

Cognitive strategies that supported teacher resilience during the COVID-19 pandemic

by

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(Educational Psychology)

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Department of Educational Psychology
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Supervisor

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DECLARATION OF ORIGINALITY

I, Elisma Williams (student number 25146956), hereby declare that this study titled **“Cognitive strategies that supported teacher resilience during the COVID-19 pandemic”** which I hereby submit for the degree Philosophiae Doctor in Educational Psychology at the University of Pretoria, is my own work and has not been previously submitted by me for a degree at this or any other tertiary institution.



.....

Elisma Williams

October 2023



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This Ethics Clearance Certificate should be read in conjunction with the Integrated Declaration Form (D08) which specifies details regarding:

- Compliance with approved research protocol,
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The author, whose name appears on the title page of this thesis, has obtained, for the research described in this work, the applicable research ethics approval. The author declares that she has observed the ethical standards required in terms of the University of Pretoria's *Code of ethics for researchers and the Policy guidelines for responsible research*.



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TO WHOM IT MAY CONCERN

I, the undersigned, hereby declare that the doctoral thesis titled **Cognitive strategies that supported teacher resilience during the COVID-19 pandemic** by **Elisma Williams** has been edited.



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Soli Deo Gloria

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ABSTRACT

The adversities associated with the COVID-19 pandemic implied that teachers had to adapt to sudden change to ensure the continuation of effective teaching. More specifically, teachers had to start implementing alternative teaching methods while simultaneously coping with the challenges of the pandemic in their personal lives. Against this background the purpose of the current study was to explore and describe the cognitive resilience profile of teachers in a world pandemic by investigating the cognitive strategies that teachers employed in response to the COVID-19 pandemic.

I integrated underlying concepts of the Transactional Theory of Stress and Coping, Social Cognitive Theory and resilience theory in compiling a conceptual framework. A sequential explanatory mixed methods design was implemented, nested within pragmatism. For data collection/generation and capturing/documentation, I utilised an online questionnaire (Phase 1, quantitative) that was fully completed by 240 urban school teachers, and online participatory focus groups (Phase 2, qualitative) with 24 of these respondents, supported by observation, audio-recordings, field notes and a reflective journal. Descriptive and inferential statistics were utilised for quantitative data analysis, while I followed a hybrid thematic analysis approach to analyse the qualitative data. Quantitative and qualitative results were subsequently integrated to achieve the purpose of the study.

The quantitative results indicate that the teachers relied on active coping, planning, suppression of competing activities, restraint coping and instrumental social support during the time of the pandemic. Following qualitative data analysis, I also identified themes related to the nurturing of a growth mindset. Based on these findings, a relationship between the cognitive strategies that the teachers utilised in response to the pandemic and teacher resilience could be confirmed. To be more specific, my findings indicate that the teachers relied on various cognitive coping strategies to cope with the challenges they faced, resulting in them demonstrating resilience during the time of the pandemic. They used a combination of cognitive strategies, the use of which strengthened resilience. Increased levels of resilience, in turn, resulted in teachers' enhanced ability to rely on cognitive coping strategies when having to cope with sudden change.



KEY CONCEPTS

- ❖ Cognitive coping strategies
- ❖ COVID-19 pandemic
- ❖ Growth mindset
- ❖ Mixed methods research
- ❖ Problem-focused coping
- ❖ Resilience
- ❖ Self-efficacy
- ❖ Teacher resilience
- ❖ Teacher wellbeing
- ❖ Teachers in urban school settings



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CHAPTER 1: INTRODUCING THE STUDY

1.1 INTRODUCTION AND BACKGROUND TO THE STUDY

This investigation focused on the cognitive profile of teachers that supported their resilience when having to cope with the COVID-19 world pandemic. My study was inspired by the unprecedented challenges experienced across the globe by all individuals and groups of people in society, including those in the teaching profession. The crisis and necessity to cope gained momentum on the 30th of January 2020, when the World Health Organisation (WHO) declared the coronavirus disease 2019 (COVID-19) a public health emergency and international concern (Gupta, 2020; Harapan et al., 2020; Lv et al., 2020; World Health Organisation [WHO], 2020a). According to Gupta (2020), the health of humanity had never been threatened in the past by any disease as in the case of COVID-19.

Caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the primary symptoms of the disease include a high fever, dry cough and shortness of breath (Harapan et al., 2020; Hilgeroth, 2020; Lv et al., 2020). As individuals in early asymptomatic states may infect others, the spread of the virus has been life-threatening to many (Hilgeroth, 2020). To be more specific, COVID-19 had to date reportedly caused the death of more than 6 930 517 individuals worldwide with a fatality rate of approximately 1% in terms of the cases that had a documented outcome (Worldometer, October 23, 2023, 05:24 GMT +2). People who had been infected in 231 countries, areas or territories numbered more than 696 888 039 by October of this year (Worldometer, October 23, 2023).

Due to the virus spreading rapidly despite various efforts worldwide to avoid this (Ataguba & Ataguba, 2020; Da Silva et al., 2020), the healthcare systems of numerous countries, specifically developing countries, were initially stretched beyond capacity. To clarify, the management and care of patients shortly after the peak of the first wave of COVID-19 infections early in 2020 posed challenges based on, for example, insufficient bed capacity, personal protective equipment (PPE) and ventilators (Ataguba & Ataguba, 2020; Gupta, 2020). Within a few months, the pandemic had spread at a high rate across the globe (Lv et al., 2020), resulting in the lockdown of many countries (Ataguba & Ataguba, 2020; Gupta, 2020).

In South Africa, the confirmed cases on 2 April 2020 were reported to be the highest in Africa at the time (Ataguba, 2020). As a result, businesses, factories, offices, construction work, social gatherings and schools were placed in lockdown, resulting in the termination of normal functioning and operations, with the implied associated challenges (Ataguba & Ataguba, 2020; Gupta, 2020). Businesses and schools had to close their doors to the public with immediate effect, resulting in negative short-, medium- and long-term economic effects (Ataguba, 2020). During that time, Naidu (2020) predicted that the challenges posed by COVID-19 would test the resilience of all South Africans, or for that matter, all human beings across the globe.

As a result of the disruption caused by COVID-19 in terms of the education system (Save our future, 2020), teachers immediately had to adapt and provide ongoing learning experiences to school-going children by means of online and remote teaching (Sun et al., 2020). This sudden change was important to ensure continued learning and to allow learners to progress (International Task Force on Teachers for Education, 2020). In addition to most teachers not being prepared to follow such an alternative route on very short notice, many teachers had to learn to adjust to the pace of online teaching – having to account for the changing teaching environment while ensuring the use of inclusive and engaging teaching methods. Education systems worldwide subsequently had to be adapted to include technologically-integrated solutions and ensure personalised learning experiences (Save our future, 2020; Sun et al., 2020).

Based on an address to the nation on 15 March 2020 and a statement by the minister of Basic Education, Angie Motshekga, South African schools were urged to – with immediate effect – provide learners with work to do at home, under the supervision of their parents, (Department of Health, 2020b). As a result, teachers had to adapt their lesson preparation and design innovative strategies to improve learner engagement (Sun et al., 2020). These additional demands on teachers seemingly intensified (Save our future, 2020) and added some challenges during an already challenging and uncertain time, with the possibility of increased levels of stress for teachers and even burn-out (International Task Force on Teachers for Education, 2020).

In this regard, Boals and Banks (2020) posit that such increased levels of anxiety and stress due to adversities related to COVID-19 could be expected to impact the cognitive functioning of individuals. More specifically, these authors explain that mind wandering can lead to limited executive functioning resources (Boals & Banks, 2020). Stress and burn-out may

consequently have hindered the functioning and wellbeing of teachers as a result of the various responsibilities they were expected to fulfil during this challenging time (Howard & Johnson, 2004; International Task Force on Teachers for Education, 2020; Tang et al., 2001). In this regard, challenges, such as those brought on by the COVID-19 pandemic, imply the possibility of impaired personal and social functioning as well as of the execution of cognitive skills, and subsequently even brain functioning optimisation (Michel, 2016). Continued stress can further limit concentration, memory, learning effectiveness, information processing abilities and the performance of the brain (Boals & Banks, 2020; Neuro-link, 2019; Savic, 2015). In the context of COVID-19, Boals and Banks (2020) argue that even the most resilient individuals most probably experienced some form of cognitive impairment during the pandemic.

At the other end of the spectrum, Genet and Siemer (2011) explain that greater cognitive flexibility can result in higher levels of resilience to adverse life events and stress. The optimisation of neurophysiological components that facilitate such flexibility in thinking, creativity, learning and problem-solving can be described as neuro-agility (Neuro-link, 2019). One approach to mediate cognitive challenges entails an increase in working memory capacity through expressive writing about stressors (Klein & Boals, 2001; Yogo & Fujihara, 2008). Additionally, mindfulness can protect individuals against a decline in their working memory and mind wandering that may occur in stressful situations (Banks et al., 2015; Howarth et al., 2019; Jha et al., 2010; Jha et al., 2017; Mrazek et al., 2013). Sleep is mentioned as another possible protective factor, as sleep can make the brain more receptive for learning, attention, thinking and remembering, thereby supporting maintained energy levels, mental alertness, brain performance and brain health (Neuro-link, 2019). Finally, exercise can promote the activation of both brain hemispheres due to movement activities, thereby stimulating learning and thinking (executive functioning) while reducing stress (Neuro-link, 2019; Wang et al., 2019).

It follows that the ability to formulate and execute realistic plans, to be confident about one's abilities and skills, and to implement functional problem-solving skills can be regarded as factors that may support resilience (Riopel, 2020). Furthermore, good brain health and optimal performance can be influenced by positive thinking and the biochemical response associated with positive thoughts. Emotions, health, information processing abilities and concentration can, among other aspects, be affected by lifestyle that includes food choice, water intake and oxygen intake (Neuro-link, 2019) and consequently cognitive functioning.

According to Riopel (2020), resilience will, in turn, contribute to cognitive functioning as well as effective coping measures.

Against the backdrop of the aforesaid, I regard problem-focused coping (Carver et al. 1989¹; Riopel, 2020), self-efficacy (Johansen et al., 2019; Riopel, 2020; Wang et al., 2016), mindfulness (Banks et al., 2015; Howarth et al., 2019; Jha et al., 2010; Jha et al., 2017; Mrazek et al., 2013), healthy sleeping patterns, movement and exercise, a positive attitude as well as healthy nutritional intake (Neuro-link, 2019) as cognitive strategies that may promote resilience. As such, in undertaking this research, I assumed that the aforesaid strategies can support cognitive functioning (the mental processes involved in reasoning, knowledge acquisition and information manipulation), more specifically in the form of the cognitive strategies (the mental processes applied to achieve goals or solve problems) that are employed to promote resilience during a crisis such as a worldwide pandemic (Cameron & Jago, 2013; Carver et al., 1989; Flax, 2017; Kolb & Whishaw, 2015; Neuro-link, 2019).

In terms of teacher resilience specifically, it should be taken into account that resilience is not dependent on the teacher as individual only, but also on the environment and context (Ungar, 2011) in which a teacher functions. As such, the capacity of teachers not only to establish but also preserve a constant and healthy pattern of functioning during or following adversity is influenced by the strength and trust of multi-layered relationships that exist in the context where teachers work (Baum et al., 2018; Bonanno, 2012; Gu, 2014; Masten, 2011; Stark et al., 2020; Ungar, 2013). The centrality of relationships that teachers generally foster can therefore facilitate positive adaptation (Ainsworth & Oldfield, 2019). In addition, resilience is seen to include a “dynamic process encompassing positive adaptation within the context of significant adversity” (Luthar et al., 2000, p. 543). As part of this process (Rosenberg, 2020), the product of the teacher, the family as well as the system (Masten, 2001) should be taken into account when investigating positive adaptation in the face of adversities posed by the COVID-19 pandemic. In this regard, I assumed for my study that teacher resilience can be taken as the process through which contextual and environmental factors interrelate to lead to positive adaptation of this group of professionals (Ainsworth & Oldfield, 2019).

When attempting to relate teacher resilience to the response to the COVID-19 pandemic it seems clear that teachers had to rely on various skills and strategies to cope with the

¹ I acknowledge that this is a dated source, yet include it as seminal work of the authors who pioneered the specific theory on coping.

challenges they faced, among others, skills of a cognitive nature. By understanding the profile of a resilient teacher, knowledge may be generated that can inform future measures or positive adaptation and support strategies during times of crisis, such as a worldwide pandemic.

1.2 RATIONALE FOR UNDERTAKING THE STUDY

My interest in this study was inspired by both my personal experiences as psychologist at a school during the COVID-19 pandemic as well as the need for research in this field that could inform not only theory but also practice when wanting to understand teachers' ways of coping with adversity. As an educational psychologist at a primary school in South Africa, I was very aware of the additional requirements, related challenges and necessity for teachers to continuously adapt due to the challenges posed by the COVID-19 pandemic. More specifically, due to them being forced to develop and adopt alternative ways of fulfilling their teaching responsibilities, many teachers felt challenged on various levels. Teachers were not only expected to adapt and adopt to sudden changes and challenges to ensure continued and effective teaching but had to do this in the midst of tremendous uncertainty, loss and threats to their overall wellbeing. As COVID-19 marked an uncertain time during which unprecedented circumstances had to be taken as the *new normal*, feelings of anxiety, uncertainty and exhaustion often surfaced during my communication with teachers. However, all the teacher colleagues I encountered continued working throughout these uncertain times to ensure ongoing education. From the outside, I got the impression that, in spite of the various adversities posed by COVID-19, many teachers spontaneously demonstrated some form of positive adaptation. I was encouraged to determine the origin of this apparent ability to cope amidst a vastly changing and challenging reality. As psychologist valuing the wellbeing of individuals, I was encouraged to conduct research on the strategies that teachers had employed in response to the adversities they faced.

In addition to my own experiences and interest in this topic, the need for ongoing research in the field of resilience has been evident over the past few decades. Save our future (2020), for example, reports that future resilient systems are dependent on the education of future engineers, health workers, teachers etc., which requires ongoing research. In terms of teacher resilience, the well-being of teachers can be regarded as fundamental to address health, environmental, economic and social crises and to ensure sustainable development in the world (Save our future, 2020). In support of this argument, PeConga et al. (2020, p. S47) explain that "history would suggest that long-term resilience will be the most common

outcome, even for those most directly impacted or those on the frontlines of the outbreak” of COVID-19, such as teachers. During the initial stages of the pandemic, Rosenberg (2020) argued that deliberate efforts were required to facilitate resilience. I was inspired by this vision of education systems and role-players demonstrating resilience in response to a worldwide pandemic by, for example, providing engaging, adaptive and inclusive education to learners in non-traditional ways (Rosenberg, 2020; Save our future, 2020).

In undertaking my study, I remained aware of the fact that different contexts may have provided various levels of support to teachers and learners that could have facilitated adaptation and resilience during the COVID-19 pandemic. As such, I focused my investigation on the strategies that teachers could utilise across contexts to demonstrate resilience within challenging times. At the time, research on the cognitive strategies that teachers employed in support of coping and resilience during a worldwide pandemic could not be found. Due to the COVID-19 pandemic implying a specific crisis and challenges for teachers in the profession, I embarked on a study that could add new knowledge to the field of teacher resilience.

As stated, my study specifically focused on the cognitive strategies employed by teachers in support of their resilience during the COVID-19 pandemic. I conducted my study alongside a fellow doctoral student², who also focused on teacher resilience during the COVID-19 pandemic, yet in terms of the psychosocial strategies that teachers relied on. In this way, findings of our studies may make a contribution to the existing literature on teacher resilience and the holistic skills and strategies that may support this.

Research on the impact of COVID-19 within the field of education and teacher resilience may, in turn, inform cognitive models on coping and responses to adversity. More specifically, an understanding of the profile of teacher resilience in the field of the education profession in response to a world pandemic is regarded as important, since the wellbeing of learners may be influenced by the wellbeing of teachers. As such, the importance of ongoing research in this field seems clear. As stated by Sun et al. (2020), the COVID-19 crisis implied an opportunity to generate and share knowledge, resources and experience, and to collaborate in putting newly gained knowledge into practice by building an online education network that may promote resilience in future when teachers may face similar challenges.

² Dippenaar S., focusing on the psychosocial strategies utilised by teachers in response to the challenges implied by the COVID-19 pandemic.

1.3 PURPOSE OF THE STUDY

The purpose of this study was to explore, describe and explain the cognitive strategies employed by teachers to cope with adversities posed by the COVID-19 world pandemic. In this study, I thus aimed to describe how cognitive resilience supported teachers when facing a world pandemic and having to cope with change, specifically in terms of their profession.

I implemented a sequential explanatory mixed methods research design to achieve my purpose. To this end, I firstly explored the cognitive strategies that teachers relied on in coping with the challenges implied by the COVID-19 pandemic, in relation to problem-focused coping (Carver et al., 1989; Riopel, 2020). For this part of the study, I collected quantitative data through two existing instruments namely the *COPE Inventory* (Carver, 2013) (Consult Appendix A) and the *Adult Resilience Measure-Revised (ARM-R)* (Resilience Research Centre, 2019) (Consult Appendix B). During the second phase of the research, I aimed to refine, elaborate and explain the results obtained from the quantitative data in terms of qualitative data generated during online participatory focus groups. In support of the empirical research I undertook, I relied on an extensive literature study that focused on possible cognitive strategies that may support coping and resilience.

The research thus aimed to obtain a profile of teacher resilience in the context of the COVID-19 pandemic, with a specific focus on the cognitive strategies that teachers employed. The purpose of the study included an identification of the cognitive strategies they used and inquiry into the experienced effectiveness of such strategies. Ultimately, I aimed to inform resilience theory with specific attention to the cognitive strategies that can be utilised in response to adversities related to the COVID-19 pandemic.

In striving to achieve the aim of the study, I was guided by the following objectives:

- ❖ To identify the cognitive strategies that were utilised by teachers in South Africa in response to the challenges implied by the COVID-19 pandemic in the context of their profession.
- ❖ To indicate which of these strategies correlated with teacher resilience in response to the challenges implied by the COVID-19 pandemic.
- ❖ To describe teachers' perceptions on the effectiveness of the cognitive strategies.
- ❖ To provide insight into how cognitive strategies employed by teachers in response to the adversities related to the COVID-19 pandemic may inform resilience theory.

The findings of the study may contribute to existing theory on teacher resilience in terms of teachers' responses to the COVID-19 world pandemic and the need to adapt their teaching modes. Future research and interventions focused on teacher resilience in terms of cognitive coping strategies may follow, based on the findings I obtained.

1.4 RESEARCH QUESTIONS

The current study was guided by the following primary research question:

How did cognitive resilience support teachers to cope with the COVID-19 world pandemic?

The following secondary research questions assisted me to address the primary research question:

- ❖ Which cognitive strategies were utilised by teachers in South Africa in response to the challenges implied by the COVID-19 pandemic?
- ❖ Which cognitive strategies show a correlation with teacher resilience in response to the challenges implied by the COVID-19 pandemic?
- ❖ How effectively did teachers experience these cognitive strategies to be?
- ❖ How can insight into the cognitive strategies employed by teachers in response to the COVID-19 pandemic inform resilience theory?

The first two secondary research questions directed the quantitative part of my empirical investigation, while the third and fourth secondary research questions guided the qualitative part of my study.

1.5 HYPOTHESES AND WORKING ASSUMPTIONS

In quantitative research, hypotheses indicate predictions about the outcome of a relationship between constructs (Cohen et al., 2018; Creswell, 2012). In the current study, it was expected that the independent variable (cognitive strategies) would influence the dependent variable (resilience). The possible effect of cognitive strategies on teacher resilience was mediated by the pandemic (intervening variable) (Creswell, 2009). These variables (constructs) were operationalised using relevant scales and related theory that formed part of the quantitative data collection phase of this study, conducted in collaboration with a fellow doctoral student Stephan Dippenaar.

The statistical hypotheses related to the research questions can be stated as follows:

- ❖ $H_0: \rho_s = 0$
- ❖ $H_a: \rho_s \neq 0$.

The null hypothesis indicates that no relationship can be found between the cognitive strategies utilised by teachers in response to the challenges implied by the COVID-19 world pandemic and teacher resilience. The alternative hypothesis designates a relationship between the cognitive strategies utilised by teachers in response to the challenges implied by the COVID-19 world pandemic and teacher resilience.

Leedy and Ormrod (2013) define assumptions as conditions for qualitative research that represent the viewpoints of the researcher and can assist in understanding a research project. In conducting the qualitative part of the current study, I assumed the following:

- ❖ Teachers in South Africa have been utilising cognitive strategies, among others, to cope with the challenges implied by the COVID-19 pandemic.
- ❖ Teachers in South Africa continued with teaching activities, either online or on-site (yet adhering to social distancing stipulations) during the COVID-19 lockdown periods, thereby demonstrating some form of resilience.
- ❖ Various cognitive strategies (for example, active coping, planning, the suppression of competing activities, restraint coping, seeking instrumental support, self-efficacy, mindfulness, movement and exercise, healthy sleeping habits, a positive attitude and healthy nutritional intake) were employed by teachers in South Africa to cope with the challenges implied by the COVID-19 pandemic.
- ❖ Some of these strategies correlate with the promotion of teacher resilience in response to the challenges implied by the COVID-19 pandemic.

1.6 CLARIFICATION OF KEY CONCEPTS

In this section, I define and contextualise the key concepts that guided my study.

1.6.1 Cognitive strategies

Cameron and Jago (2013) describe cognitive strategies as the mental processes that individuals implement with the aim of regulating thought content and processes to solve problems or achieve goals. Kaye-Tzadok and Davidson-Arad (2017) explain that resilience to traumatic experiences that may fragment the meaningful mental schemes that individuals

hold of their worlds is possible through cognitive strategies that rebuild peoples' world perceptions. Such strategies are typically used to solve problems by means of, for example, planning and reasoning (Olson & Land, 2022). Shaw et al. (2014) state that cognitive strategies can furthermore mediate mechanisms for coping. Carver et al. (1989) support this view by explaining that problem-focused coping by means of, for example, planning will generally be aimed at altering a source of stress or solving problems.

For the purpose of this study, cognitive strategies include, but are not limited to, problem-focused coping, self-care, a positive attitude, self-efficacy, mindfulness, a growth mindset, optimism, religiousness and meaningful connections with others (Banks et al., 2015; Benight & Bandura, 2004; Bonanno et al., 2015; Brooks et al., 2022; Carver et al., 1989; Collie et al., 2018; Conversano et al., 2010; Dweck, 2000; Howarth et al., 2019; Jacka & Berk, 2013; Jha et al., 2010; Jha et al., 2017; Johansen et al., 2019; Juliana et al., 2021; Lazarus & Folkman, 1984; Mrazek et al., 2013; Naidu, 2021; Padmanabhanunni et al., 2022; Riopel, 2020; Wang et al., 2016; Wu et al., 2013; Wuest & Subramaniam, 2021). These strategies are specifically viewed as possible responses that teachers could have displayed in response to the challenges they faced as a result of the COVID-19 pandemic.

1.6.2 Teacher resilience

Resilience implies the capacity of an individual to establish and maintain equilibrium and a regular healthy pattern of functioning when facing adversity (Baum et al., 2018; Bonanno, 2012; Bonanno, 2020; Resilience Research Centre, 2019; Ungar, 2013). According to Luthar et al. (2000), resilience implies a dynamic process of positive adaptation when experiencing a significant level of adversity. Ungar (2011) explains that both the environment and the context of an individual will play a role in this process.

In support, Theron et al. (2021) propose that resilience be viewed as a product of personal agency as well as the system within which individuals function. More specifically, resilience can be described as a “process of multiple biological, psychological, social and ecological systems interacting in ways that help individuals to regain, sustain or improve their mental wellbeing when challenged by one or more risk factors” (Ungar & Theron, 2020, p. 441), as in the case of COVID-19-related challenges. In undertaking my study, I viewed the multiple pathways to resilience as paramount (Bonanno, 2004) when considering the cognitive strategies that teachers could have employed in support of resilience in their systemic context in response to the challenges implied by COVID-19.

In the context of the current study, resilience is described as personal and relational capacities of individuals that can be demonstrated by multiple and potentially unexpected pathways. The purpose is to maintain wellbeing when responding to adversities and possible trauma.

1.6.3 Cognitive resilience

In this study, cognitive resilience refers to the process of adaptive coping when specific cognitive strategies are relied on to alter a source of stress or act in a way that may solve problems (Carver et al., 1989). In addition to the strategies listed earlier in Section 1.6.1, the said cognitive strategies relate to active coping, planning, the suppression of competing activities, restraint coping and the seeking of instrumental social support (Carver et al., 1989; Lazarus & Folkman, 1984; Naidu, 2021; Riopel, 2020; Wuest & Subramaniam, 2021) as well as meaningful connections with others (Brooks et al., 2022; Juliana et al., 2021; Padmanabhanunni et al., 2022; Wu et al., 2013; Wuest & Subramaniam, 2021).

In addition, self-efficacy is regarded as part of the cognitive processes that may enable coping as individuals' coping relies on their own beliefs to act effectively in response to adversities (Benight & Bandura, 2004; Benight & Cieslak, 2011; Maddux & Kleiman, 2021). Against the background of the focus of the current study, the way in which such cognitive strategies were utilised by teachers to cope with the challenges associated with the COVID-19 pandemic constitutes the concept of cognitive resilience.

1.6.4 Teacher

Merriam-Webster (2020) defines a teacher as a person that is skilled in teaching and who is a student of the practice and theory of education. Baum et al. (2018) elaborate on the responsibilities of teachers and the role that they are expected to fulfil in the education system. In addition to referring to the responsibilities of teaching and creating a learning environment, Baum et al. (2018) highlight the teacher duties related to contact with the parents of learners, learner relationship building, the development of assessment and assignments, as well as reporting to and liaising with principals and key individuals.

In the South African education system, teachers are expected to fulfil various roles, as described in the National Education Policy Act of 1996 (Department of Education, 2000) and the Department of Higher Education and Training (2011) as part of the policy on the Minimum Requirements for Teacher Education Qualifications (MRTEQ). The first role of

teachers relates to a teacher being a learning mediator that requires of all teachers to be sensitive to diverse learner needs and create a learning environment that is inspirational and contextualised. The second role of teachers indicates that teachers are responsible for interpreting and designing learning programmes and materials. In this regard, teachers are expected to understand and interpret existing learning programmes yet also design original new programmes while preparing and selecting suitable visual and textual resources that can promote learning (Department of Education, 2000; Department of Higher Education and Training, 2011).

Another role of teachers relates to them being leaders, administrators and managers to be able to make appropriate decisions, execute learning management and administrative classroom duties. The fourth role implies that teachers are scholars, researchers and lifelong learners. As such, ongoing academic, personal, occupational and professional growth should be pursued by teachers (Department of Education, 2000; Department of Higher Education and Training, 2011).

Next, the role of teachers within a community is described in the form of a citizenship and pastoral role, prescribing the promotion and practising of a committed, critical and ethical attitude towards the development of a sense of responsibility and respect towards others. The sixth role of teachers comprises the role as assessor, requiring of teachers to understand the purpose, methods and effects of assessment while designing and managing formative and summative assessment on appropriate levels and for the purpose of learning. The final role stipulated for teachers in South Africa indicates that teachers are expected to be learning area, subject, discipline and phase specialists. In this regard, teachers should be well grounded in the skills, principles, values, knowledge, procedures and methods that are relevant to the learning area, discipline, profession or occupational practice and phase they teach (Department of Education, 2000; Department of Higher Education and Training, 2011).

In undertaking the current study, teachers were taken as individuals that teach school learners from Grade R to Grade 12. Teachers from both primary and secondary schools were therefore included as possible participants.

1.6.5 COVID-19 pandemic

The coronavirus disease 2019 (COVID-19) entailed a global pandemic as declared by the WHO in January 2020 (Gupta, 2020; Harapan et al., 2020; Lv et al., 2020; World Health

Organisation [WHOa], 2020). The disease is caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Common symptoms include a high fever, shortness of breath and a dry cough (Harapan et al., 2020; Hilgeroth, 2020; Lv et al., 2020).

The unexpected and additional demands placed on South African teachers as a result of COVID-19 and the subsequent periods of lockdown implied the possibility of higher levels of occupational stress and anxiety. In addition to the detrimental and even fatal effect of COVID-19 in terms of human health, several associated challenges were faced by individuals worldwide as a result of the pandemic. Strict and unexpected lockdown stipulations resulted in challenges such as a lack of sufficient financial and food resources for some families, domestic violence, isolation and a fear of job security (Stiegler & Bouchard, 2020). For teachers, the COVID-19 pandemic implied sudden and unexpected challenges requiring of them to adapt their teaching approaches, strategies and methods to ensure continued education amidst a time of uncertainty, loss and unfamiliar threats related to COVID-19.

1.7 CONCEPTUAL FRAMEWORK

In compiling a conceptual framework I was guided by Lazarus and Folkman's (1984³) Transactional Theory of Stress and Coping, Carver, Scheier and Weintraub's (1989³) approach to assessing coping strategies, Social Cognitive Theory (Bandura 1986, 1989b³, 1997) and constructs from resilience theory, described by Ungar and Theron (2020). I paid particular attention to the cognitive strategies (Carver et al., 1989) that teachers may have employed in support of resilience and their attempts to cope with the challenges brought on by the COVID-19 pandemic.

Individuals are reported to endeavour to change the source of stress and/or negative emotions (Carver et al., 1989; Lazarus & Folkman, 1984; 1987) during any process of coping and/or adaptation to change. I incorporated this viewpoint when investigating the cognitive strategies used by teachers in support of coping and resilience. To this end, the ways in which teachers may have coped and/or responded to stress include problem-focused methods and emotion-focused methods (Carver et al., 1989). Self-efficacy as part of Social Cognitive Theory by Bandura (1986; 1989b; 1997) is included as cognitive process as it can

³ Dated sources are included due to these authors being the pioneers of the relevant theories and particular concepts forming part of the conceptual framework.

serve as a cognitive mediator during the appraisal of stressors (Lazarus & Folkman, 1984, 1987) and behaving accordingly during the coping.

Furthermore, Social Cognitive Theory (Bandura 1986, 1989b, 1997) provides a platform for researchers' efforts to explain and investigate adaptation by considering the reciprocal relationship that exists between individuals and their behaviour as well as ecology (environment) during a time of coping (Bandura 1986; 1989a; 1989b; Benight & Cieslak, 2011), as in my study. I furthermore relied on the premise posed by Maddux and Kleiman (2021) that individuals' abilities to adapt are nested within their cognitive capabilities that, as part of my conceptual framework, relates to the cognitive strategies that may be employed during the coping process. To this end, cognitive resources can be used to control and influence behaviour during the coping process, which will ultimately change the environment (sources of stress) of individuals (Benight & Bandura, 2004; Maddux & Kleiman, 2021).

More specifically, the reciprocal and transactional relationship that exists between an individual and the environment implies that a process of coping with stressors will change the environment of the individual (Lazarus & Folkman, 1984). In this regard, Bandura (1986; 1989b; 1997) explains that individuals will acquire and maintain as well as reflect on their environments during such incidences. Therefore, by coping, individuals can influence the circumstances in their lives during a process of resilience promotion (Benight & Bandura, 2004). In doing so, the mobilisation of promotive and protective factors within the socio-ecological system of the individual may improve wellbeing and support resilience in the face of stress and adversity (Ebersöhn, 2017; Ungar, 2011; Ungar & Theron, 2020; Windle, 2010). It follows that multiple pathways and various cognitive strategies towards resilience within the process of coping, and towards resilience, exist (Bonanno, 2004).

Against this background, the primary features of cognitive appraisal and coping (cognitive strategies, as noted by Carver et al. [1989]) as part of the Transactional Theory of Stress and Coping (Lazarus & Folkman, 1984) are included in my conceptual framework. While focusing on such cognitive strategies in the coping process, I remained cognisant of the fact that coping can influence the emotional state of individuals and may additionally enhance cognitive functioning and personal enablement (Biggs et al., 2017; Lazarus & Folkman, 1984, 1987). Within this coping process, I regarded the mediating role of self-efficacy in employing various cognitive strategies as important and aimed to investigate multiple supportive pathways to resilience (Bonanno, 2004; 2020; Carey & Forsyth, 2009). In

Chapter 2 I include a visual representation and more in-depth discussion of my conceptual framework.

1.8 PARADIGMATIC PERSPECTIVES

The current study is nested in pragmatism and followed a mixed methods methodological approach. In this section I briefly introduce my paradigmatic and methodological choices, with more detailed discussions following in Chapter 3.

1.8.1 Epistemological perspective

My decision to rely on pragmatism is based on my view that truth, within this epistemological perspective, is taken to be derived from what works best at a specific time, comprehending a specific research problem (Creswell, 2009; Ivankova et al., 2010; Johnson et al., 2017; Patton, 2002; Pinto, 2010; Rossman & Wilson, 1985; Teddlie & Tashakkori, 2009). Solutions to problems by means of research and practice form the focus of this paradigm (Johnson et al., 2017; Patton, 1990; Rossman & Wilson, 1985). As a result, the best understanding of a problem is sought by pragmatists, resulting in both quantitative and qualitative data being used (Creswell, 2009). To this end, the answers to research questions are regarded as more important than the methods used to address the questions (Ivankova et al., 2010).

Creswell (2009) as well as Johnson et al. (2017) explain that pragmatism offers researchers freedom of choice and flexibility in terms of techniques, methods and procedures that are employed to meet the purpose of a study. In addition, flexibility in terms of decisions about practicality and contextually compatible options are implied by pragmatism (Pinto, 2010) since theory construction within the context of research is emphasised when relying on this epistemology (Johnson et al., 2017). Throughout, the research focus falls on the *What* and *How* of a problem (Creswell, 2009) within a specific context (Pinto, 2010).

Pragmatism therefore allowed me to use multiple methods and uphold different assumptions, thereby permitting for varying worldviews and benefitting from the advantages of a mixed methods approach when collecting and analysing data (Creswell, 2009). In this regard, Ivankova et al. (2010) as well as Pinto (2010) view pragmatism as the best option to justify the use of different methods in a study. Pinto (2010) more specifically explains that pragmatism combines qualitative and quantitative research and can allow a researcher to implement these approaches in a complementary manner. Johnson et al. (2017, p. 277)

concur with this view by stating that pragmatism “remains the dominant research philosophy” used by mixed methods researchers.

Despite these benefits, certain challenges and limitations may be encountered when selecting pragmatism as epistemology. One of the inherent potential limitations relates to a focus on practical results, implying that theory and philosophy may be discarded (McCready, 2010). As a result I focused on being a responsible and scientific inquirer and remaining aware of the importance of understanding the implications of the theoretical and philosophical foundations of any scientific study (Nowell, 2015). Another potential challenge often associated with pragmatism relates to research questions being regarded as more important than the methods used (Doyle et al., 2009), implying a research question *dictatorship*, as argued by Tashakkori and Teddlie (2003). In addressing this possible limitation, I remained reflective and accountable in focusing on meeting the rationale, aims and objectives and answering the research questions by relying on empirical sound methodological choices throughout the study (Doyle et al., 2009).

1.8.2 Methodological approach

I followed a mixed methods approach, which is often associated with pragmatism, as both text and numerical data can be collected and analysed when following this approach. A combination of quantitative and qualitative data can, in turn, enable a researcher to address various aspects of a research problem and offer a more comprehensive understanding of the phenomenon (Creswell, 2009; Ivankova et al., 2010). Pinto (2010, p. 8) summarises this possibility by stating that “mixed methods research provides an opportunity to test research questions, hypotheses, and theory and to acknowledge the phenomena of human experience”. In this way, the potential to contextualise, understand and develop interventions exists when following a mixed methods approach (Pinto, 2010). Johnson et al. (2017) elaborate on this perspective by emphasising that lived experiences mediated through historical, personal and cultural backgrounds can comprise perspective and may serve as the starting point of philosophy.

According to Creswell (2009) as well as Pinto (2010), the principle of mixed methods research addresses the bias often associated with using only quantitative or qualitative methods due to the triangulation of data sources. Sequential mixed methods, and more specifically a sequential explanatory mixed methods design (Creswell et al., 2003; Ivankova et al., 2006), provided me with the option of extending, refining and explaining the

quantitative results I obtained with qualitative data. As part of the research process, I thus collected and generated data in two separate phases.

The goal of the quantitative phase of my study was to collect data on the cognitive strategies that teachers had employed in support of teacher resilience in response to the challenges they experienced as a result of the COVID-19 pandemic. For the qualitative phase of the study, the goal was to generate additional data on constructs included in the online questionnaire yet also on aspects such as sleep patterns, movement and exercise routines, attitudes, self-efficacy, nutritional intake and the perceptions of risk of the COVID-19 pandemic by the participants, which may have influenced their cognitive functioning. In addition, feelings of emotional exhaustion, depersonalisation within the occupational context, and experiences of personal accomplishments that may have affected occupational stress were explored to add insight into the quantitative results that were obtained.

1.9 OVERVIEW OF THE RESEARCH DESIGN AND METHODOLOGICAL STRATEGIES

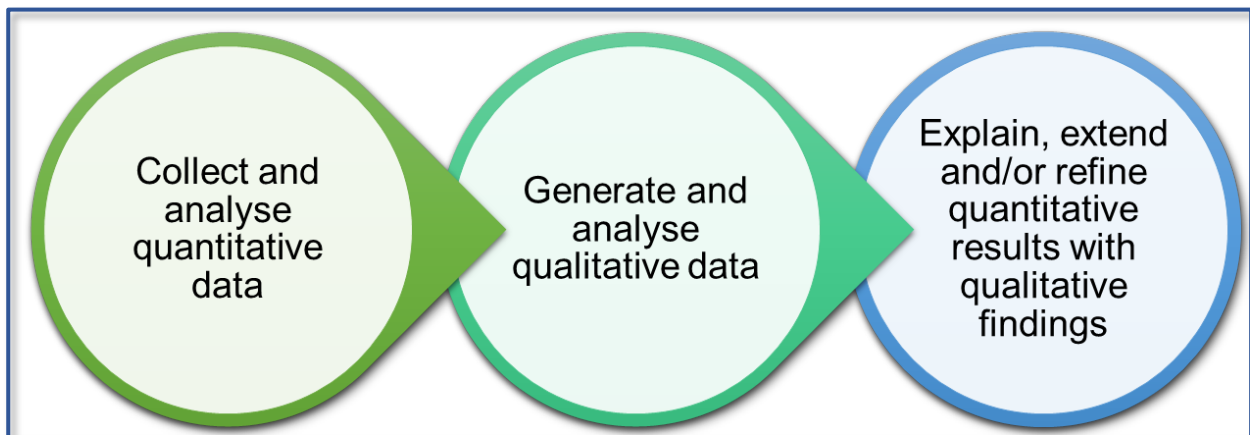
In this section, I introduce the selected research design, how the respondents/participants were selected and on which methodological strategies I relied. More detailed discussions of these aspects are included in Chapter 3.

1.9.1 Sequential explanatory mixed methods research design

When implementing a sequential explanatory mixed methods research design the quantitative data of a study is further explained in terms of the qualitative data (Creswell, 2009; Creswell et al., 2003; Edmonds & Kennedy, 2017; Ivankova et al., 2006). In such studies, the quantitative results (Johnson et al., 2017) will generally provide an overall picture of the research problem while the qualitative findings will further explain, refine or extend the general (quantitative-based) picture (Creswell, 2012; Creswell et al., 2003; Edmonds & Kennedy, 2017; Ivankova et al., 2006). As indicated, the current study involved two phases of data collection, with the quantitative results informing the generation of qualitative data (Creswell, 2009; Edmonds & Kennedy, 2017). It follows that the qualitative data was generated and analysed after the quantitative data had been collected and analysed, as illustrated in Figure 1.1.

Figure 1.1

Sequential explanatory mixed methods research design



(Adapted from Creswell, 2012; Creswell et al., 2003; Edmonds & Kennedy, 2017; Ivankova et al., 2006).

In my study, I could partly answer the primary research question by addressing the first two secondary questions (refer to Section 1.4) after analysing the quantitative data collected through an online questionnaire. More specifically, I aimed to determine which, if any, cognitive strategies had been employed by teachers in response to the challenges they faced as a result of the COVID-19 pandemic and the effect these had on their teaching. Through the COPE Inventory (Carver, 2013; Carver et al., 1989) I was able to determine whether active coping, planning, the suppression of competing activities, restraint coping and/or the seeking of instrumental social support (problem-focused coping strategies) had been employed by the respondents. The results of the ARM-R (Resilience Research Centre, 2019) questionnaire were correlated with the results of the COPE Inventory (Carver, 2013; Carver et al., 1989) by making use of the Spearman correlation coefficient (Leedy & Ormrod, 2005).

During the second phase of the study – the qualitative data generation and analysis phase – I aimed to obtain data that could address the third and fourth secondary research questions by explaining, refining and extending (Creswell, 2012; Creswell et al., 2003; Edmonds & Kennedy, 2017; Ivankova et al., 2006) the results obtained during the first phase of the study. To this end, I explored the ways in which teachers perceived the cognitive strategies they had utilised (determined during the first phase of the study), but also extended these results by investigating other possible strategies that may have been employed in support of resilience that had not been reflected in the questionnaire completed during Phase 1.

As such, the quantitative data thus created a general picture of the research in my study while the qualitative data explained, refined and expanded this. According to Pinto (2010), quantitative and qualitative research approaches can be effectively combined and will complement each other when utilising a pragmatist paradigm, as was the case in the current study. This design has been found to be especially useful when the results stemming from quantitative data are unexpected (Morse, 1991). An additional advantage relates to the fact that a mixed methods research design may or may not make use of a specified theoretical perspective (Creswell, 2009), allowing the researcher to incorporate various theories that can guide the research activities.

A potential challenge often associated with a sequential explanatory mixed methods design is that a study may take longer to complete when implementing the design (Creswell, 2009; Research Rundowns, n.d.). In an attempt to address this potential challenge, I adhered to specific timelines as discussed with my supervisor and fellow doctoral student. As the data collection had to occur during the time when the impact of COVID-19 was a reality in the lives of teachers, timeous data collection that could provide reliable data was important. The structured nature of the selected sequential explanatory research design was, however, beneficial and its implementation was easy in terms of the separate and explicit stages of the study (Creswell, 2009; Ivankova et al., 2010).

1.9.2 Selection of participants

I relied on non-probability purposive sampling (Cohen et al., 2018; Creswell, 2012; Leedy & Ormrod, 2013; Maree, 2010; Mertens, 2014; Mouton, 2001; Teddlie & Tashakkori, 2009) in selecting 240 respondents⁴ for the quantitative phase of the current study and 24 participants for the qualitative phase. For this purpose, I first contacted the principals of primary and secondary schools in the districts where I had obtained ethical clearance to conduct research. As such, the selection of schools that I could potentially include in my research were based on the areas in which I had ethical clearance to do so. After obtaining permission from the principals and related school-governing bodies, the teachers of the respective schools were contacted for voluntary participation in the study. I thus made use of purposive sampling of teachers by strategically and purposely selecting key informants⁵ that might yield in-depth data related to my research questions, with the participants all

⁴ I refer to *respondents* for the quantitative phase of my study, and to *participants* for the qualitative phase of my study.

⁵ *Key informants* refer to the teachers (the respondents and participants) who have specific knowledge and experience of the topic under study.

having experienced the phenomenon I set out to explore (Mertens, 2014; Teddlie & Tashakkori, 2009). As such, all of the teachers of the participating schools were regarded as knowledgeable on the topic under study and were therefore viewed as potential participants.

The selection criteria for participation included the following:

- ❖ The participating teachers had to provide informed consent and be willing to participate.
- ❖ Teachers had to be involved in teaching at a primary or secondary school in Gauteng/Tshwane, South Africa.
- ❖ Teachers could teach either at urban or semi-urban schools.
- ❖ Teachers had to have internet connection and access to a mobile/electronic device for completion of the online questionnaire and participation in the virtual focus groups.
- ❖ Teachers had to be proficient in either Afrikaans⁶ or English, being the languages that I am proficient in.

1.9.3 Data collection, generation and documentation

For the purpose of this study, I first collected⁷, captured and analysed quantitative data. During the second phase of the study, the focus fell on qualitative data generation and documentation (Creswell et al., 2003; Ivankova et al., 2006).

Phase 1: Quantitative data collection and capturing

In preparation of the quantitative data collection phase, my fellow doctoral student and I integrated all of the items of the COPE Inventory (Carver, 2013) and ARM-R (Resilience Research Centre, 2019) to compile one online questionnaire (Consult Appendix D). Questions relating to biographical data were added to the existing questions.

The COPE Inventory (Carver, 2013) involves a 60-item four-point Likert scale that measures how individuals respond when confronted with adversities and stress. This inventory measures active coping, planning, the suppression of competing activities, restraint coping, seeking of instrumental social support, positive reinterpretation and growth, the use of

⁶ One of the 11 official languages spoken in South Africa, used as first language by approximately 13% of the South African population (Alexander, 2021).

⁷ For my discussion in this thesis, I use the terms *data collection* and *data capturing* when referring to the quantitative phase of the study and *data generation* and *data documentation* when referring to the qualitative phase.

emotional and social support, acceptance, denial, religious coping, mental disengagement, a focus on and venting of emotions, humour, behavioural disengagement and substance use (Carver, 2013). In the current study, the focus specifically fell on problem-focused coping (active coping, planning, the suppression of competing activities, restraint coping and the seeking of instrumental social support) as these scales relate to problem-solving and actions to change the source of stress (Carver et al., 1989) relating to cognitive processes. The second instrument, the Adult Resilience Measure-Revised (ARM-R), is a 17-item five-point Likert scale questionnaire, designed to measure social-ecological resilience and provide information on the personal and relational resilience of respondents (Jefferies et al., 2019; Resilience Research Centre, 2019).

Seeing that I conducted my study alongside a fellow doctoral student, the questionnaire that was completed by respondents included questions on both the cognitive strategies and psychosocial strategies employed by the teachers in response to the adversities posed by the COVID-19 pandemic. In analysing, interpreting and reporting on the data, I thus focused on the questions related to the implementation of cognitive strategies (problem-focused coping) only, with fellow student Stephan Dippenaar focusing on the questions related to psychosocial coping strategies.

The quantitative (numerical) data was electronically captured by the respondents. Statistical packages used for quantitative research require that data is available in this format (electronically) to run statistical tests. R⁸ was used to analyse the quantitative data of the current study. As indicated, advantages of electronic data capturing include accessible data analysis and the potential of running additional statistical tests with easily accessible data if required.

However, a potential challenge that is associated with online questionnaires and electronic data relates to ensuring the confidentiality and anonymity of the respondents when data is viewed (De Vos et al., 2011). To this end, I assigned arbitrary codes to the respondents and present the results in this thesis in a confidential manner. In addition, I relied on password protected electronic files when saving the data. Throughout, regular contact with my supervisor and statistician supported accurate data collection and analysis procedures.

⁸ The R Project for Statistical Computing (<https://www.R-project.org/>).

Phase 2: Qualitative data generation and documentation

During the second phase of the study, my fellow doctoral student and I facilitated five online participatory focus groups, thereby conducting internet-mediated research (IMR) (Salmons, 2012). We relied on this method of data generation due to access to schools being restricted at the time as a result of COVID-19 safety measures. Each online participatory focus group lasted around one hour and involved four to six participants.

Participatory focus groups can create opportunities for unobtrusive data generation and the sharing of experiences by participants in a welcoming environment. However, the data obtained in this manner may be challenging to interpret, especially since online participatory focus groups do not allow for observation as in the case of face-to-face data generation sessions with participants (Creswell, 2009; Salmons, 2012). Despite this potential limitation, Salmons (2012) is of the view that videoconferencing (such as *via* the platform utilised for this study) can still allow for the exchange of verbal and non-verbal signals and can closely resemble natural turn-taking during face-to-face sessions with participants.

In an attempt to strengthen the selected data generation strategy, I gave due consideration and spent sufficient time on establishing rapport with the participants. I also paid attention to remain observant and record as much information possible, not only audio-recording the discussions, but also compiling detailed field notes during data generation sessions (Creswell, 2009). As *Kumospace*⁹ (Kumospace, 2022), the information and communications technology (ICT) platform we used (Salmons, 2012), offers the opportunity for videoconferencing *via* computers or mobile devices, the participants did not need specific software to participate. They required an internet connection and an electronic device only. To select participants for the online discussions, a screening question was included as part of the quantitative questionnaire, determining the respondents' willingness to partake in a follow-up online participatory focus group.

Online participatory focus groups therefore enabled me to gain rich information on the teacher-participants' experiences. I was able to manage the line of questioning (semi-structured) by formulating questions based on the quantitative data analysis before commencing with the focus groups. Follow-up questions were added as the focus groups progressed. In this way, I aimed to maintain a balance between pre-formulated questions and remaining flexible (Salmons, 2012). Throughout, I ensured that all questions were in

⁹ Virtual office software that enables hybrid and remote interaction.

line with the research purpose and would assist me in obtaining data that could be relied on in addressing the formulated research questions (Salmons, 2010). I encouraged the participants to be open and provide comprehensive answers during the online participatory focus groups and where needed, I relied on follow-up questions, prompting and probing to obtain clarity or more detail (Creswell, 2009; Salmons, 2010). As a researcher, I had the continued responsibility to ensure respectful inquiry and maintain ethical conduct (Salmons, 2010) in generating and transcribing the data (Creswell, 2009).

1.10 DATA ANALYSIS AND INTERPRETATION

In following a mixed methods approach, both quantitative and qualitative analyses were required. The quantitative data was analysed through statistical tests and methods to describe the results (descriptive statistics) and draw inferences (inferential statistics). Qualitative data was analysed by means of thematic analysis (Boyatzis, 1998; Braun & Clarke, 2022; Crabtree & Miller, 1999; Creswell & Plano Clark, 2018; Fereday & Muir-Cochrane, 2006; Maree, 2010; Mertens, 2014; Swain, 2018; Xu & Zammit, 2020). The process of data analysis and interpretation is explained in detail in Chapter 3, yet briefly introduced in the following sub-sections.

1.10.1 Quantitative data analysis

The following methods were employed for quantitative data analysis:

- ❖ **Descriptive statistics:** Descriptive statistics was used to organise, describe and simplify the data (Gravetter & Forzano, 2009), thereby enhancing my understanding thereof (Maree, 2010). The mean and median (measures of central tendency) as well as the range and standard deviation (extent of variability) were determined by using a statistical program (Leedy & Ormrod, 2013) that could describe the data. In addition, I relied on graphic illustrations to represent the data.
- ❖ **Non-parametric statistics:** Nominal data (for example, teachers' internet access during the lockdown period, race of the teachers, etc.) and continuous data (age) were analysed to form part of my description of the sample of teacher respondents (presented in Section 4.2.1 in Chapter 4). As the additional data that was collected and analysed as part of the study was ordinal in nature (Likert-type scale), I made use of nonparametric statistics (distribution-free tests) (Bless & Kathuria, 1993; Corder & Foreman, 2014; Ferguson, 1981; Leedy & Ormrod, 2013). Leedy and Ormrod (2013) caution that if a correlation

exists between variables (cognitive strategies and resilience), causation between the variables may not necessarily be inferred. In response, I included suitable inferential statistical tests to test the stated hypotheses and the correlations that may have been present between the constructs related to my study.

- ❖ **Inferential statistics:** The functions of inferential statistics include estimating population parameters and the testing of hypotheses to draw inferences from samples about populations (Gravetter & Forzano, 2009; Leedy & Ormrod, 2013; Maree, 2010). Even though non-probability sampling was used in this study, Gravetter and Forzano (2009) claim that samples from one context will be as representative of samples from similar contexts, implying that generalisation of the findings related to the quantitative part of this study may occur within similar contexts. For this purpose, I used a confidence interval to describe the inferences made from the sample to a population in similar contexts. I worked on a 0,05-significance level, which means that a result occurs on average only 5% of the time (Drew et al., 2008). In this regard, I attempted to determine if the calculated p-value falls within the critical region by establishing whether or not the p-value is less than or equal to the level of significance (Corder & Foreman, 2014). When considering the p-value, one can determine the particular probability of results being obtained by more than chance (O'Leary, 2004). I accordingly planned to reject the null hypothesis if I found that the test results could be ascribed to other factors than chance; and if not, I would not reject the null hypothesis (Leedy & Ormrod, 2013). I used the Spearman correlation coefficient to test the hypotheses. After the significance had been determined, the relationship/correlation between cognitive strategies employed by teachers in response to the adversities posed by the COVID-19 pandemic and resilience was investigated. To this end, I determined the direction of correlation (positive or negative) as well as the strength of the relationship (size of the correlation coefficient) (Leedy & Ormrod, 2005) between the variables (cognitive strategies and resilience).
- ❖ **Spearman correlation coefficient:** I used the Spearman correlation coefficient as it is appropriate to use with ordinal data (Leedy & Ormrod, 2005). The test is specifically suitable to use when a study seeks to determine if one variable (cognitive strategies) influences another variable (resilience) (Creswell, 2012). In this regard, two scores for each respondent were collected as part of the quantitative data collection phase, with hypotheses being stated in terms of the population parameter, as denoted in Section 1.5. When using the Spearman correlation coefficient, the p-value is calculated, with the null hypothesis being rejected if the p-value is less than or equal to 0,05. In addition, the

direction and strength of the correlation was determined during the quantitative analysis of this study (Creswell, 2012).

1.10.2 Qualitative data analysis

According to Nieuwenhuis (2010), qualitative data analysis aims to establish how participants make meaning of a phenomenon, based on their attitudes, understanding, perceptions, experiences, feelings, values and knowledge. In my study, I followed a hybrid approach to thematic analysis (Fereday & Muir-Cochrane, 2006) by incorporating deductive and inductive reasoning when analysing and interpreting the qualitative data (Swain, 2018; Xu & Zammit, 2020). As such, I was able to identify recurring meaning making across the data. I followed the guidelines provided by Boyatzis (1998), Braun and Clarke (2022), Crabtree and Miller (1999), as well as Fereday and Muir-Cochrane (2006).

During the first (deductive) phase of the qualitative data analysis, I made use of *a priori* assumptions in setting up the codes of analysis (Schwandt, 2007; Van der Walt, 2012). I therefore derived a codebook (table of analysis, as indicated in Appendix M) (Crabtree & Miller, 1999) from the theory described by Carver (2013) and Carver et al. (1989) to organise the text for subsequent interpretation (Schwandt, 2007). Next, during the inductive phase of the analysis, I was guided by the steps outlined by Braun and Clarke (2022). The process of qualitative data analysis that I completed thus included the steps of coding across the entire data set, searching for themes, reviewing themes (creating a thematic map by producing themes, subthemes and identifying relationships between them), and defining and naming the themes (Braun & Clarke, 2022). Finally, I followed an abductive approach to corroborate the results from the deductive and inductive analysis processes to address the research questions. Consult Chapter 3 for an in-depth explanation of the qualitative data analysis process and Chapters 4 and 5 for my discussion of the results and findings.

According to Braun and Clarke (2022) reflexive thematic analysis implies the benefit of flexibility, as no method of data generation or epistemological frameworks are prescribed, with the possibility of analysing almost any type of data practically to address any kind of research question. As my study is nested within pragmatism, which offers freedom of choice and flexibility in terms of methods and techniques (Creswell, 2009; Johnson et al., 2017), such a reflexive thematic analysis seemed suitable. In the process, I was able to develop a detailed descriptive explanation of the phenomenon under study (Braun & Clarke, 2022). Consequently, I could compile a description of how cognitive resilience supported teachers

to cope with the challenges implied by the COVID-19 pandemic. A potential limitation associated with thematic analysis relates to this method having limited interpretative power (Braun & Clarke, 2022). I aimed to address this limitation by explaining, refining and expanding on the quantitative results through thematic analysis of the qualitative data against the background of the conceptual framework I introduced in Section 1.7.

1.11 VALIDITY, RELIABILITY AND TRUSTWORTHINESS

I briefly introduce the standards of rigour related to both quantitative data and qualitative research in the subsections that follow. More detailed explanations of the strategies I employed in support of validity, reliability and trustworthiness follow in Chapter 3.

1.11.1 Reliability and validity of quantitative results

The reliability and validity of the quantitative instruments used in a study can predict the possibility of obtaining statistical significance, the degree to which a researcher will learn about a phenomenon under study as well as the level to which meaningful inferences may be possible (Leedy & Ormrod, 2013). The validity of an instrument relates to the question as to whether or not an instrument measures what it is supposed to measure (Foxcroft & Roodt, 2013; Gravetter & Forzano, 2009), which will be essential to address a research problem effectively. The reliability of an instrument refers to whether or not an instrument will measure a construct in a consistent manner (Foxcroft & Roodt, 2013; Gravetter & Forzano, 2009).

To ensure validity, a researcher should address threats to both internal and external validity. Internal validity threats include history, maturation, selection and mortality (Creswell, 2009; Mertens, 2014). Since my research was undertaken alongside that of a fellow doctoral student, the threat of history could be addressed by a structured timeline that assisted us in remedying unnecessary time passing. The potential threat to maturation (participants maturing or changing) was addressed by selecting participants that all matured as the study progressed. Since participant selection did not occur randomly, I could address the threat of selection by including participants from various schools and endeavouring to reach a number that would allow for generalisability of the results. The risk of mortality (drop-out of participants) was addressed by including a selection criterion on the commitment of the respondents when they were selected. In addition, a fairly large sample was used to account for potential drop-outs (Creswell, 2009; Mertens, 2014).

Creswell (2009) as well as Gravetter and Forzano (2009) argue that any aspect that may limit the generalisability of findings or incorrect inferences can threaten external validity. In this regard, Leedy and Ormrod (2013) explain that research conducted in real-life contexts may offer the opportunity for generalisability and consequently increase the external validity of the findings. As the data that I analysed had been collected online and obtained directly from the respondents, I analysed the data in the context of coping within a school context. In this regard, generalisability of the findings to a similar population was predicted, implying external validity of the instrument in the context it was administered in (Leedy & Ormrod, 2013).

Creswell (2009) cautions that statistical conclusion validity may be threatened in cases where inaccurate inferences are made as a result of insufficient statistical assumptions. In addition, Struwig and Stead (2001) explain that it is vital to ensure that data is collected with care and meticulousness. To this end, I took specific care during data collection and analysis to ensure that verified statistical procedures were adhered to. In addition, I completed a process of data cleaning before the statistical analysis commenced (Rubin & Babbie, 2014). I furthermore relied on the expertise of the University of Pretoria's Department of Statistics in determining the inter-item correlation (basis of the Cronbach's alpha coefficient) of the questionnaires used. A high inter-item correlation is associated with both the measurement instruments that were implemented (COPE Inventory and the ARM-R), as explained in more detail in Chapter 3.

Throughout my study, I remained aware of the potential limitations associated with reliability and validity, and implemented strategies and measures in support of ensuring these criteria. Even though the study was not aimed at determining the reliability and validity of the instruments that were implemented, I endeavoured to utilise existing proven instruments that could explore and explain the phenomenon under investigation, allowing me to address the research questions by determining the cognitive strategies employed by teachers in response to the challenges implied by the COVID-19 pandemic in support of their resilience.

1.11.2 Trustworthiness of the qualitative findings

For the qualitative part of this study the focus did not fall on finding an objective truth but rather to provide a fair representation of the data in order to understand individuals' experiences and perceptions (Stiles, 1993). For the qualitative component of my research, I relied on Guba's (1981) criteria for trustworthiness. Accordingly, I aimed for credibility that

can be compared to internal validity, transferability instead of generalisability (external validity), dependability (reliability) and confirmability (objectivity). In addition, I aimed to ensure authenticity, as fifth quality criterion (Lincoln & Guba, 1985; Schwandt, 2007). These criteria for qualitative research may be used as complementary to the quantitative results of a study, contributing to an enhanced understanding of the phenomenon under study (Stiles, 1993).

The first criterion, *credibility*, refers to the *truth* or value of qualitative results. In support of credibility, I included a process of data triangulation (Tracy, 2010) which, according to Pinto (2010), can enhance the verification of results. In this regard, triangulation allows for inductive and deductive observation to be explored, which can be logically connected (Pinto, 2010). In addition, by creating a detailed reflection and description of the research setting, the views and thoughts of the participants can be enhanced (Flick, 2008; Tracy, 2010). To be able to include such a detailed report, the qualitative components of my research included a reflective journal (Consult Appendix S) that captured my reflections on the research decisions and data generation and analysis processes that were completed.

In support of *transferability* of the qualitative findings of this study, I include detailed descriptions of the research process in this thesis as well as a trail of evidence to allow readers to gain insight into the research process and data as well as the analysis I completed (Bryman, 2001; Rule & John, 2011). Additional strategies I relied on include multiple data sources and data triangulation, keeping a detailed reflective journal, member checking (consult Appendix Q), regular supervision discussions, a peer review of my analysis as well as independent coding. Sufficient data was generated, and the results were compared to existing literature during interpretation of the results, comparing these with existing theoretical perspectives (Ebersöhn, 2012; Robson, 2011; Tracy, 2010).

Dependability implies the replicability of the findings of a study (Babbie & Mouton, 2001; Cohen et al., 2011; Merriam, 2009) that may be ensured through appropriate and extensive data generation and analysis procedures (Tracy, 2010). As personal bias may threaten the dependability of research findings, I remained aware of my background and preconceived ideas, and kept a reflective journal. Throughout, I noted and reflected on the research process and decisions, preliminary findings and insights I had gained.

I furthermore relied on member checking and regular discussions with my supervisor and fellow doctoral student in support of the dependability of the findings. An independent coder

conducted data checks and confirmed the relevant aspects of the data analysis in support of replicability or dependability of the findings (Nieuwenhuis, 2012).

In support of *confirmability*, I aimed for the findings to confirm the views of the participants (Lincoln & Guba, 2005). This implies that other researchers will come to similar research conclusions when analysing the data. According to Creswell (2014), a detailed description of the research process may allow for a deep understanding of the data and enhance the confirmability of findings. In addition to keeping a reflective journal, the peer review of my analysis, member checking and audio-recordings that can be revisited may enhance the confirmability of the qualitative findings (Rule & John, 2011; Seale, 1999).

Finally, I aimed to increase the understanding of the phenomenon under study in support of *authenticity*. Authenticity is possible in the case of a rich and rigorous research process, characterised by thorough methodological procedures and a robust inquiry (Seale, 2002; Tracy, 2010). Ethical fairness towards research participants by providing them with an opportunity to make informed decisions about consent can contribute to authenticity. Reflexivity during a research process may also be utilised as strategy, as well as the analysis of multiple data sources to derive substantive conclusions (Onwuegbuzie et al., 2010). Strategies such as these may all increase the usefulness of the findings of qualitative research (Flick, 2008). By relying on these strategies, I strove to ensure authentic findings.

1.12 ETHICAL CONSIDERATIONS

When conducting research with human participants, it is important to respect ethical principles. Throughout my study I was guided by the ethical principles prescribed by the Ethics Committee of the University of Pretoria, Faculty of Education (University of Pretoria, 2022).

I obtained ethics clearance from the University of Pretoria (consult Appendix F) as well as the Gauteng Department of Education (consult Appendix G) before commencing with the empirical part of my study. Hereafter, I obtained permission from the school principals and related school-governing bodies (consult Appendix H). The participants that formed part of this study also provided informed consent (consult Appendix D) prior to completing the online questionnaire (Cohen et al., 2011; Teddlie & Tashakkori, 2009). Voluntary participation was indicated as part of the informed consent, with participants being informed about the option to withdraw from the study at any time (Maree & Pietersen, 2019; Ryen, 2021).

Throughout, I adhered to the ethical principles of protection from harm, anonymity and confidentiality (Ebersöhn, 2020; Ryen, 2021). I furthermore ensured anonymity of the participants by assigning arbitrary codes to them (Cohen et al., 2018; Leedy & Ormrod, 2013; Mertens, 2014; Teddlie & Tashakkori, 2009). I therefore do not present any data or findings in this thesis in such a way that a school or participant can be identified. Even though I attended to the principle of confidentiality, I cannot ensure that the participants who took part in the online participatory focus groups kept all information confidential (Ebersöhn, 2020; Maree, 2016), despite having been requested to do so. Since my study was undertaken alongside that of a fellow doctoral student, data was available to both of us as well as our supervisor; however, all electronic files are password protected.

I endeavoured to create a relationship of trust between the participants and me by spending sufficient time to establish rapport and ensuring participants of no harm as a result of their participation (Ryen, 2021). Throughout, the participants had the right to welfare, dignity (Gravetter & Forzano, 2009), protection (Creswell, 2009), respect and privacy (Leedy & Ormrod, 2013), which I honoured during my research activities. More detailed explanations of the ethical considerations I adhered to follow in Chapter 3.

1.13 OUTLINE OF THE CHAPTERS

Chapter 1 serves as background and orientation to the study I completed. I introduce the phenomenon that I focused on, explain the rationale for undertaking the study and state the research purpose. I formulate the research questions and hypotheses, and state my working assumptions. After clarifying the key concepts of the study, I introduce the conceptual framework I relied on. Next, I refer to the paradigmatic choices I made and introduce the research design and methodological strategies I utilised. I briefly discuss the validity, reliability and trustworthiness criteria and conclude by referring to the ethical considerations that applied.

In Chapter 2, I explore relevant literature related to the COVID-19 pandemic, more specifically the impact of the pandemic on the education sector of South Africa. Hereafter I discuss existing literature on resilience and how resilience can support individuals to cope with adversities such as those associated with the COVID-19 pandemic. I pay particular attention to the nature and importance of teacher resilience. I then explore cognitive functioning, specifically in terms of possible strategies that can be used in response to

adversity that may consequently promote resilience. In the final section of Chapter 2, I explain my conceptual framework in more detail.

In Chapter 3 I discuss the empirical study that I completed. I stipulate and justify my choices related to the epistemological (pragmatism) and methodological (mixed methods) approaches I relied on. I describe the research design (sequential explanatory mixed methods research design) in detail and explain how the respondents/participants were selected. Next, I describe the process of data collection/generation, capturing/documentation and analysis. Throughout, I refer to the benefits implied by the methodological choices I made yet also indicate the implied challenges. I refer to my role as researcher, explain how I attempted to adhere to the standards of rigour and then conclude the chapter by indicating how I respected ethical guidelines.

In Chapter 4 I discuss the results of the study. To this end, I present the results of the statistical analysis, relying on graphical representations as well as the voices of the participants (qualitative data) in support of the quantitative data. In discussing the quantitative data, the results of the Spearman correlation coefficient are used to illustrate the correlation between the variables (cognitive strategies and resilience). Finally, I discuss the findings following deductive and inductive thematic analysis of the qualitative data.

In Chapter 5, I integrate the results presented in Chapter 4. More specifically, I integrate the results obtained from the quantitative data analysis with the themes identified as a result of the thematic analysis of the qualitative data. As such, the results of the quantitative part of my study are explained, refined and extended by the results of the qualitative part of the study. Throughout, I present the findings of the study by interpreting the results I obtained in terms of existing literature. I highlight correlations as well as contradictions between the results of my study and existing literature, indicate silences in the data and foreground new insight stemming from the study. I also relate the findings of my study to the underlying theories and conceptual framework I presented in Chapter 2.

In Chapter 6 I draw conclusions, indicate the possible contribution of the study, reflect on limitations and make recommendations. I commence the discussion by addressing the research questions and hypotheses. Next, I reflect on the possible theoretical, methodological and practical contributions, identify limitations and then make recommendations for future research, practice and training.

1.14 SUMMARY

In this chapter, I introduced my study and provided some background in terms of my rationale for focusing on the specific topic. I formulated research questions and stated the hypotheses I set out to test. I clarified the key concepts underlying the study and introduced the selected paradigms, research design and methodological choices. I also referred to validity, reliability, trustworthiness and the ethical considerations that applied to this research.

In the next chapter I provide an in-depth discussion of existing literature that provided background to my study. More specifically, I describe the context within which individuals had to cope as a response to the challenges implied by the COVID-19 pandemic. To this end, I present an overview of COVID-19 as a global crisis before discussing the effect of the pandemic on the education sector in South Africa. The importance of relying on resilience to cope amidst a pandemic is also elaborated on, more specifically in terms of cognitive strategies that may support teacher resilience. I conclude Chapter 2 by discussing the conceptual framework that guided me in undertaking this study.



CHAPTER 2 - LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1 INTRODUCTION

In the previous chapter I provided an introduction to my study in terms of the rationale, purpose of the study, research questions and hypotheses. I clarified key concepts and introduced the selected paradigmatic and research methodological choices I made. I briefly referred to validity, reliability and trustworthiness as well as the ethical considerations that apply.

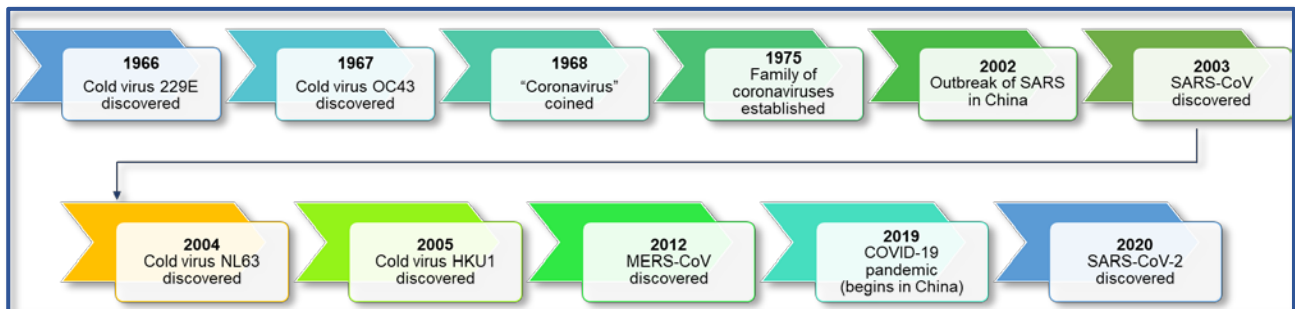
In this chapter, I discuss the existing literature related to the focus of my research. I commence by describing the COVID-19 pandemic as a global crisis, its impact within the South African context, and the effect of the pandemic on the education sector of this country. I specifically refer to the challenges faced by teachers as a result of COVID-19 and the national lockdown restrictions that were implemented. Hereafter, I explore resilience, with reference to teacher resilience and teachers' ways of coping with changing circumstances and adversity. I specifically focus on cognitive functioning and the cognitive processes that can be mediated through self-efficacy. Next, I explain the potential effect of stress on cognitive functioning and possible coping strategies that may be relied on in response. I conclude the chapter with an explanation of the conceptual framework that guided me in undertaking the study.

2.2 THE COVID-19 PANDEMIC

The first case of pneumonia, caused by SARS-CoV-2, was recorded in Wuhan (China) in early December 2019 (Harapan et al., 2020; Lv et al., 2020). This highly contagious respiratory illness can be transmitted among people through social contact (Chen et al., 2022; Hilgeroth, 2020). According to Hilgeroth (2020, p. 271), "spike proteins found on SARS-CoV-2 can bind to the human angiotensin-converting enzyme 2 (ACE2) receptor found in lung, heart and gastrointestinal cells to enter these human body cells for spreading". Despite SARS-CoV-2 only recently spreading across the globe, this coronavirus was preceded by several related viruses since 1937, as depicted in Figure 2.1.

Figure 2.1

Emergence of the coronavirus



(Adapted from Kupferschmidt, 2020)

The WHO declared COVID-19 as a pandemic on the 11th of March 2020 (WHO, 2020a; WHO, 2020b; Yıldırım & Arslan, 2020). At first, infected individuals experienced mild symptoms or were asymptomatic in around 80% of the cases (Hilgeroth, 2020). At that time, varying views on the transmission possibility by asymptomatic individuals existed yet it soon became clear that the virus could be spread by people not presenting with symptoms, thereby posing a crisis for especially people with underlying medical conditions (Bhadelia, 2020; Harapan et al., 2020; Robles-Bello et al., 2020). Comorbidities and risk factors associated with higher death rates include cerebrovascular and cardiovascular diseases, as well as diabetes in older age groups of above 60 years (Harapan et al., 2020; Hilgeroth, 2020).

In addition to their physical health being threatened, the mental health of individuals who were infected was challenged, among other factors, by the poor predictability and uncertainty associated with the pandemic at the time (Lv et al., 2020). Such volatility, unpreventability, perilousness and uncontrollability are associated with a traumatic stressor for human beings experiencing a threat such as the COVID-19 pandemic (Benight & Bandura, 2004). As such, the outbreak of COVID-19 can be regarded as an unprecedented disaster in the history of humanity (Chen & Bonanno, 2020; Lin et al., 2020). On the 5th of May 2023, more than three years later after the WHO declared the COVID-19 pandemic as public health emergency, the director-general of the WHO, Tedros Adhanom Ghebreyesus, confirmed that COVID-19 no longer constituted a global health emergency, but an ongoing and established health issue to be managed (WHO, 2023).

In the following sub-sections, I provide contextual background on the adversities and challenges associated with the COVID-19 pandemic, referring to the potential impact and

extent thereof within a global as well as a national framework. I conclude the section by discussing the effect of the pandemic on the education system in South Africa, specifically referring to the associated challenges experienced by South African teachers.

2.2.1 A global crisis

The spread of COVID-19 across the globe caused the death of hundreds of thousands of people in a short period of time (Chen & Bonanno, 2020; Gundogan, 2021; Yıldırım & Arslan, 2020). Statistics on the number of people infected and deceased (Worldometer, 2023) accentuate the severe consequences of the pandemic, with this being intensified by the fact that no evidence-based treatment or vaccine against COVID-19 was available during the first phase of the pandemic (Bhadelia, 2020; Harapan et al., 2020; Jaspal & Nerlich, 2020; Marivate & Combrink, 2020; Yıldırım & Arslan, 2020).

Consequently, due to the rapid spread of the virus, it soon posed a global public health problem (Feng et al., 2020; Harapan et al., 2020; Sajadi et al., 2020; Yıldırım & Arslan, 2020). In response to the pandemic, various types of vaccination¹⁰ were developed and by the 26th of June 2023, 13 338 833 198 doses of vaccinations had been administered worldwide (John Hopkins University, 2023). However, prior to these medical intervention options, the health and wellbeing of the global population was under threat, with the impact of the pandemic on individuals' mental health being regarded as a global public health challenge (Stark et al., 2020).

According to Ebersöhn (2020), COVID-19 thus represented a collective, cumulative, simultaneous, global and chronic distress that was initially unfamiliar, and therefore also unpredictable. In immediate response and an attempt to curb the severity of the pandemic and the spread of COVID-19, governments around the globe implemented severe restrictions and took drastic measures shortly after the outbreak had occurred (Chen et al., 2022; Gundogan, 2021; Lin et al., 2020; Padmanabhanunni et al., 2022; Watkins, 2020). These included travel restrictions, mandatory mask wearing, national lockdowns as well as the closure of non-essential services and educational settings (Ataguba, 2020; Bhadelia, 2020; Chen et al., 2022; De Jesus et al., 2021; Padmanabhanunni et al., 2022). In addition, the social determinants of health resulted in social distancing, stipulations for the closure of

¹⁰ COVID-19 vaccines assist the human immune system to create antibodies (Mayo Clinic, 2022).

schools and restaurants, the use of PPE and lockdown periods in especially developing countries, to reduce the pressure on weak healthcare systems (Ataguba & Ataguba, 2020).

Various authors agree that the COVID-19 pandemic affected the mental health of individuals worldwide (Chen & Bonanno, 2020; Feng et al., 2020; Gundogan, 2021; Yıldırım & Arslan, 2020). To be more specific, the rapid spread of the virus and the associated deaths caused high levels of fear and panic among individuals (Ataguba, 2020; Chen & Bonanno, 2020; Naidu, 2020; Padmanabhanunni et al., 2022; Taylor et al., 2020). Additionally, negative emotions such as depression and anxiety were experienced by many people, as the psychological consequences of the pandemic rose among individuals across all spheres of society (Lv et al., 2020). In this regard, Luceño-Moreno et al. (2020) as well as Theron et al. (2021) report that high numbers of individuals experienced stress in response to the pandemic, fearing contraction of the virus from objects or other individuals, or fearing the infection of others, such as a family member (Barzilay et al., 2020).

Subsequently, Gruber et al. (2021) reason that a combination of stressors associated with COVID-19 such as perceived loss of control, financial insecurity, prolonged exposure to information that provoked anxiety, the loss of loved ones and social disconnection may have increased the psychological challenges experienced by human beings from all age groups during the time of the pandemic (Feng et al., 2020; Gundogan, 2021; Robles-Bello et al., 2020; Wang et al., 2020). Some of these challenges did, however, not only impact the mental health of individuals, but also the behavioural and cognitive domains of functioning (Fitzpatrick et al., 2020; Paolini et al., 2020). Additional anguish was caused by uncertainties related to the virus that included concerns about financial resources, a constant alertness and behavioural realities associated with keeping oneself and others safe and healthy, as well as the risks of prolonged duration of the challenges and restrictions that were experienced and could become part of daily living (Barzilay et al., 2020; Da Silva et al., 2020). As such, several economic, social and health challenges surfaced in addition to the aforesaid psychological challenges that occurred (Abdallah et al. 2021; Gundogan, 2021; Polas & Raju, 2021).

In response to the pandemic, many individuals started avoiding social interaction. Suspicion of others was induced by the fear of risking infection (Feng et al., 2020, Robles-Bello et al., 2020), often leading to intensified levels of anxiety, with the possibility of some individuals developing depressive and anxiety disorders (Feng et al., 2020). Behaviour and lifestyle changes associated with social distancing resulted in individuals experiencing changes in

interpersonal relationships, social isolation, disconnection with specific places and a loss of routine (Jaspal & Nerlich, 2020). Impacted by psychological challenges such as isolation, anxiety and uncertainty, human behaviour was an important factor in dictating the severity of the pandemic and the spread thereof (Bonanno, 2020). Consequently, this disease was initially regarded as unique as it exerted severe and widespread impacts on the daily lives of individuals without an end date at the time, which presented a complex combination of stressors that often prevented individuals from focusing on protective factors in support of their own resilience (Chen & Bonanno; 2020; Chen et al., 2022).

It may be argued that individuals in countries more used to dealing with collective stressors, such as African countries, would possibly have been able to mobilise protective factors in support of collective resilience in dealing with COVID-19 (Barzilay et al., 2020). However, as individuals differ in terms of protective factors and overall health, the capacity to respond to challenges and demonstrate resilience cannot be predicted or generally applied to groups of people in society (Bonanno, 2004; Griffin 2020). Furthermore, the capacity of individuals to adapt to adverse situations can be modulated by sociodemographic factors such as age, employment and education levels, due to these factors affecting people's ability to access resources and protective factors (Lai et al., 2020; Qiu et al., 2020; Robles-Bello et al., 2020). In this regard, individuals with higher levels of education can be expected to demonstrate better resilience in difficult times than those less educated (Chen & Bonanno, 2020; Liang et al., 2020; Robles-Bello et al., 2020).

Within the African context specifically, Ebersöhn (2020) posits that large-scale adversity is normative and that interdependent resilience mechanisms will always be present as a result of the actions of the individuals on this continent. However, local risk factors may negatively impact stress levels, mental health and resilience during challenging times, such as during a pandemic (Barzilay et al. 2020; Naidu, 2020). To be more specific, when threats to the survival of oneself and others become a prominent concern in everyday life, people may feel that mental health care should take a step back and that the preservation of life is salient. Yet, Da Silva et al. (2020) argue that mental health in itself is a key to survival and that the preservation and reconstruction of society within and following the pandemic was a priority. To this end, the study that I undertook may contribute to existing literature on the wellbeing and resilience of individuals (specifically teachers) when facing adversity such as a world pandemic.

2.2.2 COVID-19 in South Africa

The first COVID-19 case was reported in South Africa on the 5th of March 2020 (National Institute for Communicable Diseases, 2020). As mentioned, it soon became apparent that older ages and comorbidities positively correlated with the fatality rates of COVID-19 patients (Ataguba, 2020). In South Africa specifically, the fairly high number of HIV/Aids, diabetes and tuberculosis patients (Institute for Health Metrics and Evaluation, 2017) may have resulted in an increased number of COVID-19-related deaths when the pandemic broke out. As on the 23rd of October 2023, 102 595 South Africans had died as a result of COVID-19 (John Hopkins University, 2023), which confirms the serious impact and extent of the virus on individuals and families in South Africa, just as in the rest of the world.

In response to the uncertainties and adversities associated with COVID-19, President Cyril Ramaphosa declared a national state of disaster in South Africa on the 15th of March 2020 (Department of Health, 2020a). As part of the announcement, the South African government attempted to reduce the spread of the virus by imposing travel restrictions and closing border-crossings (Marivate & Combrink, 2020; Naidu, 2020; Theron et al., 2021). At the time, Habib (2020) described the South African lockdown as one of the utmost extreme and rigid lockdowns implemented anywhere in the world. The lockdown was structured according to five levels, with level five prescribing the strictest measures (Theron et al., 2021). As the impact of the pandemic progressed, the levels were adjusted and enforced in a way that could manage the different waves of infections in South Africa.

In spite of the flow of events, South Africa had some advantage during the rise of the pandemic due to lessons learnt from other countries, such as China, Italy and Spain (Naidu, 2020). The South African government acted early with decisive action, and assisted citizens by providing informative and supportive material as well as psychological and social support¹¹ (Jung & Jun, 2020). Despite these efforts, Hodel and Okiror (2020) as well as Theron et al. (2021) explain that a devastating impact could still be observed in South Africa with regard to the social and economic challenges that the country faced, specifically due to shortages in terms of sufficiently equipped hospitals, intensive care units (ICUs) and ventilators to care for patients diagnosed with COVID-19.

¹¹ Monthly Social Relief of Distress (SRD) grants of approximately US\$21.25 were paid out to eligible citizens (South African Government, 2022).

As the data on contact information and available facilities within South African hospitals were not effectively updated at the time, the risk of not knowing which hospitals were adequately equipped to treat and assist COVID-19 patients was often faced by people who had to obtain assistance and medical care (Marivate & Combrink, 2020). This failure to prioritise informative data during the early days of the pandemic resulted in difficulty to manage health-related stressors in South Africa during this time of challenge (Marivate & Combrink, 2020). In addition, fear and anxiety among the citizens of the country may have been exacerbated by compromised access to health care services (Chen & Bonanno, 2020). Even though effective crisis and risk communication in developing countries, such as South Africa, may have reduced the panic and anxiety levels in society (Ataguba & Ataguba, 2020), reliable information, correct data and effective crisis and risk communication had to be maintained for this to be possible (Ataguba & Ataguba, 2020; Marivate & Combrink, 2020; Naidu, 2020). When considering these challenges surrounding health care provision during this difficult time, the possible negative impact of the pandemic on individuals' physical and psychological wellbeing within a system where control of many protective factors was out of their reach, seems clear.

Furthermore, within developing countries such as South Africa, the financial strain as a result of the COVID-19 pandemic burdened many families. According to Ataguba (2020), as much as 70% of the health expenditure in African countries was out-of-pocket payments, resulting in decreased health protection, due to many individuals already living below the poverty line when the pandemic occurred. Additionally, many African countries allocated funds to respond to the pandemic, yet as a result, had to reduce the funding allocated to other health priorities such as nutritional as well as communicable and infectious disease priority projects (Ataguba, 2020). As such, numerous economic sectors were negatively affected by the impact of and the measures taken in response to the COVID-19 pandemic (Ataguba, 2020).

At the time, the majority of the South African population (55.5 %) lived in poverty, residing in crowded homes often consisting of intergenerational families (Naidu, 2020; World Bank Group, 2020). As the incidence of depression (33%) and anxiety (45%) was high during the pandemic (Human Sciences and Research Council, 2020), especially in poverty-stricken households (Naidu, 2020), the trauma that was associated with the pandemic could have exacerbated existing mental health challenges (Chen & Bonanno, 2020; Montemurro, 2020). Associated hardships may, in turn, have intensified the risk of domestic violence. In addition, Tomita et al. (2019) report that food insecurities may have increased the mental health challenges experienced by South African citizens during the COVID-19 pandemic.

Social restrictions that prevented individuals from spending time with their families and friends seemingly had a distinct negative effect on individuals (Ebersöhn, 2020). To this end, a growing body of literature confirms that the COVID-19 pandemic and its related restrictions negatively influenced the mental health of many individuals (Chen & Bonanno, 2020; Padmanabhanunni et al. 2022). Consequently, additional mental health services, including *pro bono* interventions offered by psychologists and psychiatrists, were made available to South African citizens through the national public health system (Naidu, 2020). As a psychologist working within the education sector, I often reflected on the extent to which teachers could have accessed these services in support of their coping with the adversities implied by the pandemic.

2.2.3 Effect of COVID-19 on the education sector of South Africa

As a result of the response to the COVID-19 pandemic, people in the education sector faced distinct challenges (Juliana et al., 2021). In this regard, Naidu (2021) is of the view that few developments in history have impacted on the general trend of thought in education systems quite as severely as COVID-19 did. More specifically, the pandemic resulted in a drastic transformation of the education system and a paradigm shift in learning and teaching methodologies (Corpuz, 2021; Juliana et al., 2021). Furthermore, navigation of the implications of the COVID-19 pandemic may have been experienced as traumatic by many teachers, thereby affecting the intensity of environmental stressors experienced by them (Brooks et al., 2022; Weißenfels et al., 2022). I concur with Alavinia and Pashazadeh (2018) that society is, to a large extent, dependent on its educational system and the role of teachers in a country, with this view confirming the importance of teacher wellbeing, even during times of challenge.

After President Ramaphosa had declared a national state of disaster on the 15th of March 2020, all South African schools were closed as of the 18th of March 2020, initially scheduled to reopen on the 14th of April (Department of Health, 2020a; Padmanabhanunni et al., 2022). On the 23rd of March 2020, President Ramaphosa announced an extended national lockdown for 21 days as from the 26th of March until the 16th of April 2020. During this time, all South Africans, except those involved in essential services, had to stay at home (Department of Health, 2020c). The president once again extended the lockdown on the 9th of April until the end of April 2020 (Department of Health, 2020d).

With immediate effect, teachers were expected to start offering remote and/or online teaching to learners during the said lockdown periods. Forced and unseen changes included a changed mode of working for teachers, adjustments for people to work from home, and the provision of continued online education that may have affected the professional and personal lives of teachers (Brooks et al., 2022; Dinu et al., 2021; Weißenfels et al., 2022). According to Naidu (2021), this sudden change to an online learning environment required the reengineering and rethinking of learning and teaching strategies by teachers as well as learners, placing additional demands on teachers in an already uncertain time (International Task Force on Teachers for Education, 2020).

More specifically, teachers had to adapt their instructional methods, acquire new technological skills, adjust their teaching in various ways to stay connected to learners, provide effective remote instruction to learners and think creatively when faced with emerging challenges (Padmanabhanunni et al, 2022; Wuest & Subramaniam, 2021). Teachers furthermore had to adapt and adjust to new health regulations and manage uncertainties within the *new normal* reality, also in terms of curriculum implementation (Brooks et al., 2022; Padmanabhanunni et al., 2022). All these demands and changes added to the workload of teachers, requiring of them to develop alternatives for assessment procedures and face-to-face teaching activities for practical subjects (Dinu et al., 2021) within uncertain times and a changing education environment (Brooks et al., 2022).

The Minister of Education, Angie Motshekga, announced a phased-in approach for the reopening of South African schools on the 30th of April 2020. In her statement, the minister indicated that teachers had to return to school on the 18th of May 2020, with Grade 7 and Grade 12 learners returning to school on the 1st of June (Department of Health, 2020f), after which the other grades would return, following a phased-in approach. Despite this plan, learners of all schools did not return on the stipulated dates due to different levels of readiness within the education sector in different schools (Department of Health, 2020g). Parents furthermore had the option to continue with online learning in the case of learners that were regarded as high-risk cases or that resided with people with comorbidities. However, learners started returning to school from the 8th of June 2020 under strict safety regulations implemented by teachers and other school staff members. With regard to the assessment of learners' work, an announcement on the 18th of April 2020 stipulated that the Department of Basic Education had postponed the writing of the May/June (mid-year) examinations in schools in South Africa for that particular year (Department of Health, 2020e).

A few weeks later, on the 23rd of July 2020, President Ramaphosa announced that schools would be closed once again, from the 27th of July until the 24th of August 2020. Grade 12 learners were the exception, with them returning to school on the 3rd of August, followed by Grade 7s on the 10th of August 2020. The president furthermore announced that the academic school year would be extended beyond the end of the 2020 calendar year (Department of Health, 2020h). During the periods of (partial) school closure, teachers, however, had to create and offer continuous learning opportunities, once again relying on online modes and/or remote learning facilitation (International Task Force on Teachers for Education, 2020; Naidu, 2021; Sun et al. 2020). Hence, teachers had to undergo upskilling and reskilling without delay to accommodate this adapted teaching and learning scenario, resulting in many teachers experiencing high levels of work pressure and stress (Naidu, 2021; Padmanabhanunni et al., 2022). In addition to teachers making adjustments on ground level, policy development and redesigning were required to incorporate the needs of the shifted educational landscape (Naidu, 2021). Existing policies had to be adapted to include the use of technology and media during teaching and learning activities within unfamiliar and unprecedented scenarios (Brooks et al., 2022; Naidu, 2021).

In addition to the implementation of the aforesaid regulations, teachers were expected to continue with online teaching during and after the lockdown periods, to accommodate learners who decided to stay and learn from home during these times. As a result, teachers had to teach on the school premises for the majority of the learners yet also online for a small percentage of learners until February 2021, when conventional classroom-based teaching resumed for all learners (Padmanabhanunni et al., 2022). According to the International Task Force on Teachers for Education (2020), the additional and continuous demands that were placed on teachers intensified as a result of the pandemic, possibly resulting in increased levels of stress and even burnout among individuals in the profession.

Dinu et al. (2021) are of the view that especially the older generation teachers were less confident and able to apply digital skills, resulting in them probably feeling more challenged than the younger age group of teachers. Adding to this, Brooks et al. (2022) explain that experienced teachers would typically experience a greater sense of discouragement than their inexperienced counterparts when not meeting the expected or desired results. However, older individuals may experience fewer symptoms of depression, post-traumatic stress and anxiety during challenging times when compared to younger individuals, with females being prone to display more intense symptoms of these conditions than men (González-Sanguino et al., 2020; O'Connor et al., 2021). Jia et al. (2020) and O'Connor et

al. (2021) confirm these trends by indicating that females, individuals with pre-existing mental health challenges and young individuals are generally at a greater risk of experiencing mental health problems than others. However, females are also regarded as being more resilient than males (Pappa et al., 2021), resulting in the possibility of females more often experiencing mental health challenges, yet being better able to cope with such conditions. Regardless of these trends, it seems clear that teachers of varying ages and genders faced the possibility of experiencing intensified levels of stress during the COVID-19 pandemic.

Brooks et al. (2022) argue that teachers from different countries may have experienced the stressors posed by the pandemic in different ways, depending on their unique contextual situations. In this regard, Padmanabhanunni et al. (2022) are of the view that teachers in South Africa may have experienced higher levels of fear in response to COVID-19 when compared to teachers in other countries, due to contextual factors negatively impacting South African teachers' ability to implement safety protocols as well as to many teachers having comorbidities themselves. In general, teachers working in environments where resources were limited experienced burnout more often due to the demands and expectations being especially high given their circumstances (Juliana et al., 2021). Bottiani et al. (2019) report that burnout and stress among public school teachers were even higher in the case of teachers working in urban schools, where, according to Herman et al. (2018), 93% of all teachers may experience high levels of stress, even when working under normal conditions.

The negative effects of COVID-19 (including depressive symptoms, anxiety symptoms, feelings of defeat, entrapment and loneliness) were reported to be the worst for individuals from socially disadvantaged backgrounds¹² (O'Connor et al., 2021; Sayed & Sing, 2020). In this regard, in terms of the contextual factors within which many South African teachers are expected to cope and adapt, limited resources and other related systemic challenges may not support effective coping. In considering these predictions, I was concerned about the uptake of my study by teachers from both semi-urban and urban school contexts when commencing with my field work, due to the challenges related to resource constraints in many schools in the country.

¹² Individuals or groups of individuals who have been disadvantaged in gaining access to resources and opportunities. This may be based on cultural bias, gender or historical contexts (adapted from Law Insider, 2013-2022).

In summary, South African teachers that are regarded as frontline workers within the education system experienced sudden changes in terms of the nature of their work as a result of the COVID-19 pandemic (Naidu, 2021; Padmanabhanunni et al., 2022). More specifically, teachers had to make adjustments and start teaching online, balancing the demands of family life, managing limited organisational support, dealing with financial challenges, addressing the needs of learners, and dealing with family and/or personal loss and illness. All these challenges may have added to the stress experienced by teachers during this time (Brooks et al., 2022; Chen & Bonanno, 2020; Padmanabhanunni et al., 2022; Wuest & Subramaniam, 2021). Closely related, a study by Padmanabhanunni et al. (2022) indicates that the fear of COVID-19 resulted in emotional exhaustion (Juliana et al., 2021) and even depersonalisation among teachers in South Africa. In addition, the changes caused by the COVID-19 pandemic led to feelings of guilt, frustration and anxiety, all nested within high levels of stress and even possible trauma experienced by teachers (Brooks et al., 2022; Weißenfels et al., 2022).

It is imperative to keep in mind that teachers play a critical role in the education of learners (Corpuz, 2021). If teachers are not coping effectively, their relationships with learners may be affected, implying a potential negative impact on the behaviour and performance of learners (Herman et al., 2018). Despite the possibility of many teachers feeling overwhelmed during the challenging time of the COVID-19 pandemic, teachers seemingly coped by adapting and then fulfilling the new adjusted roles as expected of them (Benight & Bandura, 2004). When considering this trend of teachers to continue supporting learners to progress and perform, it seems clear that the teachers in South Africa demonstrated varying levels of teacher resilience in coping with the challenges they faced. As ongoing research has been undertaken on teacher responses and the effects of COVID-19 on their wellbeing over the past few years (Brooks et al., 2022; Dinu et al., 2021), my study may contribute to this growing body of knowledge. By specifically focusing on the cognitive strategies that teachers may have relied on in coping with the adversities they faced as a result of COVID-19, the findings of my study may provide insight into transformative pathways and a transformative response to adversity, as applicable in the education sector (Ebersöhn, 2020).

2.3 RELYING ON RESILIENCE WHEN HAVING TO COPE WITH SUDDEN CHANGE

Adversity may take on many forms in the lives of individuals. George Bonanno was a pioneer in the introduction of resilience within the context of loss and trauma, as related to the adversities posed by the COVID-19 pandemic (Bonanno, 2020). According to Bonanno

(2004), resilience in the face of potential trauma is more common than was previously believed, pointing to unexpected and multiple pathways towards resilience. I regard the views of Bonanno (2004; 2012; 2020) on resilience as relevant for the study I undertook as this author has often done research in response to traumatic events and experiences.

Bonanno (2020) is of the view that resilience within the context of a world pandemic implies the ability to maintain a level of good mental health, minimising concern, depression and anxiety, and keeping one's spirits up during challenging times. From a positive psychological perspective (Seligman, 2003; Seligman & Csikszentmihalyi, 2014), positive emotions will as a result be relied on in support of resilience, when facing trauma.

In terms of the specific focus of my study, Griffin (2020) emphasises that COVID-19 resulted in trauma experienced in many countries yet that individuals' experiences of the pandemic may have differed. Therefore, it can be assumed that, within the context of COVID-19, resilience may have had a significant effect on the psychological wellbeing and mental health of different populations and among different cultural groups despite the possibility of populations having different experiences (Feng et al., 2020; Gundogan, 2021; O'Connor et al., 2021; Yıldırım & Arslan, 2020). In this regard, Bonanno et al. (2015) differentiate between acute and chronic circumstances during which individuals can display resilience, in the following manner:

... acute adversity describes a relatively isolated but potentially traumatic life event that demands resources and/or results in the loss of resources and exerts its primary impact over a relatively transient period, usually no longer than one month. By contrast, chronic adversity involves an event or related series of events that exerts repeated and cumulative impact on resources and adaptation and persists for many months and typically considerably longer (Bonanno et al., 2015, p. 142).

When aiming to understand the psychological resilience of an individual, the quality of the adverse risk experience, its chronicity and severity, the systemic level at which it occurred, attribution to the causality as well as cultural relevance of the challenge should be considered (Ungar, 2015; Ungar & Theron, 2020). It follows that trauma cannot be viewed as an isolated event, but rather represents an occurrence that may imply prolonged and pervasive stressors (Benight & Bandura, 2004). In undertaking this research, I upheld the view that the adversities associated with the COVID-19 pandemic can be regarded as both acute (initially) and chronic when considering the continued challenges it posed to individuals. Within the context of a pandemic, resilience will in general imply individuals

dealing with ongoing stress to minimise the effect of stress in a time of crisis (Bonanno, 2020).

In the case of multiple stressors such as those related to COVID-19, for example, the loss of an income, witnessing multiple deaths or losing loved ones, and the risk of becoming homeless, resilience may have presented differently for different individuals. As such, resilience might have been demonstrated as acts of, for example, seeking social support, tolerating uncertainty, relying on optimism, actively solving problems, coping on a daily basis or creating hope for the future (Bonanno et al., 2015; PeConga et al., 2020).

According to Chang and Bonanno (2020), most human beings will demonstrate resilience in the face of extreme or potentially traumatic events. In applying this view to the context of COVID-19, it can be argued that individuals' resilience may have had the outcome of forced adaptation to sudden change and the challenges implied by the pandemic (Bonanno et al., 2011). In this regard, recent research by Kimhi et al. (2021) indicates that resilient individuals displayed fewer symptoms associated with depression and anxiety in response to the challenges posed by COVID-19 than what could have been expected. In support of this finding, Chang and Bonanno (2020) mention that the majority of individuals who are exposed to aversive events, such as those associated with the COVID-19 pandemic, are able to withstand this with no or little long-term negative psychological effects.

2.3.1 Understanding the concept and implications of resilience

Original theorising on resilience is largely attributed to psychiatrists and developmental psychologists that introduced the concept in the 1970s (Bonanno & Mancini, 2008). Various authors, such as Baum et al. (2018), Bonanno (2012), Masten (2001; 2011), Stark et al. (2020), Ungar (2013) as well as Wuest and Subramaniam (2021) have since proposed definitions of resilience. In general, these authors view resilience as the ability of an individual to create and maintain a healthy and continuous pattern of functioning in response to adversities and setbacks. As such, a prerequisite for resilience is exposure to adversity or a threat (Ee & Chang, 2010; Masten, 2001; Ungar & Theron, 2020). In synthesising these scholars' views, resilience can be conceptualised as a process whereby the mobilisation of protective and promotive factors – personal and contextual – within socio-ecological systems takes place to sustain and improve wellbeing (outcome) in the face of adversity (Ebersöhn, 2017; Ungar, 2011; Ungar & Theron, 2020; Windle, 2010).

As all individuals are presumed to possess the potential of demonstrating resilience to varying degrees, resilience can be developed, learnt and strengthened over time in an intentional manner (Wuest & Subramaniam, 2021). To this end, individuals may strengthen and develop coping strategies that can support them in managing challenging situations (Masten, 2001; Willers et al., 2013). Therefore, resilience may be framed as an adaptive response to stress ultimately to limit the negative effects of adversity while leading to positive outcomes (Gu & Day, 2007; Skinner & Zimmer-Gembeck, 2007; 2011; Tait, 2008).

Accordingly, various authors state that multiple pathways to resilience and resilience processes exist and that resilience can be scaffolded through everyday or ordinary resources (Bonanno, 2004; Coetzee et al., 2017; Masten, 2001; Ungar & Theron, 2020). Consequently, resilience can be described as the ability to bounce back and adapt from trauma, threats and adversity stemming from substantial sources of stress (Masten, 2001; Pappa et al., 2021). As such, resilience implies the ability to sustain a constant equilibrium despite experienced challenges and should not be regarded as the goal, but rather the means of achieving functional outcomes (Bonanno 2004; Ungar & Theron, 2020). In this regard, the efficacy of coping strategies in response to trauma and in promoting resilience has been found to vary between individuals and situations (Chen & Bonanno, 2020), resulting in the premise that no single factor can determine resilience for an entire population (Bonanno, 2020; Bonanno et al., 2015).

In line with these views, Wuest and Subramaniam (2021) describe resilience as the inner strength that all individuals possess and can rely on to deal with challenges and trauma in healthy ways to maintain stability in mental health (Bonanno, 2020). More specifically, resilience can be understood as a process during which promotive and protective factors (life, environment and individual assets) and processes of various relational, psychological, sociocultural, biological and ecological systems interact to assist individuals to sustain, regain and improve their mental wellbeing when facing adversities (Ungar & Theron, 2020; Windle, 2010). In this sense, resilience can be seen as the capacity of individuals to sustain wellbeing by navigating to resources available in their social and physical ecologies, and as the capacity of communities and families to share resources in a culturally meaningful way (Resilience Research Centre, 2019; Ungar, 2011; Ungar & Theron, 2020).

These multisystemic resources depend on the specific risk that is faced as well as the cultural context of an individual (Masten & Motti-Stefanidi, 2020; Masten et al., 2021; Ungar & Theron, 2020; Theron et al., 2021). In this regard, Ungar et al. (2007, p. 287) state that

“resilience is both an outcome of interactions between individuals and their environments, and the processes which contribute to these outcomes” that are furthermore influenced by the specific contexts of individuals. This implies that resilience will depend on the processes that contribute to wellbeing and may mitigate risks among individual, contextual, community (environment) and cultural factors (Bonanno, 2020; Ungar, 2011; Ungar & Theron, 2020; Ungar et al., 2007). To sum up, resilience can be ascribed to multiple promotive and protective factors and processes, across various systems (Ungar & Theron, 2020).

Resilience can thus assist individuals to cope with challenges; more specifically, it can be regarded as a buffer that alleviates the negative effects of stress and therefore acts as a protective factor, as explained by Wuest and Subramaniam (2021), supported by Luceño-Moreno et al. (2020). Protective factors refer to factors that can predict the adjustment potential of individuals that experience adversity (Hamby et al., 2018). It follows that resilience will depend on several protective and risk factors, with some of these factors being dependent on individual differences (Chen & Bonanno, 2020). Attributes that often serve as protective factors include attachment, agency and mastery, intelligence and/or problem solving, self-regulation, self-efficacy and faith, hope and meaning-making (Masten, 2014; Theron, 2020) as discussed in more detail in Section 2.3.4 (consult Table 2.1). Since individuals generally require a range of protective factors and strengths to improve their coping, Hamby et al. (2018) propose *polystrengths* as a term that refers to the entire range of protective factors that an individual holds. Polystrengths may include meaning-making strengths – reflective of cultural and faith-based processes – regulatory strengths, as well as peer, adult, community and immediate family social support (Hamby et al., 2018; Ungar & Theron, 2020). Gundogan (2021) adds that psychological resilience can in the same manner fulfil a protective function against the negative psychological consequences that individuals may experience, thereby increasing their endurance.

Being resilient does not imply that individuals do not experience stress or adversities; it simply means that an individual will be able to harness strengths to manage challenges effectively and ultimately learn and grow from these (Wuest & Subramaniam, 2021). As such, resilience implies that an individual will manage potential traumatic events significantly well and continue to function within the relevant systems (Bonanno, 2004). In support of this view, Richards et al. (2016) explain that individuals with strong levels of resilience are able to cope better with challenges and stress than their less resilient counterparts. As alluded to earlier, I support this view that higher levels of resilience can facilitate better coping, and

that effective coping may in turn strengthen an individual's resilience, thereby resulting in a coping-resilience-coping cycle, with a potentially positive effect on health and wellbeing.

In conclusion, Yıldırım and Arslan (2020) as well as Yıldırım and Belen (2019) posit that resilience will have a positive impact on individuals' wellbeing, mental health, life satisfaction, flourishing and balance. In linking this view to positive psychological theory, the latter foregrounds the satisfaction, contentment and wellbeing of past experiences, optimism and hope for the future, as well as happiness and flow in the present (Seligman & Csikszentmihalyi, 2014). Accordingly, hope, as inner resource and protector against inner vulnerabilities and/or external threats, can mediate the effect of resilience on an individual's wellbeing (Morote et al., 2017; Satici, 2016). It follows that the positive effect of resilience on the mental health and wellbeing of individuals can be explained from a positive psychology perspective, more specifically from an adaptive coping framework that I next discuss as lens through which I undertook my research.

2.3.2 Resilience from an adaptive coping framework

Bonanno and Mancini (2008) explain that individuals who face traumatic events often rely on resilience to cope and adapt. In line with this view, Skinner and Zimmer-Gembeck (2007; 2011) state that resilience can be framed as an adaptive response to stress that consequently limits the adverse effects of adversity and leads to positive outcomes. As such, the employment of adaptive coping strategies and the interaction between transactional adaptive systems in the face of adversity may lead to resilience as a product (Beltman, 2020; Brooks et al., 2022; Coetzee et al., 2017; Gu & Day, 2013; Jonker, 2021; Mansfield et al., 2016; Masten, 2001; Ungar, 2011). Herman et al. (2018) are of a similar view and state that stress and coping as constructs will contribute to the understanding of the adaptation of individuals, and that these constructs as well as self-efficacy are described as multidirectional and interrelated. In applying this perspective to resilience, more specifically to teacher resilience, it should be kept in mind that teacher stress is closely related to how teachers experience, perceive and appraise stressors (Brooks et al., 2022). In this regard, Csikszentmihalyi (1990) argues that resilience can be utilised as a powerful tool to dissolve trauma and assist an individual in regaining stability and balance. Broadly speaking, resilience involves a range of complex processes associated with the adaptive reactions of individuals when faced with challenges, on an emotional, behavioural and cognitive level (Masten, 2014; Masten & Cicchetti, 2016).

Ungar and Theron (2020) elaborate on this view and explain that internal promotive and protective factors that support resilience can include individuals' stress responses, neurological factors as well as cognitive factors. To be more specific, protective factors that have been identified as important to promote and maintain resilience include cognitive flexibility, self-regulation, thought processes and self-efficacy (Benight & Bandura, 2004; Chen & Bonanno, 2020; Masten, 2014; 2019), all of which are related to cognitive strategies or cognitive factors as noted by Ungar and Theron (2020).

During the resilience process, adaptive coping can seemingly mediate adversity, and as a result progressively lead to the positive adaptation of individuals (Jonker, 2021; Skinner & Zimmer-Gembeck, 2011). During such a process of adapting, effective coping strategies will curb the effect of adversity and foster individual wellbeing (Willers et al., 2013). In this way, resilience can be seen as a function of the interaction that takes place between the transactional adaptive systems in which an individual is rooted and as something that is shaped by contextual and cultural factors (Jonker, 2021; Skinner & Zimmer-Gembeck, 2011; Theron, 2016; Willers et al., 2013). In elaboration, risk factors will be appraised based on the contextual factors and the individual's self-perception, while the response thereto (coping behaviour) will lead to an adaptive outcome within the ecological system (Ebersöhn, 2014; PeConga et al., 2020; Skinner & Zimmer-Gembeck, 2007). From this point of view, resilience can be understood from a multilevel framework that underlies the subjective sense of ability of individuals to take control within an adverse situation (Jonker, 2021; Skinner & Zimmer-Gembeck, 2007; 2011).

A salient factor when wanting to promote and maintain resilience during times of drastic change, such as the COVID-19 pandemic, as argued by Chen and Bonanno (2020), relates to the need for cognitive flexibility. More specifically, Masten (2019) as well as Benight and Bandura (2004) highlight the self-regulation of individuals' thought processes as important to maintaining emotional wellbeing when facing a traumatic experience. Self-regulation, in turn, points to the possibilities of cognitive strategies when demonstrating resilience. In this regard, Masten (2014) identifies self-efficacy, self-regulation and problem-solving skills as cognitive attributes of resilience and wellbeing. During the challenging times associated with the COVID-19 pandemic, aspects such as self-regulation, personal coping resources, meaning, optimism, hope and significance (Baum et al., 2018; Masten, 2019) could thus have supported the occupational wellbeing and resilience of teachers. Hope is regarded as specifically beneficial to moderate the relationship between psychological adjustment and

stressors (Rand & Touza, 2021), with resilience being associated with the belief that life has meaning (Masten, 2019).

Following the outbreak of the COVID-19 pandemic, Da Silva et al. (2020) argued that the mental health agenda of individuals remained essential and should therefore have been one of the bases of resilience in a society facing various unprecedented challenges associated with the pandemic. Within the context of the pandemic, Bonanno (2020) similarly emphasised the importance of keeping added stress to a minimum during the time as all individuals already had to adapt to a new reality within this unprecedented experience. It is possible that so-called resilient individuals may have experienced a momentary stress reaction at the time, even though such reactions are usually short-term, mild to moderate and will not significantly affect the ability of an individual to continue with normal functioning (Bonanno & Mancini, 2008). In applying this argument to my study, I anticipated that resilient teachers would have experienced similar reactions and might have been able to continue functioning in response to the challenges posed by the COVID-19 pandemic. However, I also considered the view that stress can be regarded as an expectable and natural aspect of life that necessitates coping (Lazarus, 2006), especially when living in challenging circumstances. Against this background, I describe resilience in relation to the South African context in the following section.

2.3.3 A South African perspective on resilience

Large-scale adversity appears to be normal within the African and South African contexts (Ebersöhn, 2020), resulting in resilience being a prominent focus area for research on this continent (Ebersöhn, 2014). To be more specific, adversity in the South African context implies resilience (and positive outcomes) as a result of adaptive responses by making use of protective factors in multisystem levels (Ebersöhn, 2017). In support of this view, Barzilay et al. (2020) state that individuals from countries that are more used to dealing with collective stressors were possibly able to recruit more resilience and protective factors than people from other countries when having to deal with the adversities implied by the COVID-19 pandemic. Even though resilience is depicted as a universal experience, it is also described as a cultural process that is influenced by culturally related philosophies and practices (Beltman et al., 2011; Ebersöhn, 2019; Masten & Wright, 2010; Theron & Theron, 2014).

As such, it is important that researchers in the field of resilience consider the values, practices, perspectives and philosophies of collectivist cultures¹³ when involving South African participants in their studies. To this end, the collective coping behaviours of individuals from such cultural groups may be viewed as a product of relational and communal values and norms (Kuo, 2013). The need may consequently exist to assimilate the product of interdependent cultural orientation, contextual factors and sociocultural factors that support resilience to allow for collective coping behaviour when exploring the way in which individuals cope with adversity, such as the COVID-19 pandemic (Beauchamp et al., 2019; Kuo, 2013). It should furthermore be kept in mind that the capacity of individuals to cope can be reinforced by supportive environments (Ebersöhn, 2012; Ungar, 2010; 2011).

Therefore, to understand resilience, one should understand the potential constraining and enabling processes within a specific context (Day & Gu, 2013; Shean, 2015). The importance of making use of contextual lenses to support positive outcomes within adverse environments seems necessary and is subsequently highlighted by scholars in the field (Ebersöhn, 2014; 2016; 2017; Ferreira & Ebersöhn, 2012; Jonker, 2021; Sayed & Badroodien, 2016). In undertaking my research, and in exploring their resilience within the face of adversity I, as a result, remained mindful of the fact that consideration had to be given to the contextual and cultural factors potentially influencing the participants.

During times of adversity, intrapersonal factors and the mobilisation of accessible resources within the socio-ecological domain may support resilience (Ebersöhn, 2017). Contextual protective factors can include positive institutions, for example clinics, schools, libraries and hospitals that provide essential services (Seligman et al., 2009) as well as meaningful relationships and connections that can nurture resilience (Ebersöhn, 2012; 2016; 2019). Extended family resources can also be regarded as protective factors within collectivist cultures, such as in South Africa (Höltge et al., 2021; Theron et al., 2021). It therefore seems clear that an authentic understanding of resilience is embedded in local belief systems (Shean, 2015). This statement is supported by research findings indicating that a person's context in itself can act as a variable among studies and within the scope of education (Beltman et al., 2011; Ebersöhn, 2017; Jonker, 2021; Shean, 2015).

In this regard, Jonker (2021) posits that it seemed unethical, while obstructing meaning-making in differing cultures or contexts, to apply a typically western positive product across

¹³ Individuals in these cultures view themselves as interdependent and a member of a group. Value is placed on collaboration, constructive interdependence, communalism and the conformity of norms and roles (adapted from Nickerson, 2021).

all cultures or contexts. As a result, I remained cognisant of the risk associated with general applications of the conceptualisation of resilience – for example, from a Western perspective – that may not be sensitive to the contextual and cultural factors when aiming to understand resilience in the South African context (Theron, 2011). I therefore aimed to provide a description of the South African context in which the research was undertaken, with the intent of providing local community findings. I furthermore specifically focused on teacher resilience (Gu, 2018) that can be regarded as part of an extension of resilience research.

2.3.4 Teacher resilience

According to Gu and Day (2013), teacher resilience relates to teachers' perceptions of their capacity to successfully manage inevitable uncertainties associated with being a teacher, and their capacity to sustain a purposeful educational role. Consequently, teacher resilience may lead to resilience-promoting outcomes such as commitment, quality teaching, agency and teacher wellbeing (Gu & Day, 2013; Mansfield et al., 2016). This can be achieved in the process of applying various strategies, such as planning, and by making use of personal and contextual resources (Beltman, 2020; Brooks et al., 2022; Mansfield et al., 2016). In this regard, Ebersöhn (2014) argues that resilience as a process – the interaction between the risk and protective factors in the ecological and individual systems – and an outcome coincides with the typical profile of a South African teacher.

Beltman (2020) conceptualises teacher resilience from different perspectives, including the person-focused perspective (i.e. agency, trait or personal capacity), the process-focused perspective (i.e. interaction between individual and contextual factors where strategies to support resilience are employed by teachers), the context-focused perspective (i.e. contextual resources supporting resilience and contextual challenges) as well as the system-focused perspective (i.e. the dynamic and collective interactions between the systems). Broadly speaking, contextual influences and individual factors therefore appear to be important in predicting resilience and people's ability to, for example, address burnout. In terms of teacher burnout specifically, Ainsworth and Oldfield (2019) argue that self-care can be regarded as the most significant individual protector of wellbeing. Furthermore, a reasonable workload and a positive school climate are regarded as important when support is provided to teachers during challenging times (Ainsworth & Oldfield, 2019). Ainsworth and Oldfield (2019), Day and Gu (2010; 2013) as well as Day et al. (2006) propose that contextual factors such as the support from school leadership, constructive feedback from

school management, the trust that teachers have in school management structures, as well as the learners and parents of the school, can positively influence teacher resilience.

In this regard, the multidimensional and dynamic process of adapting in the face of adversity and within the specific socio-cultural context needs to be taken into account when teacher resilience is considered (Mansfield et al., 2012; Peixoto et al., 2018). It follows that, even though the severity of exposure to adversity will determine the resilience outcomes, protective factors such as interpersonal and intrapersonal resources may also play a role (Chen & Bonanno, 2020). In this way, rewarding environments may foster resilience (Dutcher & Creswell, 2018) while weaker settings associated with high-stress circumstances can have an adverse effect on the health and resilience of individuals (Dragano et al., 2017; Rugulies et al., 2017). To this end, Ungar and Theron (2020) note that individuals are more likely to obtain and develop the psychological capacity for coping within the context of chronic or severe exposure to adversity when an increased number of systems are supported by interventions that can enable resilience.

According to Day and Gu (2013), teacher resilience is conceptualised as role specific. As such, teachers' beliefs in terms of the purpose of their vocation and their application of this role to be better able to manage uncertainties and challenges can influence their resilience (Brunetti, 2006; Day & Gu, 2010; Gu, 2018; Guy, 2022; Sammons et al., 2007). Various other researchers (such as Brunetti, 2006; Day, 2012; Day & Gu, 2010; 2013; Gu & Day, 2013; Masten, 2001; Wosnitza et al., 2018) describe teacher resilience as a personality characteristic or trait, or, in the words of Jonker (2021, p. 55), as "the capacity of a teacher to 'bounce back' or recover as well as to develop, learn and strengthen effective coping mechanisms or strategies over time, while gaining insight, maintaining equilibrium as well as commitment and agency to teaching despite the challenges experienced in the teaching world".

It follows that resilient teachers in general believe in their own ability (self-efficacy), feel proud of their achievements and competence, and are able to maintain strong interpersonal connections (Howard & Johnson, 2004). For Ebersöhn (2014), teacher resilience entails the process of a teacher's appraisal (Skinner & Zimmer-Gembeck, 2007) of a risk factor (based on context awareness and self-perception) and the related adaptive outcome (through coping behaviour) within the teacher's specific ecological system and in response to the stressor. Therefore, a resilient teacher can identify and access external and internal protective factors continuously to mediate cumulative and chronic adversities (Ebersöhn,

2014; Jonker, 2021). Within this process, resilient teachers are said to use adaptive coping strategies despite adversity (Jonker, 2021; Skinner & Zimmer-Gembeck, 2011; Willers et al., 2013).

Closely related, Maslach and Leiter (2016) report that emotional capacity, personal achievement and involvement can also be associated with individuals who adaptively cope during difficult times. As resilience can reduce the negative impact that individuals may experience in response to traumatic events (Luceño-Moreno et al., 2020), adaptive behaviours in the midst of fear, grief and anxiety can be taken as acts of resilience (PeConga et al., 2020). Resilient individuals typically continue executing and fulfilling their social and personal responsibilities while embracing new experiences and tasks (Bonanno et al., 2007). In addition, these individuals are generally more able to adapt to changing environments and demands (Yıldırım & Arslan, 2020), as was required as a result of the COVID-19 pandemic.

In this regard, both protective and risk factors can affect the process of adaptation and resilience. When risk factors are present in the absence of protective factors, negative outcomes may be expected or predicted (Jonker, 2021). However, when the context where teachers work is considered, the presence of protective factors – resilience enablers – may lead to unpredicted, unexpected or even better than expected positive outcomes such as high levels of wellbeing (Ainsworth & Oldfield, 2019; Ebersöhn, 2014; Mansfield et al., 2016). An overview of potential protective factors (facilitating resilience) and risk factors (constraining resilience) within the individual and contextual levels, as identified by various authors (indicated below the table), is provided in Table 2.1.

Table 2.1

Protective and risk factors for teacher resilience

	INDIVIDUAL LEVEL	CONTEXTUAL LEVEL
Protective factors	<ul style="list-style-type: none"> • Sense of pride and professional competence • Self-efficacy, agency and mastery • Altruistic motives and sense of vocation • Morals and values • Perseverance and persistence • Internal locus of control • Reflectiveness and self-insight • Professional development, goals and aspirations • Formation of teacher identity 	<ul style="list-style-type: none"> • Working with learners • Peer and colleague support • Support from school administration • Support for continuous professional development • Inclusion in decision-making processes • Mentoring and leadership relationships • School conditions and culture • Relational resilience (supportive and trusting professional and personal)

	INDIVIDUAL LEVEL	CONTEXTUAL LEVEL
	<ul style="list-style-type: none"> • Meaning-making • Social competence • Self-regulation • High levels of intrinsic motivation • Problem-solving skills (proactive) • Coping skills and strategies • Positive emotions and motivation • Empathy, humour, optimism, hope and faith • Flexibility and ability to adapt to change • Realistic view of negative occurrences 	<ul style="list-style-type: none"> • Supportive networks (collegial, social and/or personal) • Trust in school management structures • Community engagement • Community development enabling teacher reflection • Extended family resources • Institutions providing essential services
Risk factors	<ul style="list-style-type: none"> • Reluctance to seek help • Personal belief and discrepancy practice • Lack of confidence and/or professional competence • Negative self-belief (also in classroom management capabilities) • Lack of motivation and/or commitment • Limited relational resilience and/or social competence 	<ul style="list-style-type: none"> • Time needed for non-teaching duties • Heavy workloads and/or inadequate professional preparation • Teacher-parent relationships • Challenges within the school and/or classroom context and/or poor working conditions • Lack of resources • Learner behaviour management challenges • Family responsibilities • Inadequate developmental support and/or mentoring

(Compiled from the work of Ainsworth & Oldfield, 2019; Beltman, 2020; Coetzee et al., 2017; Day & Gu, 2013; Ebersöhn, 2012, 2014; Gu & Li, 2013; Höltge et al., 2021; Johnson & Down, 2013; Knight, 2007; Mansfield et al., 2012, 2016, 2018; Masten 2014; Peixoto et al., 2018; Price et al., 2012; Seligman et al., 2009; Tait, 2008; Theron et al., 2021; Tugade & Fredrickson, 2004).

Considering these factors as well as the different levels of influence as part of the process of teacher resilience, Gu and Day (2013) acknowledge the influence of relational, organisational and personal factors associated with teachers' place of work as affecting their resilience. Similarly, based on Ungar's (2011) decentrality principle (the focus on multiple systems), the context of teachers, interaction between their environment and context, and characteristics of the individuals all seem important in determining resilience. Ainsworth and Oldfield (2019) as well as Gu and Li (2013) echo this view when discussing teacher resilience by stating that intrapersonal factors embedded in the dynamic nature of teachers' lives and their work will shape teacher resilience and the adaptation process.

2.4 COPING WITH THE COVID-19 PANDEMIC

Even though the likelihood of post-traumatic stress disorder and traumatic effects were present during the time of the pandemic (Griffin, 2020), systemic support seemingly enhanced people's recovery from the trauma or their experienced challenges. In this regard,

Luceño-Moreno et al. (2020) posit that frontline workers, which include teachers, were able to mitigate the negative effects of COVID-19 by relying on resilience. Based on my discussions in the previous paragraphs, I came to the conclusion that people's ability to demonstrate resilience can be related to their social-ecological system. More specifically, individual, family and systemic factors need to be taken into account when investigating positive adaptation in the face of adversities such as those posed by COVID-19 (Masten, 2001; Rosenberg, 2020).

In this regard, various authors (Bandura, 2001; Bonanno et al., 2015; Masten et al., 1990) state that social, individual and genetic factors within an interactive process may all foster an optimistic belief in self-efficacy and an individual's ability to adapt to adversity. Therefore, when considering the significance and flexibility of the outcomes of resilience (Chen & Bonanno 2020; Robles-Bello et al., 2020), it seems clear that many factors may be relied on as protective factors during challenging times. Cognitive strategies (the focus of my study) can be regarded as one group of such protective factors that could have supported resilience during the COVID-19 pandemic. This possibility is explored in more detail in Section 2.6, where cognitive strategies are discussed in relation to coping theory.

In 1984, Lazarus and Folkman defined coping as "constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" (Lazarus & Folkman, 1984, p. 141). Following this conceptualisation, coping thus refers to these said efforts to minimise, tolerate, master or reduce external (environmental) and internal (individual) demands and stressors (Lazarus & Folkman, 1984). I relied on this definition in undertaking my study and conceptualising the multidirectional nature of the cognitive processes and strategies I focused on in relation to coping and environmental stressors. In applying this view, it follows that the process of coping can be regarded as dynamic in nature, with the concept of appraising requiring of the environment to respond in an appropriate way. These views supported my intent to identify possible cognitive strategies that could facilitate resilient behaviour within a stressful environment as part of my research.

Coping is not static but should rather be viewed as a process that can change over time, and as a trait or style when it remains relatively stable (Lazarus, 2006). As coping is generally subjected to social and personal forces, styles or personality traits (Lazarus, 2006), it implies a dynamic and subjective process, as already mentioned. Bonanno and Mancini (2008) distinguish between two main types of coping styles, namely pragmatic

coping and repressive coping. A pragmatic approach to coping implies the view of doing *whatever it takes* and may be preferred by individuals who are goal-directed. In comparison, other individuals may, however, prefer repressive coping due to their preference to avoid emotional experiences that are unpleasant (Bonanno & Mancini, 2008).

It follows that coping can be described as an active and vital cognitive factor that can enable a sense of control to effect crucial personal and social resources that are pertinent to regaining, maintaining, or even enhancing the wellbeing of an individual (Benight & Cieslak, 2011). Applying this definition to the challenges posed by the COVID-19 pandemic, coping thus implies a belief in one's efficacy to manage stressors and apply cognitive strategies to alleviate the effects of the challenges faced, subsequently promoting resilience and enhancing cognitive functioning. When considering cognitive flexibility and bearing in mind that cognitive functioning may support and promote the resilience and coping of individuals who face challenges (Rand & Touza, 2021; Snyder et al., 2021; Yıldırım & Arslan, 2020), it seems apparent that the implementation of cognitive strategies may foster the resilience of individuals.

During the coping process, one's beliefs, and therefore cognition of self-efficacy, may, in turn, result in the motivation to face challenges and demonstrate resilience amidst adversity (Benight & Bandura, 2004). More specifically, when an individual experiences a resilient sense of self-efficacy, socio-cognitive functioning can be enhanced (Bandura, 1989b). In the words of Bandura (1989b), resilient individuals:

... are active cognitive processors of information and remain highly efficient in their analytic thinking in complex decision situations. They heighten their efforts in the face of failures or setbacks. They ascribe failure to insufficient effort, which supports a success orientation. They quickly recover their sense of efficacy after failures or setbacks. They approach potential stressors or threats with assurance that they can exercise some control over them. Such an efficacious outlook enhances the level of cognitive functioning and performance accomplishments, reduces stress, and lowers vulnerability to depression (Bandura, 1989b, p. 731).

In essence, individuals with a high sense of self-efficacy are likely to implement actions and strategies that are designed to adjust a threatening environment to a more manageable one in order to cope (Benight & Bandura, 2004). Therefore, self-efficacy, or coping, within the context of adversity, can be regarded as the perceived capability to manage stressful demands or recover from post-traumatic events (Benight & Bandura, 2004; Benight & Cieslak, 2011). In this regard, problem-focused coping, contextualised as part of Lazarus and Folkman's (1984) Transactional Model of Stress and Coping, can be described as a process during which individuals attempt to modify stressful situations by actively attempting

to solve problems or the causes thereof. As such, problem-focused coping may specifically be adopted by individuals when they experience an overall sense of perceived control over stressors due to following this approach (Sumer et al., 2005). In addition to following a problem-focused approach to coping, self-efficacy can also play a role in physical health, psychological adjustment and self-guided behaviour change strategies and coping (Maddux & Kleiman, 2021). In this regard, a recent study indicates that psychological resources, emotional intelligence and self-efficacy could seemingly have supported the resilience of people who had to respond to the challenges implied by the COVID-19 pandemic (Bada et al., 2020).

In the face of COVID-19 and its associated stressors, people across the globe were required to cope to keep psychological distress to a minimum and facilitate resilience (Chen & Bonanno, 2020). According to Bonanno (2020), this implied the implementation of optimism, bonding with significant others, relying on the support of others, distracting oneself, not overindulging in media yet remaining informed, identifying ways to minimise isolation, and finding ways to have fun and maintain laughter amidst the world crisis. Similarly, people coped by relying on positive psychology resources such as hope and resilience that could in turn promote psychological health and wellbeing (Snyder et al., 2021). In comparison to those experiencing lower levels of hope, individuals with higher levels of hope were seen as able to generate sufficient strategies to cope with adversities, practising greater cognitive flexibility to find alternatives, and expressing a greater probability to use these strategies (Rand & Touza, 2021). In this regard, Yildirim and Arslan (2020) report that hope had a positive and significant effect on subjective wellbeing and resilience in the context of COVID-19, with resilience positively affecting the psychological health and wellbeing of individuals (Yildirim & Arslan, 2020).

In the specific context of the current study, the challenges posed by COVID-19 also affected the ability of teachers to cope with their role as educators (Brooks et al., 2022). In this regard, Brooks et al. (2022) emphasise the importance of teachers learning how to cope when they need to deal with change, as was the case at the time of the pandemic. In the next section, I contemplate possible ways in which teachers coped with the challenges posed by the COVID-19 pandemic, by relying on resilience.

2.5 TEACHER RESILIENCE AS CORNERSTONE FOR TEACHERS COPING WITH THE COVID-19 PANDEMIC

As a result of the COVID-19 pandemic, people in the education sector around the globe were challenged (Naidu, 2021). For teachers, distress specifically stemmed from possible health risks as well as an increased workload as a result of the pandemic (Brooks et al., 2022; International Task Force on Teachers for Education, 2020). Occupational stress during this time potentially resulted in higher levels of burnout, absenteeism and teachers feeling challenged to demonstrate resilience (International Task Force on Teachers for Education, 2020). In this regard, Padmanabhanunni et al. (2022) argue that many teachers were left vulnerable to the challenges associated with mental health at the time.

In response to the challenges they suddenly faced, teachers had to rely on protective factors (such as personal resilience) in managing psychological distress that can be described as uncomfortable emotional experiences that may manifest in fear, tension, psychological instability or anxiety (Feng et al., 2020). Both the increasingly complex demands placed on teachers as well as the unpredictable and dynamic education sector had a potentially negative effect on the wellbeing of teachers and the educational outcomes experienced by learners (Ebersöhn, 2014; Gu & Day, 2013; Thieman et al., 2014). Despite these challenges, teachers in the sector were forced to cope and continue serving their learners. Beltman et al.'s (2011) statement relating to focusing on the factors that enabled teachers to thrive and not only to survive during a challenging time seems to be salient to my study.

To this end, research by Padmanabhanunni et al. (2022) indicate that resilience was a health-sustaining factor for teachers in South Africa during the COVID-19 pandemic. In this way, teacher resilience can be regarded as a protective resource that teachers relied on to manage COVID-19 related anxiety, burnout and distress. To elaborate, even though prolonged symptoms of stress and feelings of a lack of control during uncertain times may lead to burnout (Luceño-Moreno et al., 2020; Pappa et al., 2021), psychological strengths can assist individuals to cope with challenges such as those related to COVID-19, thereby fostering wellbeing and mental health (Yıldırım & Arslan, 2020). In this way, resilient people – in this case teachers – could demonstrate positive adaptation during the COVID-19 pandemic (Gu & Day, 2007; Tait, 2008) by making use of individual as well as environmental protective factors and by employing suitable coping strategies to manage the challenges they faced (Coetzee et al., 2017; Gu & Day, 2013; Jonker, 2021; Masten, 2001; Ungar, 2011).

According to Ainsworth and Oldfield (2019) as well as Luceño-Moreno et al. (2020), positive adjustment can be observed in increased levels of wellbeing and decreased levels of burnout. According to these authors, positive adjustment by teachers can be associated with their capacity, for example, to remain motivated and create environments that are conducive to learning while establishing interaction between the environment and personal resources, even in challenging circumstances. Resilient teachers are as a result typically able to deliver high quality learning and teaching outcomes in various settings (Gu & Day, 2007; Tait, 2008), while demonstrating good planning and organisational skills (Brooks et al., 2022; Hewitt et al., 2017), maintaining sound determination skills, being able to make meaning from challenging events (and set goals by having a growth mindset), experiencing work satisfaction, and maintaining a high level of self-efficacy (Gu & Day, 2007; Guy, 2022; Tait, 2008; Wuest & Subramaniam, 2021). Consequently, opportunities for growth and development within the teaching sector may be regarded as a result of teachers' responses to challenges (Mansfield et al., 2018, Peixoto et al., 2018).

In terms of the process of adapting to challenging or changed circumstances, Dinu et al. (2021) argue that COVID-19 and the changes brought about by the pandemic eventually led to an increased team spirit and a sense of collegiality in many cases, thereby supporting motivation and teacher wellbeing. Bottiani et al. (2019) similarly report that teachers who are affiliated with colleagues, those with higher levels of self-efficacy and those who believe in a learner-emphasis approach will typically experience lower levels of burnout and stress during challenging times than their peers not characterised by these traits. As indicated earlier, I regard self-efficacy as a critical mediator when having to cope with challenges and per definition, this entails cognitive self-evaluation that reflects the level of confidence with which an individual, or teacher, exerts control over their motivation and behaviour (Carey & Forsyth, 2009).

2.6 COGNITIVE FUNCTIONING DURING CHALLENGING TIMES

René Descartes (1596-1650) introduced neuropsychology (Kolb & Whishaw, 2015) and paved the way for continued research in this area of interest. According to the French philosopher and anatomist, critical indicators of the mind, as related to neuropsychology, will entail the use of reason and language (Kolb & Whishaw, 2015). Kolb and Whishaw (2015, p. 5) concisely define neuropsychology as “how the brain and behaviour are related”, with Flax (2017) elaborating on this view and stating that neuropsychology is underpinned by

knowledge of the brain structure and function as well as the effects of the related functioning, or dysfunction, on human behaviour, emotions and cognitive operation.

In this section, I discuss the effects of stress on cognitive functioning, with specific reference to the COVID-19 pandemic and how functioning on this level can enhance coping and subsequently resilience. I frame cognitive processes within the construct of self-efficacy as integral part of the process of coping with the challenges associated with COVID-19. I also refer to possible cognitive strategies that teachers potentially relied on in coping with the adversities implied by the COVID-19 pandemic and how this may have promoted their resilience.

2.6.1 Potential effect of stress and burnout on cognitive functioning

According to Maslach and Leiter (2016), burnout can be defined as a psychological condition that emerges from a prolonged response to interpersonal and chronic occupational stressors. Key dimensions of burnout include feelings of detachment from the job and cynicism, an overwhelming feeling of emotional exhaustion, and a sense of lack of accomplishment (Juliana et al., 2021; Maslach & Leiter, 2016). Emotional exhaustion may include feelings of physical as well as cognitive depletion (Juliana et al., 2021; Maslach & Leiter, 2016). Burnout can furthermore be related to the stress that an individual experiences within the context of social relationships (Durr et al., 2014; Maslach & Leiter, 1999). Based on these definitions it seems possible that some teachers may have experienced burnout and related mental disorders due to the adversities posed by the COVID-19 pandemic, with this adding to already high levels of stress in a demanding work environment (Brooks et al., 2022; Dinu et al., 2021). It follows that the wellbeing of teachers may have been adversely impacted by the stressors related to COVID-19 after the outbreak of the pandemic (Padmanabhanunni et al., 2022).

In interpreting this argument from the neuropsychological framework on cognitive functioning, researchers from the Stress Research Institute at Stockholm University (Golkar et al., 2014) indicate that individuals who experience stress and burnout are often characterised by relatively larger amygdala as the brain is linked to emotional distress. Based on the research done by the Institute, it is believed that higher levels of reported stress are associated with weaker connections between specific areas of the brain. In addition, higher levels of stress are linked to slower connections between the amygdala and

the brain structure involved in executive functioning, situated in the medial prefrontal cortex (Golkar et al., 2014).

Savic (2015), who conducted research in a similar field, indicates that individuals who experience stress and burnout are often characterised by a distinct thinning of their frontal cortex – the brain region essential to cognitive functioning – when compared to others experiencing lower levels of stress. As structural changes and cortical thinning can thus seemingly be the result of burnout, executive attentional and memory systems as well as emotional regulation may also be affected in such cases (Deligkaris et al., 2014; Liston et al., 2009; Savic, 2015). Closely related, Michel (2016) as well as Padmanabhanunni et al. (2022) explain that creativity, working memory and problem solving (a dimension of cognitive functioning) can also be negatively affected by stress and burnout, with Alavinia and Pashazadeh (2018) confirming that teacher burnout can significantly hamper creativity. Results such as these provide indications of the possible physiological effect that stress may have on the human brain, and consequently on people's cognitive functioning. In applying this line of thinking to the context of my study, it seems probable that the demand for teachers to suddenly adopt new ways of teaching may have caused stress in their lives.

Teachers may furthermore have experienced difficulties to concentrate and sleep, as well as challenges related to depression, emotional detachment, and disengagement from life aspects that could provide self-fulfilment and meaning (Benight & Bandura, 2004), due to the general effect of the pandemic on most individuals. As such, teachers may have experienced symptoms of anxiety, depression and even post-traumatic stress (Bonanno et al., 2007; Luceño-Moreno et al., 2020; Pappa et al., 2021; Wu et al., 2009), with the possibility of burnout as a result of chronic stress experiences (Bottiani et al., 2019). Feelings such as these may have negatively affected the capacity of teachers to use innovative teaching strategies during this challenging time that called for changed ways of doing. Correspondingly, increased levels of burnout may have been intensified by the challenge of separating leisure time from the workspace, being isolated from peers, an increased workload and the need to deal with the challenges associated with the pandemic without delay (Padmanabhanunni et al., 2022).

During this time, teachers were generally not able to predict or know what to expect, potentially resulting in increased levels of stress and uncertainty (Brooks et al., 2022). Heightened levels of stress and anxiety associated with the pandemic may subsequently have impacted the cognitive functioning and coping abilities of individuals (Boals & Banks,

2020; Brooks et al., 2022) who may have been concerned about factors such as keeping up with the latest news about the pandemic, the health and safety of their loved ones, as well as their financial state and the possible implications of becoming ill, in addition to their concerns about immediately adapting their ways of instruction to fulfil their role as teachers. In undertaking my research, I kept these possibilities in mind, against the background of Burić et al.'s (2019) indication that a negative correlation exists between teacher wellbeing and stress on the one hand, and burnout on the other, as well as the findings of Beltman et al. (2011), indicating a positive correlation between teacher wellbeing and professional growth, coping and resilience. In this regard, the findings of Botwinik (2007), Clement (2017), Richards (2012), as well as Yong and Yue (2007) all indicate a link between teachers successfully coping with stress on the one hand, and resilience on the other, thereby highlighting the possible link between teachers coping with the COVID-19 pandemic and their reliance on aspects of resilience.

2.6.2 Factors supporting cognitive functioning

Various factors have been associated with healthy cognitive functioning, such as the optimisation of brain performance through healthy lifestyle habits (Neuro-link, 2019). In addition to the importance of a person's automatic responses during stressful situations (Vermeulen, 2016), the brain's reward system also plays a critical role in its ability to respond with resilience during stressful times (Dutcher & Creswell, 2018). In this regard, Johansen et al. (2019) explain how the promotion of attention may lead to improved self-efficacy, with high levels of self-esteem forming a protective factor from hippocampal atrophy (Johansen et al., 2019; Wang et al., 2016). In confirmation, Bonanno et al. (2015) similarly link a positive self-image and self-esteem to resilience.

Other existing studies indicate that self-efficacy perceptions can act as a buffer against the effects of occupational stress, burnout and high work-related demands (Benight & Cieslak, 2011; Weißenfels et al., 2022). In support of this view, Benight and Bandura (2004) as well as Sumer et al. (2005) indicate that self-efficacy beliefs can serve a protective purpose against stressors as they can enhance an individual's motivation to identify resources and effectively utilise these during a threatening situation. In this manner, self-efficacy beliefs can regulate the functioning of individuals through motivational, cognitive, decisional and affective processes (Benight & Bandura, 2004). To this end, the efficacy beliefs of individuals can alleviate anxiety and stress by enabling individuals not only to mobilise, but also sustain

their coping efforts (Benight & Bandura, 2004; Maheshwari & Jutta, 2020), in support of resilience.

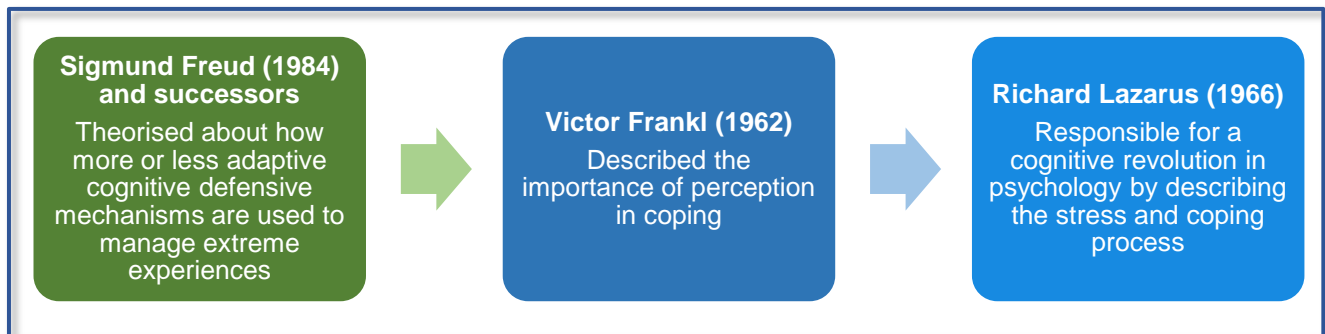
Self-efficacy beliefs may therefore have affected teachers' capacity to cope with the challenges implied by the COVID-19 pandemic, as self-efficacy relates to an individual's general belief of the ability of the self to execute required tasks (Bottiani et al., 2019). Along the same line of argumentation, Sumer et al. (2005, p. 332) explain self-efficacy as the "perceived capability of an individual to cope with the demands following a traumatic event", such as the COVID-19 pandemic. In this regard, Brooks et al. (2022) are of the view that teachers' job efficacy and self-concept could have played a critical role in their learning to cope and adapt to the changes in support of resilience. Applying this to the specific challenges associated with the COVID-19 pandemic, Sokal et al. (2020) predicted at the start of the pandemic that the attitude of teachers to remote learning, their ability to use technology and their sense of self-efficacy would be determining factors in their reliance on personal resources and their experiences of burnout. Against the background of the aforementioned arguments, it therefore seems possible that improved levels of self-efficacy and resilience promotion may have promoted the brain performance and cognitive resilience of the teachers who had to deal with the pandemic and the associated challenges. By undertaking this study, I aimed to broaden my understanding of this possibility.

2.6.3 Cognitive processes associated with resilience

Decades ago already, Epictetus (c.50-c.135 AD) stated that "we are disturbed not by events, but by the views we take of them" (Benight & Cieslak, 2011, p. 45). This view of the Greek philosopher captures the relation between cognitive processes implemented by individuals and the resilience they generally demonstrate. As implied by the statement, the processing of information and perception of reality form significant components of coping when facing adversities (Benight & Cieslak, 2011). Over the years, many scholars have added to the current thinking on how cognitive psychological factors may affect stressful demands (Benight & Cieslak, 2011), with the prominent leaders' contributions captured in Figure 2.2.

Figure 2.2

Contributions of leading scholars in coping theory



As background to undertaking my study, I explored existing theory on cognitive processes, more specifically in terms of cognitive strategies that may enable successful adaptation and coping with adverse circumstances. I focused on the way in which cognitive processes can enable self-efficacy, thereby fostering adaptation and resilience. As self-efficacy is not a perceived skill, but rather represents what individuals believe they can do in a specific situation or under certain conditions, self-efficacy forms part of a self-evaluating cognitive process (Benight & Cieslak, 2011; Maddux & Kleiman, 2021). More specifically, Maddux and Kleiman (2021) propose that self-efficacy can best be understood in the context of social cognitive theory, facilitating an approach to comprehending human action, cognition, emotion and motivation.

Similarly, when individuals possess a high sense of efficacy, effective actions can be cognitively constructed (Bandura, 1989b). It follows that individuals who experience success at a task are more likely to believe in future successes, with this belief consequently predicting their future behaviour, to a certain extent (Benight & Cieslak, 2011; Herman et al., 2018). The possible relation between self-efficacy beliefs and successful adaptation in response to demanding circumstances, resulting in increased levels of resilience, is highlighted by various scholars, including Benight and Cieslak (2011) as well as Robles-Bello et al. (2020).

To this end, Parsons et al. (2016) propose a cognitive model of resilience that may facilitate the application of a cognitive approach when wanting to understand resilience. In line with this proposed model, PeConga et al. (2020) argue that dynamic cognitive, behavioural and environmental processes will actively shape and construct resilience. In this regard, Benight and Bandura (2004) state that a central aspect of human agency within the context of traumatic events relates to the belief in one's efficacy to manage one's own functioning and

to exercise control and promote resilience. Such a belief in coping efficacy will inevitably influence attentiveness to threats and how these are cognitively processed (Benight & Bandura, 2004).

It follows that the direction and awareness of mental functions and individuals' knowledge of their own thought processes (metacognition) can play an important role in coping (Bandura, 1989b; Inci et al., 2021). As thoughts, perceptions, beliefs and attitudes affect the way in which individuals think about a situation, these aspects can thus all play a role in resilience (Wuest & Subramaniam, 2021). However, resilience implies improved coping skills and better cognitive functioning (Riopel, 2020), thereby underscoring the possibility of a reciprocal relationship between cognitive functioning and resilience.

From the perspective of resilience theory, Carver (2013) states that individuals who possess a sense of mastery and confidence move upward and onward during challenging times, while individuals who doubt their own abilities may experience ongoing challenges to cope. In the case of teachers, specifically, low levels of self-efficacy may result in less effective teaching, which may consequently lead to sub-standard achievement by learners (Herman et al., 2018). However, self-efficacy is also regarded as a malleable teacher characteristic by Bandura (1997), which can be strengthened through mastery experiences and cognitive restructuring. In this regard, cognitive flexibility is associated with resilience when experiencing stress or adverse life events (Genet & Siemer, 2011).

Per definition, flexibility implies an ability to pay attention to the fluctuating demands of a situation, making a choice in terms of the strategies that may address these demands, monitoring the efficiency of the strategies and modifying the strategies if needed (Chen & Bonanno, 2020). Therefore, cognitive flexible individuals are able to regulate how they behave and feel to the extent that they can exercise control over what they think – in other words, their cognitive processes (Benight & Bandura, 2004). To this end, both cognitive flexibility and self-efficacy seem imperative when responding to adversity (Benight & Cieslak, 2011; Chen & Bonanno, 2020; Robles-Bello et al., 2020). Taking this into account, the cognitive flexibility of teachers during challenging times such as the COVID-19 pandemic seems to be a probability and even reality, with the implied potential of strengthened self-efficacy that, in turn, could have promoted the cognitive coping ability of individuals.

In addition to self-efficacy, resilience can be modulated by optimism (Li et al. 2018; Pathak & Lata, 2019; Robles-Bello et al. 2020; Tan-Kristanto & Kiropoulos, 2015). More specifically,

Maheshwari and Jutta (2020) indicate that individuals' levels of resilience can be strengthened by increasing optimistic and positive thoughts. To be specific, optimism as a construct is associated with individuals' inclination to assume positive consequences in future (Thompson et al., 2018). Since optimism, self-efficacy and the belief that life has meaning can be regarded as protective factors in support of resilience (Masten, 2019), these attributes can play an important role in an individual's goal-directed behaviour when facing challenges or experiencing adversity. In this regard, Maheshwari and Jutta (2020) as well as Robles-Bello et al. (2020) posit that the confluence of self-efficacy and optimism within the context of COVID-19 may have supported the manner in which teachers coped by means of adaptive and flexible behaviour.

In accordance with existing literature in this field, I thus conducted my study from the standpoint that the cognitively constructed beliefs of teachers may affect their coping and resilience processes. I was specifically interested in investigating whether, and if so, how the implementation of cognitive strategies that may have implied teachers' reliance on self-efficacy could have promoted the resilience of teachers during the pandemic. By following a mixed methods approach, I was able to explore possible correlations between the cognitive coping strategies that were employed by the participating teachers on the one hand, and the resilience they demonstrated on the other.

2.6.4 Cognitive strategies that can be relied on to alleviate challenges

Resilience-enablers during the COVID-19 pandemic implied the utilisation of various multisystemic resources, which may include social factors, built environments as well as psychological factors (Theron et al., 2021). Based on this view, I remained cognisant of the systemic resources and protective factors that could have supported resilience throughout my research, even though my study focuses on the cognitive strategies employed by individual teachers to facilitate resilience.

In this regard, Bonanno and Mancini (2008) explain that cognitive ability as intrapersonal resource within an individual's system can be regarded as a protective factor against challenges and/or experienced trauma. Protective factors can be relied on when implementing cognitive strategies such as cognitive appraisal, locus of control, learning, motivation and self-efficacy during difficult times (Beltman et al., 2011; 2018; Day & Gu, 2013; Staal et al., 2008). Other cognitive strategies that can support coping include social support and continued online communication, maintaining levels of actualisation, optimism

and the avoidance of information overload (Chen & Bonanno, 2020; Day, 2012; Liang et al., 2020; Robles-Bello et al. 2020; Staal et al., 2008). Additionally, positive thinking and the associated biochemical responses to positive thoughts can improve brain health and optimal performance. Within the context of the challenges implied by the COVID-19 pandemic it therefore seems possible that not only positive thinking (optimism), but also accurate health-related information about COVID-19 may have reduced psychological distress, or avoided a negative impact on cognitive flexibility (Chen & Bonanno, 2020). This implies that individuals' cognitive flexibility (and appraisal) may have affected their coping efficacy and could have mediated cognitive challenges, as captured in my conceptual framework (refer to Section 2.7).

In addition, mobilising and sustaining efforts to cope include the mediation of cognitive challenges by means of creative engagement, mindfulness techniques and healthy sleeping patterns (Banks et al., 2015; Denkova et al., 2020; Howarth et al., 2019; Jha et al., 2010; Jha et al., 2017; Klein & Boals, 2001; Mrazek et al., 2013; Yogo & Fujihara, 2008). In accordance, lifestyle choices that include water intake, food choice and oxygen intake directly influence individuals' information processing abilities, concentration, emotions, overall health and consequently their cognitive functioning (Neuro-link, 2019). Cognitive functioning may furthermore be enhanced by the activation of both brain hemispheres that can be promoted by exercise and the associated movement that takes place. At the same time, executive functioning – thinking and learning – may be stimulated, while stress is reduced (Neuro-link, 2019; Wang et al., 2019). On the contrary, it should be taken into account that individuals may also adopt potentially harmful behaviours when trying to cope with challenges, such as exercising less often, increasing their alcohol consumption, smoking and overeating (Lee et al., 2021; Pappa et al., 2021).

To summarise, cognitive strategies that may be utilised by individuals in support of resilience include problem-focused coping (i.e. active coping, planning, the suppression of competing activities, restraint coping, the seeking of instrumental social support and the fostering of meaningful connections with others) (Brooks et al., 2022; Carver et al., 1989; Juliana et al., 2021; Lazarus & Folkman, 1984; Naidu, 2021; Padmanabhanunni et al., 2022; Riopel, 2020; Wu et al., 2013; Wuest & Subramaniam, 2021). To elaborate, functional problem-solving skills, confidence in one's abilities and skills, and the ability to develop and execute realistic plans are all aspects of cognitive strategies that relate to problem-focused coping and self-efficacy (Riopel, 2020). In addition, individuals may cultivate a growth mindset by making

use of various strategies, such as maintaining self-efficacy, practising self-care, having a positive attitude, and practising mindfulness, religiousness as well as optimism in support of resilience (Banks et al., 2015; Benight & Bandura, 2004; Bonanno et al., 2015; Brooks et al., 2022; Collie et al., 2018; Conversano et al., 2010; Dweck, 2000; Howarth et al., 2019; Jacka & Berk, 2013; Jha et al., 2010; Jha et al., 2017; Johansen et al., 2019; Mrazek et al., 2013; Riopel, 2020; Wang et al., 2016; Wu et al., 2013; Wuest & Subramaniam, 2021).

In undertaking my study, I was guided by these cognitive strategies that may be employed by individuals when facing adversity. I specifically investigated problem-focused coping (active coping, planning, the suppression of competing activities, restraint coping and the seeking of instrumental social support) by implementing the COPE Inventory (Carver, 2013). According to Lazarus and Folkman (1987), problem-focused coping is often relied on when encounters are changeable rather than requiring mere acceptance. In elaborating on this statement, Carver et al. (1989) indicate that problem-focused coping as a strategy may be preferred when individuals can predict that a constructive manner of dealing with a stressor is possible. Against the background of this discussion, I kept in mind that multiple and possibly unexpected pathways to resilience (Bonanno, 2004) could be associated with the way in which teachers may have coped with the COVID-19 pandemic when undertaking my study. Throughout, I regarded the beliefs and thought processes employed by the teacher-participants as indicators of the coping strategies they had employed.

In a related recent study, Brooks et al. (2022) found that problem-focused strategies were often implemented by teachers to cope with challenges related to their profession during the COVID-19 pandemic. Wuest and Subramaniam (2021) similarly found that cognitive strategies can assist individuals to view circumstances from different viewpoints, achieve a more positive outlook, and engage in empowering affirmations. Given this background, I could assume, when embarking on this research, that it was possible that cognitive coping strategies may have supported the resilience of teachers during the COVID-19 pandemic. In the following sub-sections I discuss cognitive strategies that may be utilised by individuals when responding to stress and adversities.

2.6.4.1 Active coping

Active coping involves a process whereby individuals take active steps in an attempt to circumvent or remove stressors or lessen the effects thereof (Carver et al., 1989). This process may include increasing one's efforts, taking direct action or attempting to implement

structured steps of a coping effort (Carver et al., 1989; Naidu, 2021; Wuest & Subramaniam, 2021). According to Carver et al. (1989), active coping is generally used during the appraisal of a stressor, and may enhance resilience (Naidu, 2021; Wuest & Subramaniam, 2021). More specifically, Benight and Bandura (2004) clarify that active coping reduces the probability of individuals experiencing long-term distress.

Taking direct action may involve various strategies that can facilitate active coping. For example, when taking steps in self-enhancement, wellbeing can be promoted that will consequently support resilience (Bonanno, 2004). For Bonnano et al. (2015), coping and resilience thus encompass positive adjustment and adaptation. In this regard, a recent study by Brooks et al. (2022) indicates that the process of acquiring skills or new knowledge as part of self-enhancement formed part of the coping strategies that teachers employed in response to the challenges implied by the COVID-19 pandemic. Another study indicates that self-enhancement as active coping strategy, specifically when employed by optimists, will include individuals seeking information about the challenges they experience, planning accordingly and actively coping when facing adversities (Mens et al., 2021). Theron et al. (2021) similarly found that individuals tended to keep themselves busy by engaging in activities that could facilitate coping during the COVID-19 pandemic. It follows that individuals, specifically teachers, were challenged to positively adapt as a result of the pandemic (Bonanno, 2020), remain flexible to achieve their goals and actively cope during the trying times of COVID-19 (Brooks et al, 2022; Wuest & Subramaniam, 2021).

Such adaptive coping strategies as active coping method can support psychological health (Yıldırım & Arslan, 2020). Following the onset of the pandemic and the lockdown measures that were implemented, adaptive coping could, for example, be observed in how teachers accelerated education innovations and started using novel digital technologies to utilise online-learning platforms for continued education (Ebersöhn, 2020). In this regard, Bonanno and Mancini (2008) regard adaptive coping and flexibility as healthy coping strategies that can support resilience through positive responses to adverse and potential traumatic events. This belief is based on the premise that individuals who employ this strategy hold the capability to modify their behaviour to meet the challenging demands of stressors (Bonanno & Mancini, 2008). As such, active coping that supports resilience can be taken as inclusive of adaptability and flexibility (Chang & Bonanno, 2020). In this way, the flexibility in individuals' cognitive operations – problem-solving skills – is taken to be linked to resilience

and may thus act as a buffer against the potential long-term effects of exposure to trauma (Bonanno et al., 2015; Heppner et al., 2021).

Similarly, positive problem-solving appraisal can be linked to increased levels of active coping that has the aim to, in advance, modify or even prevent a potentially stressful event from occurring (Heppner et al., 2021). To this end, positive problem-solving appraisal is associated with individuals attempting to alter the course of stressful situations and actively focus on resolving problems (problem-focused coping) (Heppner et al., 2021; Lazarus & Folkman, 1984). To be more specific, problem-solving abilities can be linked to resilience (Bonanno et al., 2015; Masten, 2019). In an attempt to alter the course of a stressful situation, individuals may thus rely on problem-solving by means of planning as part of their cognitive coping strategies to respond to challenges. Similarly, planning appears to be important when the cognitive coping strategies of individuals are considered (Carver et al., 1989).

2.6.4.2 Planning

Planning as cognitive coping strategy entails the act of thinking about how stressor(s) can be coped with. In this regard, individuals can come up with action strategies, think about the appropriate steps to take as well as the best way to handle a problem or challenge that they face (Carver et al., 1989). During this process, the efficient allocation of time to protect their own wellbeing is seen as critical in coping with stressors (Brooks et al., 2022). Time-efficient practices and strategies can be regarded as protective mechanisms that may assist people in enhancing their coping capacity and supporting their own wellbeing (Mansfield et al., 2016; Thieman et al., 2012; Wosnitza et al., 2014). In this case, individuals can make use of chunking to cope with stressors in an attempt to gain a sense of control over a situation, which may, in turn, facilitate the coping process (Luceño-Moreno et al., 2020; Thompson, 2021). To this end, Thompson (2021) proposes that, in an attempt to maintain control, individuals may create new avenues to create a sense of personal control. In the context of my study, a sense of control is associated with teachers maintaining a routine to manage a sense of order within the uncertainties associated with the COVID-19 pandemic (Brooks et al., 2022).

This belief in a sense of control during challenging times, and a strong motivation as well as the ability to plan alternative routes of reaching one's goals can be linked to high levels of dispositional hope (Yıldırım & Arslan, 2020). Against this background, the efficient use of

time and resources as well as the trend to remain structured as part of the efforts to respond to the challenges implied by the pandemic may all have been cognitive strategies that teachers employed to cope during this time of rapid change and unforeseen challenges.

2.6.4.3 *Suppression of competing activities*

Individuals may suppress competing activities in an attempt to focus all their efforts on coping with immediate challenges when facing difficult times. As such, the suppression of the processing of other channels of information or the involvement of activities that may compete with individuals' ability to focus fully on the adversity or stressor at hand may facilitate coping. In such cases, individuals will, for example, put other projects aside and avoid getting distracted to handle an immediate stressor (Carver et al., 1989). When employing this strategy, the individual will be aware of what is controllable in the situation, and what not (Wuest & Subramaniam, 2021) and subsequently suppress the challenges, thought processes and/or activities that are regarded as less important than others at that specific time.

Within the context of coping with the COVID-19 pandemic, individuals seemingly relied on this strategy, according to Brooks et al. (2022) as well as Wuest and Subramaniam (2021). These scholars namely found that the individuals who participated in their respective studies tended to prioritise what is important and urgent, and consequently focused their energy on what could be changed and/or controlled to reduce their workload. In this regard, Lin et al. (2020) explain that such a strategy would ask of individuals to prepare well in an attempt to avoid obstacles, barriers or potentially competing behaviours that may derail them from keeping to their planned behaviour. In addition to suppressing competing activities, individuals may also cope by avoiding unpleasant emotions or thoughts, or as Bonanno (2004) puts it, by being repressive copers. According to Bonanno (2004), the avoidance of unpleasant emotions or thoughts may foster adaptation in response to extreme adversity (Bonanno, 2004). This does not imply that individuals will avoid dealing with challenges all together, but that they will wait for a suitable time to do so, as discussed in the next subsection.

2.6.4.4 *Restraint coping*

Restraint coping implies that individuals will wait for an appropriate opportunity to act in response to a stressor or adversity. Therefore, not to act prematurely or to hold oneself back can be regarded as specific strategies that align with this coping method (Carver et al.,

1989). Carver et al. (1989) explain that this strategy can be seen as an active coping strategy as the person's behaviour is focused on addressing the stressor effectively in this case. However, it can also be seen as a passive strategy due to the use of restraints, implying that the person is not acting. Individuals who employ this strategy will usually become aware of the fact that acceptance within a situation may benefit their coping ability when appropriate to the situation. In this regard, individuals will accept what cannot be changed, with change being regarded as a constant in life, yet then act when the time is right to deal with a specific challenge (Wuest & Subramaniam, 2021).

To this end, Thompson (2021) as well as Yong and Yue (2007) state that the acceptance of change can assist individuals in coping with situations where they do not have control over and may as a result experience stress. Upon consideration of the importance of acceptance during coping, Thompson (2021) states that acceptance can be achieved by, for example, finding meaning within a challenging situation. Accepting the challenges implied by the COVID-19 pandemic resulted in teachers viewing the threat of the pandemic in itself as a challenge to overcome, according to Brooks et al. (2022). More specifically, according to Folkman and Lazarus (1984), individuals may view challenges that require coping as the potential for growth or gain. As such, the attitude of teachers towards change can be regarded as a significant resource in terms of their responses to the challenges posed by the COVID-19 pandemic (Sokal et al., 2020). Consequently, teachers may have experienced personal growth following the adverse experiences they faced (Masten, 2019) as a result of the coping process.

2.6.4.5 Seeking instrumental social support

Another coping strategy that may be employed during challenging times involves individuals seeking for information, advice or assistance from others (Carver et al., 1989). Brooks et al. (2022) as well as Wuest and Subramaniam (2021) regard this strategy of seeking professional guidance as well as a reliance on teamwork to access support as important strategies for coping with the challenges implied by the COVID-19 pandemic. In this regard, Bonanno et al. (2015) link such instrumental support with tasks of daily living as well as the provision of information that can facilitate coping to positive psychological adjustment. Juliana et al. (2021) concur with this view, indicating that information sharing and supervisory support promoted the engagement of teachers and mediated burnout within the context of them having to cope with the COVID-19 pandemic. In addition, social relationships can be strengthened through the sharing of useful information and knowledge that can be

fostered through the use of technology (Bonanno et al., 2015) that was also apparent during the COVID-19 pandemic.

To be more specific, teachers were required to utilise technology not only to meet their work requirements at the time, but also for the seeking of instrumental social support. According to Bonanno and Mancini (2008) as well as Bonanno et al. (2007), such social support can be regarded as a significant predictor of resilience following a potential traumatic event and can consequently be associated with wellbeing and health. Bonanno and Mancini (2008) furthermore posit that supportive relations can promote resilience. It follows that the establishment and maintenance of supportive relationships in addition to those within the teaching landscape can potentially facilitate teacher wellbeing during times of change and challenge (Ainsworth & Oldfield, 2019; Cefai & Cavioni, 2014). More specifically, a critical aspect that may strengthen resilience relates to the process of connecting with others in meaningful ways (Padmanabhanunni et al., 2022; Wu et al., 2013; Wuest & Subramaniam, 2021). Through such connections, feelings of isolation can be reduced, with the implied opportunities for insight and varying perspectives on similar challenges by different individuals, such as mentors (Brooks et al., 2022; Wuest & Subramaniam, 2021).

In addition to the role of mentors, practical help from others or the sharing of information can assist individuals (teachers) to cope with practical challenges, such as how to modify lessons for an online mode of delivery (Brooks et al., 2022; Wuest & Subramaniam, 2021). In this regard, Wuest and Subramaniam (2021) note that both informal small groups and professional learning communities can offer opportunities for discussions on discourse in terms of challenges as well as possibilities for support. In addition, these authors state that teachers who faced adversities during the pandemic may have experienced help and care from others as a result of the buffering effect of instrumental social support on the impact of stress (Wuest & Subramaniam, 2021). It follows that social support as well as social and community cohesion can thus form protective factors against the adverse consequences of stressors (Mandavia & Bonanno, 2019; Theron et al., 2021). More specifically, the protective factor found in social support may alleviate stress and depression and also enhance health while fulfilling the enabling function of enhancing self-efficacy (Benight & Bandura, 2004). It may be argued that self-efficacy can furthermore contribute to a growth mindset, with individuals such as teachers starting to believe in their own coping abilities, thereby becoming a supportive factor within the resilience process.

2.6.4.6 Cultivating a growth mindset

An individual with a growth mindset views challenges and experiences as opportunities to grow and learn (Dweck, 2000; Wuest & Subramaniam, 2021). Wuest and Subramaniam (2021) recommend that a growth mindset, instead of a fixed mindset, should be adopted by individuals to promote resilience. In support of this statement and as part of the theory of positive psychology and the growth mindset concept, Post-Traumatic Growth is taken as the by-product of an aversive or traumatic event, typically resulting in closer relationships with others as well as a greater sense of personal strength (Masten, 2019; Matos et al., 2021; Robles-Bello et al., 2020). This model suggests that, by fostering constructive thinking, individuals are able to rebuild their altered core beliefs and regulate their emotions in a manner that can facilitate a willingness to engage with trauma-related emotions and memories (Masten 2019). In this regard, the purpose and meaning of self-interest are important to foster resilience amidst a crisis situation (Guy, 2022). Such a belief by individuals that they can grow and learn from both negative and positive life experiences can therefore be seen as a pathway to resilience (Bonanno, 2004).

Closely related, a sense of self-efficacy and resilience may safeguard an individual against the immediate impact of stress or traumatic life events (Bonanno et al., 2015; Yıldırım & Arslan, 2020). In this regard, Bandura (1997) argues that self-efficacy plays a critical role in the quality of an individual's coping efficacy. The basis of such coping lies in the motivation of the individual, which is engrained in cognitive activity (Bandura, 1989b). Therefore, the relationship between cognitive processes and the self-efficacy to function can be regarded as significant during the coping processes of individuals. Upon consideration of the literature that I reviewed, I realised the importance of identifying which and to what extent the interaction between these two constructs may have enabled the use of various cognitive coping strategies, and effectively supported the resilience of the teachers who participated in this research.

Within the scope of maintaining a growth mindset, Wuest and Subramaniam (2021) propose some strategies for teachers to strengthen their capacity for resilience. One of these strategies relates to the prioritisation of self-care habits (Beltman et al., 2011; Cook et al., 2017; Wuest & Subramaniam, 2021), as this may strengthen resilience (Wuest & Subramaniam, 2021). In this regard, by taking the time to practise and engage in hobbies and leisure activities, the management of stressors and enablement of individuals to recharge and relax within challenging situations, such as during the COVID-19 pandemic,

is possible (Brooks et al., 2022; Wuest & Subramaniam, 2021). In addition, healthy eating and sleeping habits as well as sufficient physical exercise are proposed as activities that may support stress management, promote resilience and facilitate coping (Jacka & Berk, 2013; Theron et al., 2021). Examples of stress management techniques include the use of mindfulness techniques, meditation, yoga and progressive relaxation (Brooks et al., 2022; Langer & Ngnoumen, 2021; Wuest & Subramaniam, 2021).

Furthermore, self-care includes the utilisation of reflectiveness and setting boundaries that may enable individuals to foster resilience and promote wellbeing (Hong, 2012; Wuest & Subramaniam, 2021). During the process of reflectiveness, individuals are advised to engage in mindful awareness and acknowledge their emotions and thoughts in a non-judgemental manner (Wuest & Subramaniam, 2021). In this regard, mindfulness can be defined as openness to novelty and a flexible mindset (Langer & Ngnoumen, 2021). These authors suggest that mindfulness may increase the performance of individuals and may lead to better engagement with a presenting task, but can also be noticed in a peaceful reaction to challenging situations (Langer & Ngnoumen, 2021). Participation in such meaningful experiences may bring grace, goodness and hope into individuals' awareness and may ultimately foster good mental health (Guy, 2022).

In addition, mental health can be nurtured by cultivating a positive outlook or optimism during the employment of cognitive strategies in coping (Wuest & Subramaniam, 2021; Yost, 2016). Galatzer-Levy and Bonanno (2014) as well as Pathak and Lata (2019) report that such a positive outlook, or optimism, can be seen as a predisposition of advantage towards one's future and can be associated with positive health outcomes. Furthermore, Sumer et al. (2005) state that optimism can be a valuable resource when having to cope with challenges and stress following disasters such as the COVID-19 pandemic. In elaboration, higher levels of subjective wellbeing, improved physical health and increased quality of social relationships are said to be linked to optimism (Mens et al., 2021). It furthermore appears as if optimistic individuals tend to cope with adversity in an active manner, accepting the challenges that they are unable to resolve and focusing on the positive and meaningful aspects of any experience (Mens et al., 2021).

According to Conversano et al. (2010), optimism correlates with adaptive behaviour and cognitive strategies that imply problem-solving and flexibility. It follows that optimists will be inclined to look for benefits in adversity, anticipate favourable outcomes, use humour, remain flexible, reserve their resources and effort for prioritised activities, and positively

reframe stressful situations when coping with adversities (Masten, 2019; Mens et al., 2021). These aspects of optimism can facilitate a future-oriented and goal-directed cognition (Masten, 2019) and are furthermore associated with positive outcomes in the workplace, less burnout and better levels of resilience (Collie et al., 2018). The use of positive emotions and laughter are similarly associated with resilience (Bonanno, 2004), as is the acknowledgment of the difficulties surrounding a situation in a realistic way (Wu et al., 2013).

In this regard, Sumer et al. (2005) argue that optimism can be regarded as a valuable resource that may increase a sense of coping self-efficacy and reduce general stress. In addition, the confidence to manage stress (coping self-efficacy) and adapt to demands can foster motivation, offer an intrinsic sense of control, support the management of emotions, assist in effective decision-making and strengthen resilience (Bandura, 1997; Benight & Cieslak, 2011; Carver, 2013). Therefore, perceived self-efficacy and optimism are said to be linked to psychological health and adjustment, and therefore to resilience (Bonanno et al., 2015; Masten, 2019). Furthermore, psychological health is seen to be directly influenced by hope and resilience (Yıldırım & Arslan, 2020), with hope implying a positive effect on the creativity of individuals when resolving issues and pursuing their goals, possibly resulting in increased levels of subjective wellbeing (Snyder et al., 2021; Yıldırım & Arslan, 2020). To this end, hope can be conceptualised as a cognitive construct or as a pattern of thinking that is closely related to the construct of optimism (Masten, 2019).

As such, cognitive (optimistic and hopeful) reframing can be defined as a skill that can be employed to alter negative thinking and move towards a more positive focus, subsequently adjusting the intensity and nature of experienced stress (Wuest & Subramaniam, 2021). Reframing of this kind requires the acknowledgement of one's feelings and an awareness of one's thinking. In support of this argument, Brooks et al. (2022) state that effective coping can be managed by reframing difficult experiences and report that the confidence of teachers who participated in their study increased as they reappraised the pressure of the uncontrollable situation brought about by the COVID-19 pandemic. In this regard, Buckingham and Richardson (2021) as well as Robles-Bello et al. (2020) indicate that reframing will involve the meaning-making of a challenging situation and viewing it in a more positive light, which encompasses an engagement with the emotions associated with the situation. As a result, individuals may reappraise a situation and follow a proactive self-regulatory strategy where a positive relationship between resilience and Post-Traumatic Growth is fostered (Masten, 2019; Matos et al., 2021). In support, Folkman and Moskowitz (2004) found that individuals who experience severe stress often experience something

positive as a result of the experience. Subsequently, effective coping within a stressful situation may mobilise individuals to achieve more than what they perceive as possible, with the result that they can experience growth and increased levels of gratefulness of life (Lazarus, 2006).

The experience of growth related to religious or spiritual practices can in the same way strengthen resilience (Masten, 2019; Wuest & Subramanian, 2021). These practices may include prayer and meditation, mindfulness exercises, singing, painting, participating in a faith community and other similar practices (Guy, 2022; Theron et al., 2021). To this end, Kimhi et al. (2021) report that a resilience trajectory can be associated with individuals who identified as religious during the COVID-19 pandemic. Generally speaking, the nurturing of spirituality can provide an individual with the opportunity to maintain health and balance, enable the brain to be prepared for adversities, and support resilience (Guy, 2022). In addition, an individual's ability to make meaning of personal spiritual experiences, nested within a personal spiritual framework, has been found to promote hope that can, in turn, be associated with a growth mindset and resilience (Du Plessis, 2016). Making sense of spiritual experiences and a belief in one's ability to cope therefore seem supportive of resilience. In addition, the interaction and connections that individuals may have and foster within the framework of a social support structure to promote resilience seem valuable.

When considering the literature I reviewed, the importance of ongoing research on the cognitive strategies that teachers relied on during the COVID-19 pandemic seems evident. Even though studies on resilience and the COVID-19 pandemic only commenced in 2020, answers to questions related to the cognitive coping strategies that supported teacher resilience during the time seem limited. My study may contribute to this growing body of knowledge and specifically inform the formulation of guidelines for teachers who need to cope with sudden change and the implied challenges. Expanded knowledge of cognitive strategies and protective factors for teachers who face uncertainty can be useful, as related to COVID-19, yet also in other similar challenging circumstances (Chen & Bonanno, 2020).

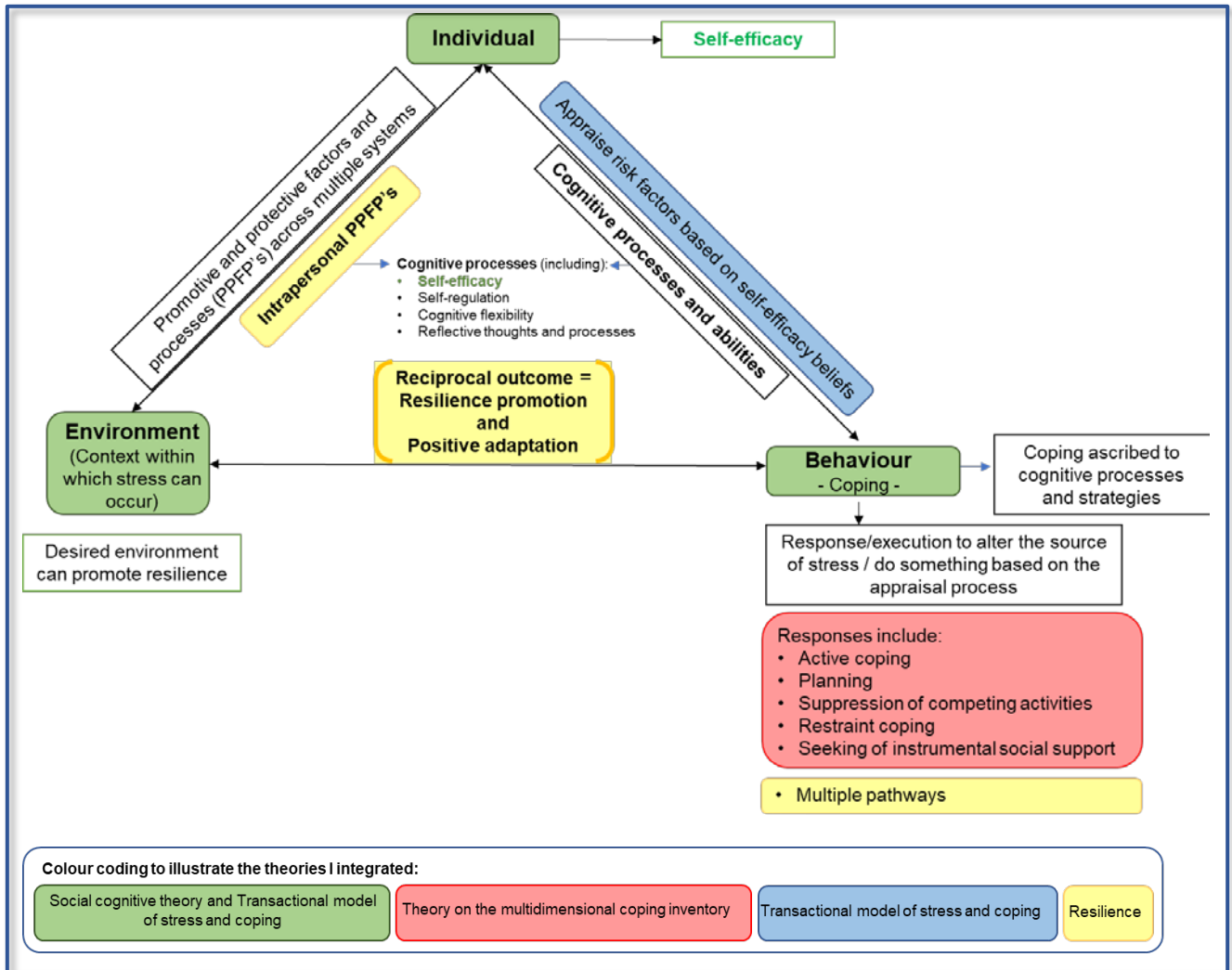
2.7 CONCEPTUAL FRAMEWORK

In compiling a conceptual framework, I incorporated constructs from resilience theory (Ungar & Theron, 2020) with aspects of Social Cognitive Theory (Bandura, 1977; 1986; 1989a; 1989b; 1997), Carver, Scheier and Weintraub's (1989) approach to assessing coping strategies as well as Lazarus and Folkman's (1984) Transactional Model of Stress and

Coping. I present my conceptual framework in Figure 2.3; then discuss the theoretical perspectives and concepts I relied on and lastly describe the way in which I integrated these into a conceptual framework.

Figure 2.3

Conceptual framework of the study



(Adapted from concepts included in the work of Bandura, 1977; 1989a; 1989b; 1997; Carver et al., 1989; Lazarus & Folkman 1984; Ungar & Theron, 2020)

2.7.1 Social cognitive theory

In his Social Cognitive Theory, Bandura (1977; 1986; 1989b) considers the specific manner in which individuals maintain and acquire behaviour, explaining how individuals regulate their behaviour by means of control and reinforcement (LaMorte, 2019). Simultaneously, the social environment in which such behaviour is executed is considered (Bandura, 1977; 1986; 1989b; LaMorte, 2019). Accordingly, the interactions between the individual, the

environment and his or her behaviour predict adaptation and the promotion of resilience (Benight & Cieslak, 2011). In effect, individuals will thus influence their own functioning and life circumstances. In turn, resilience depends on the associated factors of personal enablement of the individual (Benight & Bandura, 2004).

According to Social Cognitive Theory (Bandura, 1977; 1986; 1989b), individuals are therefore regarded as self-influencing, self-regulating, pro-active and self-reflecting agents (Bandura, 1977; 1989a; 1989b; 1997). In addition, the self-efficacy of individuals, a salient component of this theory, can impair or enhance their performance through the effects of affective, motivational or cognitive processes (Bandura, 1977; 1986a), where perceived self-efficacy refers to a belief system that provides propositions on how to enable, motivate and guide individuals for social and personal change (Benight & Bandura, 2004). Self-perception is said to influence individuals' tendency to think either pessimistically or optimistically, whether they act in supportive or obstructive ways to achieve their goals, if they avoid or approach tasks and what their motivation level is during task engagement, or if they persevere for a long or short time when facing difficult tasks, and if they are demoralised or motivated by failure (Snowman & McCown, 2013). As such, self-efficacy will dictate whether or not individuals will uphold the judgement, conviction and appraisal of their abilities or competence to manage, employ, initiate or perform the required behaviour to produce or maintain a specific and anticipated outcome (Bandura, 1977; 1997).

A recent study on the Social Cognitive Theory (Maddux & Kleiman, 2021) proposes certain basic premises of the theory. These include that individuals are taken as possessing powerful cognitive capabilities that enable their ability to create innovative ways of action and engage in reflective activities, paving the way for self-regulation; and that personal inner factors (including cognition), behaviours and environmental events will serve as interactive influences that individuals respond to emotionally, behaviourally and cognitively. In this regard, the behaviour can be controlled by making use of cognition, which may consequently influence the environment. The third premise that these authors propose that I included in my conceptual framework is that individuals are able to self-regulate their behaviour in the pursuit of goals (Maddux & Kleiman, 2021).

Therefore, self-regulation is taken to be based on the abilities of individuals and the use of past experience and knowledge to anticipate expectations (Maddux & Kleiman, 2021). Bandura (1989b) explains that anticipatory cognitive simulations in response to adversities can include the potential of individuals to cognitively rehearse solutions and visualise the

execution of these activities. As such, self-regulation appears to play an important role in regulating behaviour so as to reach goals and, consequently, to cope. More specifically, self-regulation is accomplished through internal (cognitive appraisal) and external (changes within the environment) feedback systems (Benight & Cieslak, 2011). As a result, an interactive process will occur whereby individuals regulate their behaviour through continuous interaction with any challenging environment (Benight & Cieslak, 2011). In this way, individuals' capacity to adjust to and cope with challenges will be the consequence of transactions (interactions) between the individual and the environment.

To this end, self-appraisal can be conducted by interpreting failure or success and altering cognition and behaviour to create an environment as desired, and is consequently seen to play a role in resilience (Benight & Cieslak, 2011). Similarly, contextualism, as part of the Social Cognitive Theory (Bandura, 1977; 1986; 1989b), implies that developmental change will occur as a result of the reciprocal relationship between the context (environment) and the individual (Thomas, 2005). Therefore, with a focus on self-efficacy and self-regulation in the current study, I included concepts from Social Cognitive Theory (Bandura, 1977; 1986; 1989b) within my conceptual framework to highlight the reciprocal processes between the individual, the environment and behaviour (coping) that may strengthen resilience through positive adaptation.

2.7.2 Transactional theories on stress and coping

According to the Transactional Model of Stress and Coping (Lazarus & Folkman, 1984), the ways in which individuals appraise and cope with stressors may impact the conditions of the situation and ultimately their wellbeing (Brooks et al., 2022). As explained by Lazarus and Folkman (1984), stress responses entail three processes, namely primary appraisal, secondary appraisal and coping (Carver et al., 1989; Lazarus & Folkman, 1987) that can be regarded as key cognitive mediators within the coping process (Benight & Cieslak, 2011).

Primary appraisal involves the process during which a threat is perceived by an individual while secondary appraisal implies that an individual considers potential responses to the threat and assesses the available resources (Benight & Cieslak, 2011; Brooks et al., 2022; Carver et al., 1989; Lazarus & Folkman, 1984; 1987). During the secondary appraisal process, threats, challenges, harms and benefits will depend on individuals' perceptions about what can be controlled (Lazarus & Folkman, 1987). An important psychological characteristic for the purpose of coping entails the individual's belief (including self-efficacy)

or cognition and their ways of thinking about the occurrence. Furthermore, Lazarus and Folkman (1987) explain that the appraisal of the context by an individual is important in shaping the process of coping by that individual. In this way, a sense of competency and control in the context of adversity seems to be central to healthy adaptation (Benight & Cieslak, 2011). The third of the stress response processes relates to coping (executing the response of appraisal), with the aim of doing something or altering the source of stress (problem-focused coping) and regulating emotions in response to a stressor (emotion-focused coping) (Carver et al., 1989; Lazarus & Folkman, 1984; 1987).

Whether or not, and how individuals cope with a stressor will flow from the appraisal processes, while the temperament and personality of an individual will underpin the process of appraisal (Brooks et al., 2022; Lazarus & Folkman, 1987). In this regard, a bidirectional nature exists between individuals' level of coping and the stress that they experience (Biggs et al., 2017; Lazarus & Folkman, 1984). Consequently, the possibility exists that coping may change as a situation unfolds (Lazarus & Folkman, 1987). For my study, I focused on the third of the stress response processes according to which individuals execute behaviour based on the appraisal processes in order to alter the sources of stress and ultimately cope. I specifically considered the bidirectional nature of stress and coping, as altering the source of stress may alter coping responses.

Based on the research by Lazarus and Folkman (1984) in terms of the Transactional Model of Stress and Coping, Carver et al. (1989) propose a theoretically based approach to assessing coping strategies. These authors developed a multidimensional coping inventory that guides the assessment of different ways in which individuals respond to stress and adverse circumstances. In this regard, coping can potentially be executed by employing conceptually distinct aspects related to problem-focused coping and emotion-focused coping. These strategies may include, but are not limited to, active coping, planning, the suppression of competing activities, restraint coping and the seeking of instrumental social support. In line with the sequential explanatory research design that I implemented, I measured these strategies by making use of quantitative research methods and then elaborated on the results by identifying additional cognitive strategies during the qualitative phase of my study. My focus did not fall on coping only, as I aimed to identify cognitive strategies that could have supported the resilience of teachers during the COVID-19 pandemic.

2.7.3 Resilience theory

As part of Section 2.3, a detailed discussion on resilience provided the necessary background on the existing literature that relates to my study. For my conceptual framework, I adhered to the views on resilience as described by Ungar and Theron (2020). As such, I regard resilience as a “process of multiple biological, psychological, social, and ecological systems interacting in ways that help individuals to regain, sustain, or improve their mental wellbeing when challenged by one or more risk factors” (Ungar & Theron, 2020, p. 441). In addition, I take resilience as likely to be supported by multiple promotive and protective factors that may include cognitive coping strategies (among others) across the various systems (Ungar & Theron, 2020). To this end, I anticipated that the multiple promotive and protective factors, including cognitive strategies across multiple systems (Ungar & Theron, 2020) may have supported multiple pathways to the resilience of teachers, as illustrated in Figure 2.3.

2.7.4 Integration of theoretical perspectives into a conceptual framework

As illustrated in Figure 2.3, I presented an individual, the individual’s behaviour and the environment in the shape of a triangle, implying the reciprocal and transactional nature between these constructs, drawing from aspects of the Social Cognitive Theory (Bandura, 1977; 1986; 1989b) as well as the Transactional Model of Stress and Coping (Carey & Forsyth, 2009; Lazarus & Folkman, 1984; 1987). As proposed by the Social Cognitive Theory (Bandura, 1977; 1986; 1989b), I view the apparent reciprocal relationship between the behaviour of individuals and their environments as suggesting a sense of ability to effect change through cognitive processes and by making use of cognitive strategies. In relation, the process of resilience can be described as a product of the interaction between individuals and their environments as well as the processes that contribute to the related outcomes (Ungar et al., 2007). To this end, individuals, by means of self-efficacy – the belief in the ability to cope with challenges – will appraise stressors and make use of promotive and protective factors and processes, including cognitive processes and abilities across multiple systems (resilience theory) to guide their behaviour (coping) and to effect change in the environments they function in. As a result, the reciprocal outcome may take the form of positive adaptation and resilience.

Promotive and protective factors employed by individuals who demonstrate resilience can include cognitive processes such as self-regulation, cognitive flexibility and reflective thoughts and processes (Benight & Bandura, 2004; Chen & Bonanno, 2020; Masten, 2014; 2019; Ungar & Theron, 2020) that are regarded as intrapersonal factors. The ability of an individual to cope (behaviour) can, amongst other things, be ascribed to cognitive processes and strategies that may be the consequence of the transactions between the environment and the individual. To be more specific, the coping behaviour that is aimed at altering the source of stress can be described as cognitive processes and strategies and may include active coping, planning, the suppression of competing activities, restraint coping and the seeking of instrumental social support (Carver, 2013; Carver et al., 1989).

In addition, individuals generally use a combination of ways to cope (multiple pathways, as described in resilience theory) when having to adjust to sudden change and challenges (Bonanno, 2020; Brooks et al., 2022). As such, self-care habits, the presence of a growth mindset, maintaining meaningful connections with others, movement and exercise, a positive attitude, healthy nutritional intake and sleep patterns, as well as mindfulness and optimism may all be relied on when coping with challenges. By strengthening resilience through cognitive strategies such as the aforementioned, individuals' ability to appraise a threat and address anxiety may improve and their cognitive functioning may be enhanced, in further support of resilience, in a cyclical manner (Baum et al., 2018; Creswell, 2018; Dutcher & Golonka et al., 2017; Genet & Siemer, 2011; Michel, 2016).

In view of this explanation, I relate the process of stress appraisal and coping to the construct of self-efficacy in my conceptual framework, as this aligns with the perceptions and cognition of individuals' ability to respond to challenges, and consequently to cope. In this sense, I regard self-efficacy as a central intermediary when individuals need to cope with challenges (Carey & Forsyth, 2009). I furthermore integrated the third of the stress response processes stipulated by the Transactional Model of Stress and Coping (Lazarus & Folkman, 1987) as part of my conceptual framework, being coping, as this process focuses on executing a potential response to address stress or adversity, as assessed in the COPE Inventory (Carver, 2013; Carver et al., 1989), which formed part of the data collection instrument I used. As such, I refer to the theoretically based approach of assessing coping strategies by Carver et al. (1989) by making use of a multidimensional coping inventory that can guide the assessment of how individuals respond to stress when having to cope (assessing coping strategies). Even though I focused on problem-focused coping for the purpose of my research, I remained cognisant of the fact that problem-focused coping and emotion-focused

coping complement and intersect with each other (Brooks et al., 2022). These strategies may be regarded as personal and relational capacities, or as multiple pathways that can facilitate resilience (Bonanno, 2020; Ungar & Theron, 2020) and enhance individuals' ability to respond to adversities and stress.

I additionally took into account that linearity within the coping process is possible, as also a transactional and/or bidirectional course between individuals, their behaviour and the environment. Accordingly, when an individual realises that a more adequate or appropriate coping response is available, such an individual may reappraise the source of stress and be guided by this (Carver et al., 1989). Individuals that perceive additional threats in response to a stressor may need to mobilise additional coping efforts in comparison to those that do not perceive an experience as a great threat (Sumer et al., 2005).

For the purpose of the current study, I thus conceptualised the ability of teachers to cope as being dependent on resource availability as well as the constraints thereof in support of resilience (Brooks et al., 2022; Lazarus & Folkman, 1984). It follows that risk factors were appraised based on self-efficacy beliefs as well as the context (ecological system) of an individual, and that coping in response may lead to adaptive coping and resilience (Ebersöhn, 2014; PeConga et al., 2020; Skinner & Zimmer-Gembeck, 2007; Ungar & Theron, 2020). Positive outcomes when these strategies are employed can consequently be associated with adaptive responses and coping through multiple pathways in support of resilience (Bonanno 2004; 2020; Coetzee et al., 2017; Masten, 2001; Skinner & Zimmer-Gembeck, 2011; Ungar & Theron, 2020).

2.8 SUMMARY

In Chapter 2, I discussed existing literature related to my study. I commenced the chapter by reviewing COVID-19 as a global pandemic and worldwide crisis. Thereafter, I discussed the effect of the pandemic in South Africa and paid specific attention to its impact on the national education sector. Next, I explored literature on resilience, and specifically referred to teacher resilience and the importance thereof for teachers when facing challenges. I then discussed existing literature on cognitive functioning and explained cognitive strategies that may alleviate challenges in response to adversities. I concluded the chapter by explaining the conceptual framework I compiled that guided me in planning and undertaking this study.

In Chapter 3, I explain the empirical part of my study. I discuss the selected epistemological perspective, methodological approach and the research design that I employed. I describe

the sampling procedures as well as the data collection/generation, capturing/documentation and analysis procedures. I elaborate on the standards of rigour, quality criteria as well as the ethical guidelines I respected throughout the study.



CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

In Chapter 2, I discussed existing literature reporting on the COVID-19 pandemic as a global challenge. I specifically focused on the effect of COVID-19 on the education sector and teachers in South Africa. In the second section of the chapter, I explored cognitive strategies that may be relied on to mediate challenges in response to adversities, contemplating how these strategies may promote resilience. In the final part of the chapter, I described the conceptual framework that guided me in undertaking the study.

In the current chapter I discuss the research process. I commence by describing the paradigmatic (pragmatist) and methodological (mixed methods) approaches that I followed. I discuss the research design (sequential explanatory mixed methods design) and explain the selection of respondents/participants as well as the data collection/generation (online questionnaire and online participatory focus groups) and analysis (quantitative data analysis and a hybrid approach to thematic analysis) procedures I utilised. I reflect on my role as researcher and then conclude the chapter by discussing standards of rigour (validity and reliability), the quality criteria of the study (credibility, dependability, confirmability, transferability and authenticity) and the ethical guidelines I respected.

3.2 PARADIGMATIC PERSPECTIVES

A research paradigm refers to a philosophical orientation that guides the methodology of a study and specifies the way in which a researcher views material related to scientific research (Creswell, 2014; De Vos et al., 2011; Fouché & Delport, 2002; Teddlie & Tashakkori, 2009; Wagner et al., 2012). In this study, I followed a mixed methods methodological approach, anchored in pragmatism as epistemological paradigm.

3.2.1 Epistemological perspective: Pragmatism

Lived experiences form the basis of pragmatist worldviews since repeated experiences can produce warranted beliefs that cannot be regarded as universal truths, as these continually evolve (Duram, 2010; Johnson et al., 2017; Morgan, 2014). Experiences typically relate to objects, the life worlds of people, events and the physical or natural environment. Experiences are thus mediated through and emerge from an individual's historical, cultural

and personal background and subjective thoughts, all of which comprise the perspective of the specific individual (Johnson & Onwuegbuzie, 2004; Johnson et al., 2017; Morgan, 2014). Duram (2010) explains that understanding is acquired through such experiences or can be inferred from the perceptions of the experiences of others. Even though the external world exists, individuals will thus place high regard on the influences of their inner worlds due to their personal experiences (Cherryholmes, 1992; Johnson & Onwuegbuzie, 2004; Morgan, 2014). It follows that knowledge is consequently based on personal constructions as well as on the reality of individuals' experienced life worlds (Cohen et al., 2018; Johnson & Onwuegbuzie, 2004).

From a pragmatist perspective, meaning-making, knowledge and current *truth* is seen as tentative, as things that will change over time, and as socially constructed (Johnson & Onwuegbuzie, 2004; Morgan, 2014). Cohen et al. (2018), Creswell (2014) as well as Hoshmand (2003) concur that pragmatism arises from consequences, actions and situations, keeping in mind that consequences may change as situations change (Morgan, 2014). Closely related, consequences cannot be predicted without considering the specific context. It follows that the separation of actions from the contexts in which they occur is not possible (Cherryholmes, 1994; Morgan, 2014). In addition, the beliefs about reality, objectivity and causality, and questions and answers about reality are all context-dependent (Cherryholmes, 1994). Pragmatism thus focuses on solutions (pluralistic approaches), the consequences of research and applications (Cherryholmes, 1994; Cohen et al., 2018; Creswell, 2014; Creswell & Plano Clark, 2018; Johnson et al., 2017; Patton, 1990).

A pragmatist researcher, according to Johnson and Onwuegbuzie (2004), can conduct effective research when promoting epistemological and methodological pluralism. Abductive reasoning is encouraged, which implies creative reasoning, reasoning back-and-forth and reasoning for the best explanation (Cohen et al., 2018; Johnson & Gray, 2015). As such, it is important for a pragmatist researcher to have a thorough understanding of multiple methods that may promote collaboration, facilitate communication and provide research findings that can reflect relevance (Cohen et al., 2018; Johnson & Onwuegbuzie, 2004). In the current study, pragmatism enabled me to remain flexible and address the research questions by utilising both quantitative and qualitative methods and integrating the research findings in meaningful ways.

As a pragmatist researcher is directed at the solving of problems that may affect individuals and seeks to transfer research results into action (Cohen et al., 2018; Duram, 2010; Mertens,

2014), the “conceptualization of truth” can be regarded “as being born in practice” (McCready, 2010, p. 191), with the end of research justifying the means (Doyle et al., 2009). In the current study, pragmatism as epistemological perspective is aligned with my use of mixed methods due to the paradigm representing a practical and applied research philosophy (Cohen et al., 2018; Duram, 2010; Edmonds & Kennedy, 2017; Tashakkori & Teddlie, 1998; Wheeldon & Ahlberg, 2012). To this end, Tashakkori and Teddlie (2003, p. 713), conceptualise pragmatism in the following way:

A deconstructive paradigm that debunks concepts such as “truth” and “reality” and focuses instead on “what works” as the truth regarding the research questions under investigation. Pragmatism rejects the either/or choices associated with the paradigm wars, advocates for the use of mixed methods in research, and acknowledges that the values of the researcher play a large role in interpretation of results.

Cherryholmes (1992) elaborates on this conceptualisation by stating that the choices related to pragmatic research will be conditioned by where a researcher wants to go with a study within the broadest sense of the word. As such, freedom of choice, pluralism, practicality and eclecticism are often associated with pragmatism, allowing for flexibility in the use of techniques, methods and procedures when doing research (Cherryholmes, 1992; Cohen et al., 2018; Creswell, 2014; Creswell & Plano Clark, 2018; Doyle et al., 2009; Johnson & Onwuegbuzie, 2004; Johnson et al., 2017; Mertens, 2014; Wheeldon & Ahlberg, 2012). As such, pragmatism resonates well with a mixed methods approach (Cohen et al., 2018; Creswell, 2014; Doyle et al., 2009; Duram, 2010; Johnson et al., 2017) as followed in the current study.

The pragmatist paradigm implies a philosophy that is real world practice-oriented, where attention is given to the ways of life, as they take place in social and other contexts (Cherryholmes, 1992; Creswell, 2009; Johnson & Onwuegbuzie, 2004; Mertens, 2014). According to this paradigm, the meaning-making of data is possible through probing, corroborating and triangulation of the data, which allows for rich data and new approaches to thinking to emerge when contradictions between two data sources occur (Cohen et al., 2018). Therefore, my choice of pragmatism implied the advantage of the findings capturing an authentic understanding of the research problem which could, in turn, enable me to address the purpose of the study.

Despite these advantages, the pragmatist paradigm implies some potential challenges and limitations that I remained cautious of and tried to avoid. Johnson et al. (2017), for example, refer to the way in which researchers combine quantitative and qualitative methods,

encouraging them to follow a strategic approach and combine the methods in a way that these will complement one another. In an attempt to address this potential area of concern, I took a reflexive, open-minded and flexible stance, critically reflecting on the research process and the progress of my study, with the option of adjustment remaining open (Cohen et al., 2018; O'Leary, 2004). Continuous consideration of what was being researched as well as of the integrity and truthfulness of the entire research process (O'Leary, 2004) enabled me to combine approaches, methods and procedures in a way that could complement the sequential explanatory mixed methods design I relied on.

Johnson and Onwuegbuzie (2004) note that another possible limitation of pragmatism relates to the meaning of usefulness and workability, which is associated with the pragmatist paradigm, potentially being vague, once again requiring of pragmatist researchers to remain reflective and strategic throughout the research process. As a result, I regularly consulted with my supervisor and focused on answering the research questions in the best possible manner, remaining flexible and open to any required changes in terms of the way in which I executed the study, thereby applying the strategies suggested by Creswell (2014), Denzin and Lincoln (2018) as well as Johnson et al. (2017).

In summary, as a scientific methodology, pragmatism allows for the integration of processes associated with both deductive and inductive approaches, within a broader research cycle (Cohen et al., 2018; Teddlie & Tashakkori, 2009; Wheeldon & Ahlberg, 2012). Both reasoning from the general to the particular (deductive) and from the particular to the general (inductive) are possible when adopting this paradigm (Johnson & Gray, 2015). In this regard, Johnson and Onwuegbuzie (2004) advise pragmatist researchers to combine the validity of perceptions and lived experiences with the reliability of accounts to communicate knowledge and meaning. A particular value of pragmatism as research paradigm thus lies in the possibility of mixing approaches in a meaningful manner, with qualitative techniques complementing quantitative methods (Duram, 2010; Hoshmand, 2003), as was the case in the current study. As mentioned, conclusions and new insight as a result of pragmatist research can provide a workable solution to problems experienced in practice (Johnson & Onwuegbuzie, 2004).

3.2.2 Methodological approach: Mixed methods

In 1959 already, Campbell and Fiske proposed multiple-trait and multiple methods in research as well as the use of convergent methodology (Shen, 2017). Closely related, Duffy (1987) posited more than three decades ago that the triangulation of research methods can

increase reliability, validity and the accuracy of a study. This author argued that the triangulation of methods can result in the compensation of methodological variances, as different methods can be associated with different strengths (Duffy, 1987). In more recent work, Tashakkori and Creswell (2007, p. 4) define mixed methods research as “research in which the investigator collects and analyzes data, integrates the findings, and draws inferences using both qualitative and quantitative approaches or methods in a single study or program of inquiry”. It follows that quantitative and qualitative methods are mixed across the stages of a mixed methods study, when following this approach, with these methods being regarded as inherently related (Cohen et al., 2018; Creswell & Creswell, 2018; Johnson & Onwuegbuzie, 2004; Mertens, 2014; Teddlie & Tashakkori, 2009; Wheeldon & Ahlberg, 2012).

Pragmatism is often associated with studies that follow a mixed methods methodological approach (Cohen et al., 2018; Edmonds & Kennedy, 2017; Johnson & Gray, 2015; Johnson & Onwuegbuzie, 2004; Mertens, 2014). Creswell and Plano Clark (2018) explain that, in such studies, the researcher will use different methods to collect or generate and analyse both quantitative and qualitative data to test hypotheses and address formulated research questions. Consequently, the integration of the two forms of data and the related results is possible while framing associated procedures within philosophy and theory (Cohen et al., 2018; Creswell & Plano Clark, 2018).

It follows that mixed methods research implies the formulation of two types of research question, two types of data collection or generation procedure, as well as two sets of data and the analysis thereof, making this method creative and expansive in nature, using different views to make sense of the phenomenon under study (Cohen et al., 2018; Johnson & Onwuegbuzie, 2004; Tashakkori & Creswell, 2007). The reason for following such a methodological approach relates to the possibility of utilising and combining methods in order to address the research questions in cases where one data source may be insufficient (Creswell & Creswell, 2018; Creswell & Plano Clark, 2018; Edmonds & Kennedy, 2017; Ivankova et al., 2006). As stated, this approach aligns with the pragmatist perspective, according to which a process of inquiry will be grounded in combining the strengths of different quantitative and qualitative methods (Morgan, 2014). In this way, the researcher can draw on the strengths of both quantitative and qualitative approaches and minimise the potential limitations associated with only one of the two (Johnson & Onwuegbuzie, 2004).

To be more specific, quantitative research may reduce a comprehensive understanding of the views of respondents while qualitative research can be limited in terms of the possibility of generalising the findings of a study (Creswell & Plano Clark, 2018). When combining the two approaches, these limitations can be countered by the advantages and strengths of the other approach. Such a purpose aligns well with the pragmatist perspective, where the focus falls on an understanding of abductive connections between data and theory (Creswell & Plano Clark, 2018; Wheeldon & Ahlberg, 2012). To clarify, when conducting a mixed methods study, quantitative data can provide a general understanding of the research phenomenon, while qualitative data can contribute to a more detailed understanding of what was obtained in a quantitative way (Creswell & Plano Clark, 2018; Wheeldon & Ahlberg; 2012). In this regard, Johnson and Onwuegbuzie (2004) argue that pictures, narratives and words can, for example, be utilised to add meaning to numbers, while numbers can, in turn, be used to add precision to pictures, narratives and words. Consequently, stronger evidence can be provided for research conclusions through the corroboration and convergence of findings, while the likelihood of generalisability is increased (Cohen et al., 2018; Johnson & Onwuegbuzie, 2004).

If only a quantitative or qualitative methodological approach was employed, the findings of my study may not have been significant enough to address the research question. Wheeldon and Ahlberg (2012) emphasise this possibility by stating that a mere focus on numeric information may lack detail and the necessary depth that participants assign to a phenomenon, resulting in the complexity of human behaviour, experience and perception potentially being lost. I was able to avoid this potential limitation and complement one method with another by making use of a sequential explanatory mixed methods research design, nested in pragmatism (Johnson & Onwuegbuzie, 2004; Mertens, 2014). A related strength associated with the selected mixed methods design is that this design offered me with the opportunity to expand on the quantitative results with the qualitative findings, thereby contributing to triangulation (Cohen et al., 2018; Pinto, 2010), as already indicated.

Other advantages associated with mixed methods research relate to the possibility of simultaneously addressing a range of research questions, having access to stronger inferences, and being able to use a variety of data collection/generation tools (Creswell & Plano Clark, 2018; Edmonds & Kennedy, 2017; Johnson & Onwuegbuzie, 2004; Teddlie & Tashakkori, 2009; Wheeldon & Ahlberg, 2012). In addition, Creswell and Plano Clark (2018) as well as Edmonds and Kennedy (2017) explain that mixed methods researchers are able to examine constructs at a deeper level, implying the possibility of added insight. To be more

specific, multiple methods and different stages of data collection or generation and/or analysis can provide a researcher with a better understanding of the phenomenon under investigation due to the option of combining the credibility of lived experiences with the reliability of empirical quantities (Wheeldon & Ahlberg, 2012). In this regard, Cohen et al. (2018, p. 33) state that mixed methods research

... enables a more comprehensive and complete understanding of phenomena to be obtained than single methods approaches and answers complex research questions more meaningfully, combining particularity with generality, “patterned regularity” with “contextual complexity”, insider and outsider perspectives ... focusing on the whole and its constituent parts, and the causes of effects.

In this regard, abductive reasoning, which is a process valuing both the deductive and inductive approaches associated with quantitative and qualitative research, is typically implemented when relying on the pragmatist perspective. A researcher employing this approach will thus be able to connect theory and data and make transferable inferences from the data, putting the richest possible information forward to the reader (Swain, 2018; Wheeldon & Ahlberg, 2012). Such a research approach is practical as researchers are free to use all the necessary methods required to address the research problem (Creswell & Plano Clark, 2018). When conducting mixed methods research, the researcher will typically develop a broad skill set and experience the possibility of producing a variety of written publications from one study (Creswell & Plano Clark, 2018; Mertens, 2014).

Challenges associated with mixed methods research relate to the time required to conduct research, to certain and specific skills needed to apply the methodology, and to the resources needed for the wide-ranging data collection or generation and analysis procedures that may be implemented (Creswell & Creswell, 2018; Creswell & Plano Clark, 2018; Johnson & Onwuegbuzie, 2004). I aimed to address these potential challenges by following a structured timeline for data collection/generation, analysis and the writing up of my findings, regularly engaging in reflective sessions with my supervisor and fellow doctoral student who conducted his study alongside mine. I also acquainted myself with the process of following a mixed methods approach (quantitative as well as qualitative processes) before embarking on my study. To this end, my thorough preparation probably contributed to the skills I applied during data collection or generation and analysis. Since the data collection/generation (both phases) was conducted online due to the prescribed COVID-19 protocols, the resources typically required for printing and in-person data collection or generation sessions were minimal.

3.3 RESEARCH DESIGN AND METHODOLOGY

I explain the research design, selection of respondents/participants and methodological strategies I utilised in this section. An overview of these choices and processes is captured in Table 3.1.

Table 3.1

Overview of methodological choices

RESEARCH COMPONENT	METHODOLOGICAL CHOICE
Research design	❖ Sequential explanatory mixed methods design
Sampling procedures, data collection and capturing for Phase 1 of the study (quantitative phase)	<ul style="list-style-type: none"> ❖ Non-probability purposive sampling of teachers ❖ Online questionnaires ❖ Nominal, ordinal and continuous (age) data electronically captured
Selection procedures, data generation and documentation for Phase 2 of the study (qualitative phase)	<ul style="list-style-type: none"> ❖ Purposeful selection of teacher-participants that indicated their willingness to participate in Phase 2 ❖ Online focus groups ❖ Transcription of recordings, observation, field notes and reflective journal
Data analysis and interpretation	<ul style="list-style-type: none"> ❖ Descriptive and inferential statistical procedures of nominal and ordinal data (quantitative); continuous data formed part of descriptive statistics only ❖ Deductive and inductive (hybrid) thematic analysis of data (qualitative)
Ethical considerations	<ul style="list-style-type: none"> ❖ Ethical clearance to collect, analyse and report on data ❖ Voluntary participation and informed consent ❖ Confidentiality and anonymity ❖ Respect ❖ Protection from harm ❖ Trust
Validity, reliability and quality criteria	<ul style="list-style-type: none"> ❖ Validity and reliability (quantitative) ❖ Credibility, dependability, confirmability, transferability and authenticity (qualitative)

3.3.1 Sequential explanatory mixed methods research design

I selected a sequential explanatory mixed methods design as I wanted to obtain quantitative results on the cognitive strategies employed by teachers in response to the COVID-19 pandemic; yet I also wanted to enrich and explain the quantitative results by relying on qualitative data (Creswell & Creswell, 2018; Edmonds & Kennedy, 2017; Ivankova et al.,

2006). A sequential explanatory mixed methods design implies that qualitative data (text or narrative) is generated and analysed after the collection and analysis of quantitative data (numerical) (Creswell & Creswell, 2018). This design implies two consecutive and distinct phases according to which research is undertaken (Creswell & Plano Clark, 2018; Edmonds & Kennedy, 2017; Ivankova et al., 2006; Teddlie & Tashakkori, 2009).

When implementing a sequential explanatory mixed methods design, quantitative methods are often relied on to address the purpose of a study, with qualitative data being used to explain the quantitative results. The approach can be presented as QUAN → qual, indicating that qualitative data is generated after the quantitative phase of data collection in order to explain the quantitative results (Creswell & Plano Clark, 2018; Teddlie & Tashakkori, 2009). Even though I implemented this option that is often used by mixed methods researchers, other options are also possible as QUAL → quan, indicating the sequence and prominence of the various data collection or generation phases of a study.

In the case of a QUAN → qual design, the quantitative data and analysis thereof will thus typically provide a broad and general understanding of the phenomenon under investigation, with the analysed qualitative data explaining and refining the statistical results, focusing on the views and perceptions of participants in greater depth (Carr, 2008; Creswell, 2009; Creswell & Plano Clark, 2018; Ivankova et al., 2006). In my study, the quantitative results were accordingly clarified, explained, interpreted, refined and expanded by means of the qualitative data (Creswell & Creswell, 2018; Creswell & Plano Clark, 2018; Edmonds & Kennedy, 2017; Pinto, 2010).

My decision to implement the QUAN → qual mixed methods research design relates to the possibility of determining the implementation of certain variables (cognitive strategies and resilience) by the participating teachers through quantitative instruments, with these constructs being of primary interest to my study (Cohen et al., 2018; Creswell & Plano Clark, 2018). In order to obtain an in-depth understanding of the participants' experiences of the implementation of the said variables, I involved selected participants during the qualitative phase of data generation, where further clarification and elaboration could be obtained in terms of the participants' utilisation of the constructs measured on the quantitative scales. Within this research design, I thus developed and refined specific but open-ended qualitative research questions and data generation protocols during the second phase of the study that could build on the quantitative results (Creswell & Creswell, 2018; Mertens, 2014). As such,

the qualitative phase was dependent on and connected to the quantitative phase of the study.

Creswell and Creswell (2018), Creswell and Plano Clark (2018) as well as Teddlie and Tashakkori (2009) discuss the strengths associated with the sequential explanatory mixed methods design. One of these relates to the fact that this research design may appeal to quantitative researchers due to the design often including a strong quantitative component as first phase of a study. In addition, this design option lends itself to uncomplicated and straightforward implementation processes as quantitative and qualitative data is collected or generated during two distinct phases, with the opportunity to explore quantitative data in more detail during the qualitative phase of a study (Ivankova et al., 2006). Next, when reporting on the findings of a study, a section on the quantitative results can be followed by a section on the qualitative findings to provide the reader with clear explanations, following a straightforward reporting style. Finally, this design can be seen as emergent in nature as the second phase of a study will derive from the results of the first phase while inferences are based on the analysis of both quantitative and qualitative data (Mertens, 2014).

Challenges associated with the implementation of a sequential explanatory mixed methods design include the necessity of a prolonged period of time to complete such a study (Creswell & Creswell, 2018; Ivankova et al., 2006). Additionally, the specifications of the qualitative phase cannot be finalised in advance, which may pose challenges in terms of obtaining ethical clearance prior to commencing with a study (Creswell & Plano Clark, 2018). In order to address these potential challenges, I formulated a realistic yet detailed time line with the assistance of my supervisor before commencing with my study and then aimed to keep to the formulated objectives in terms of the target dates. For ethics clearance, even though the exact specifications of the qualitative phase were not clear from the start, I tentatively framed the research process (Creswell & Creswell, 2018; Creswell & Plano Clark, 2018) and formulated draft questions that could potentially be used during the online focus groups when applying for permission to commence with the research (Consult Appendix E).

3.3.2 Selection of respondents/participants

According to Teddlie and Tashakkori (2009), the overall purpose of mixed methods sampling is to generate a sample that can address the research questions of a study. Cohen et al. (2018) explain that a researcher will target a specific group of people when using non-probability purposive sampling, knowing that the sample will not represent the wider

population but merely represent itself. In concurrence, Teddlie and Tashakkori (2009) state that purposive sampling is generally used when wanting to find instances that are typical or representative of a particular phenomenon or experiences.

I relied on non-probability sampling (Cohen et al., 2007; Leedy & Ormrod, 2013) by purposefully (for a specific purpose) selecting respondents to participate (Babbie, 2021; Cohen et al., 2007; Creswell & Creswell, 2018; Maree, 2010; Mertens, 2014; Mouton, 2001; Teddlie & Tashakkori, 2009). To be more specific, I purposefully selected teachers who had experienced the central phenomenon that I set out to explore (coping with the challenges associated with the COVID-19 pandemic). Due to the participants having experienced the phenomenon first-hand, it seemed possible to obtain rich and in-depth information from them that could address the research questions (Cohen et al., 2018; Creswell & Plano Clark, 2018; Teddlie & Tashakkori, 2009).

Non-probability sampling is fairly easy to employ, usually not expensive (Cohen et al., 2007, 2018) and can provide for rich information based on in-depth research (Denzin & Lincoln, 2018; Mertens, 2014). In relying on this strategy, I could draw from the advantage that depth may be added to a study (Babbie, 2021; Cohen et al., 2018; Creswell & Plano Clark, 2018; Teddlie & Tashakkori, 2009), yet I also remained aware of the possibility of less breadth that may be the case when probability sampling is used (Cohen et al., 2018). To this end, I decided to use purposive sampling to select teachers that would enable me to acquire in-depth information from them, without aiming for generalisation to the wider population (Babbie, 2021; Cohen et al., 2018). To elaborate, purposive sampling is specifically used when wanting to select respondents/participants who are knowledgeable and likely to provide useful and appropriate information (Campbell et al., 2020; Cohen et al., 2018) in addressing the research question(s). Therefore, purposive sampling implies the possibility of a good match between the sample and the objectives and aims of a study (Campbell et al., 2020).

As such, I involved participants who seemed knowledgeable of the phenomenon I set out to explore (Babbie, 2021; Cohen et al., 2018; Denzin & Lincoln, 2018). As my goal was to obtain a sample that could assist me to address the research questions, I applied specific selection criteria to select 240 teacher-respondents, as listed in Section 1.9.2 (Chapter 1). The respondents namely had to be involved in teaching at a primary or secondary school in Gauteng/Tshwane, South Africa; the participating teachers had to provide informed consent and be willing to participate; they had to teach at either an urban or semi-urban school; they

had to have internet connection and access to a mobile/electronic device for completion of the online questionnaire and participation in the online focus groups, and they had to be proficient in either Afrikaans or English. In this regard, the teacher-respondents were selected for the purpose of focusing on a precise, unique and specific case or issue (Cohen et al., 2018), namely the way in which teachers relied on cognitive strategies to cope with COVID-19 and the challenges implied by the pandemic.

To select respondents, I consulted with key role players in the districts where I wanted to do my research to identify potential schools where teachers might be willing to participate in the study. My fellow researcher and I made contact with the principals and/or school governing body members of 11 urban and 18 semi-urban schools in the districts for which I had obtained permission to conduct research from the Department of Education. We relied on telephonic and/or email contact for this purpose, due to COVID-19 restrictions, which yielded positive results in the case of the urban schools we contacted but posed a distinct challenge in terms of the responses received from the semi-urban schools we attempted to involve.

Upon receiving a positive response from a school, we provided the principal and/or school governing body with the required documentation, explaining the research (consult Appendices F and G) as well as the request for permission to conduct the research at the particular school that had to be signed by school management before recruiting participants (consult Appendix H). Once permission had been obtained from the principal and school governing body, I obtained the contact details of the teachers working at the school for us to be able to contact them, invite them to participate and send them the electronic link to the online questionnaire we used for data collection during the quantitative phase of our studies. In some cases, the principals of the schools preferred to send the link for the online questionnaire to the teachers themselves.

All 11 urban schools provided permission for the research and 347 teachers responded. Only one of the 18 contacted semi-urban schools responded, with four teachers fully completing the questionnaire during Phase 1 of the study. Even though 347 individuals from urban schools completed the online questionnaire, 107 of these responses could not be used due to the teachers only partially completing the questionnaire, resulting in a final number of 240 questionnaires being analysed. Based on the limited number of respondents from the one semi-urban school that participated, only the descriptive statistics of these questionnaires are reported on in the next chapter. As such, the final study number of respondents reported on in terms of inferential statistics (Spearman correlation coefficient)

is 240, with the quantitative data collected from the semi-urban school being analysed only in terms of descriptive statistics (Report 1 [Descriptive Results for Semi-urban Schools]) and not in terms of inferential statistics, due to the small sample size.

Despite the fact that only the responses from the teachers at urban schools were included for the inferential statistics, the sample size for the quantitative phase of the study ($n = 240$) is regarded as sizeable enough to meet the requirements of the statistical tests conducted, based on the recommendations of Cohen et al. (2018) as well as Creswell and Plano Clark (2018). In terms of mixed methods research methodology specifically, Creswell and Plano Clark (2018) propose that sufficient quantitative data be collected to provide researchers with an in-depth understanding of the phenomenon that is researched, with the qualitative data generation phase involving a much smaller sample size than that of the quantitative part (Cohen et al., 2018; Creswell & Plano Clark, 2018). Accordingly, a subset of the participants was involved in the second phase of the study for qualitative data generation purposes.

To be more specific, 24 teachers participated in the second (qualitative) phase of my study. The selection criteria for these participants entailed that they had to provide informed consent and their contact email addresses, indicating their willingness to participate in the second follow-up phase, with this indication forming part of a question included in the online questionnaire that was implemented during Phase 1. The number of potential participants that provided their email addresses during the first phase of the study was 61 (59 from urban schools and two from semi-urban schools).

Even though several attempts were made to include the two participants from the semi-urban schools in the online participatory focus groups, these individuals did not respond or participate in the study. As a result, only teachers from urban schools were involved in the second phase of the study that entailed qualitative data generation. After contacting the 59 participants from the urban schools who had provided their email addresses, 24 of them responded positively and partook in the online focus groups. An overview of the respondents/participants for the two phases of the research is provided in Table 3.2.

Table 3.2*Number of respondents/participants during the respective research phases*

School	Type of school	PHASE 1 (QUANTITATIVE)		PHASE 2 (QUALITATIVE)
		Total number of respondents (prior to data cleaning)	Number of respondents included for data analysis (inferential statistics)	Total number of participants (Phase 2)
1	Urban	43	29	17
2	Urban	8	5	-
3	Urban	94	59	2
4	Urban	14	8	-
5	Urban	61	52	1
6	Urban	59	42	1
7	Urban	27	17	3
8	Urban	17	11	-
9	Urban	9	4	-
10	Urban	5	4	-
11	Urban	10	9	-
12	Semi-urban	11	-	-
Totals		358	240	24

A limitation of the sampling and selection procedures that I employed relates to the selective nature thereof, implying that the data was not representative of the wider population (Babbie, 2021; Cohen et al., 2018; Mertens, 2014). In this regard, Gravetter and Forzano (2009) reason that it can be presumed that samples from one setting can be representative of samples from similar settings. In addition, Babbie (2021) posits that, if many participants of a smaller representative group of a population that a researcher intends to study are identified and selected, the researcher will be able to conduct research for the intended purpose.

Another potential limitation that I faced relates to the possibility of not obtaining a sufficient number of participants for data generation (Cohen et al., 2007). In an attempt to address this potential limitation, I invited all of the respondents during the first phase of the study to participate on a voluntary basis in the second phase. The 24 teachers that subsequently participated in the online focus groups provided rich qualitative data that offered the opportunity to clarify, explain, interpret, refine and expand on the results obtained during the

quantitative phase of the study (Creswell & Creswell, 2018; Creswell & Plano Clark, 2018; Edmonds & Kennedy, 2017; Pinto, 2010), as these participants had in-depth knowledge about the phenomenon that I explored (Cohen et al., 2007).

3.3.3 Data collection/generation and capturing/documentation

According to Creswell and Plano Clark (2018), quantitative data collection and qualitative data generation are not independent when conducting mixed methods research, but rather related to each other since one will build on the other. In Table 3.3. I provide an overview of the various data collection/generation methods I used, as an introduction to my discussion of the two phases of my study and the data collection/generation and capturing/documentation I completed, in collaboration with fellow PhD student Stephan Dippenaar.

Table 3.3

Data collection/generation and capturing/documentation

PHASE 1: QUANTITATIVE DATA			
DATA COLLECTION METHOD	DATE(S)	RESPONDENTS	DATA CAPTURING
Online questionnaire	Open for completion from 28 February until 12 April 2021	<ul style="list-style-type: none"> ❖ 240 fully completed questionnaires by respondents from urban schools ❖ Four fully completed questionnaires by respondents from semi-urban schools 	<ul style="list-style-type: none"> ❖ Online questionnaire data captured by means of Qualtrics¹⁴ ❖ Different links of the same questionnaire used for the different participating schools ❖ Arbitrary codes assigned to links to maintain anonymity of the schools
PHASE 2: QUALITATIVE DATA			
DATA GENERATION METHOD	DATE	PARTICIPANTS	DATA DOCUMENTATION
Online participatory focus group 1	22 September 2021	5	
Online participatory focus group 2	28 September 2021	4	❖ Audio-recordings of focus groups
Online participatory focus group 3	30 September 2021	5	❖ Observation (online, restricted)
Online participatory focus group 4	4 October 2021	4	❖ Field notes
Online participatory focus group 5	7 October 2021	6	❖ Reflective journal

¹⁴ Data capturing software (<https://www.qualtrics.com/uk/frontline/digital/analytics/>).

3.3.3.1 Quantitative data collection

Questionnaires are widely used for quantitative data collection. This data collection method can be administered without the researcher being present and will provide structured and often numerical data that can be relatively straightforward to analyse (Cohen et al., 2018). The use of an online questionnaire for the first phase of my study seemed suitable due to COVID-19 regulations at the time allowing me to collect data remotely and electronically. The purpose of the questionnaire was to obtain data that would enable me to address the research questions, with the result that questions included in the questionnaire had to be focused, concrete and specific (Cohen et al., 2018; Fielding et al., 2017).

As indicated, my fellow PhD student and I integrated the COPE Inventory (Carver, 2013) and the ARM-R (Resilience Research Centre, 2019) into one questionnaire that could be completed online. All of the questions of both the COPE Inventory and the ARM-R were included in the questionnaire we implemented, with the two of us focusing on separate differentiated analyses of the data according to the specific foci of our studies. The COPE Inventory (Carver, 2013) was included to measure the coping strategies that teachers had been employing in response to the challenges they had faced as a result of the COVID-19 pandemic, while the ARM-R was included as a self-reporting instrument that could measure social-ecological resilience (Resilience Research Centre, 2019). We also included questions on biographical data in the combined questionnaire, as well as a question enquiring about the respondents' willingness to participate in the second phase of the study. The biographical information of the respondents provided nominal data and continuous data, while the scales measuring among other aspects cognitive strategies (problem-focused coping) and resilience provided ordinal data.

The COPE Inventory and ARM-R can be perused in Appendices A and B respectively. As indicated, in combining these questionnaires into one questionnaire (with added biographical data), we did not make any changes to either of the instruments or the questions included to retain the psychometric properties of both the instruments. As such, all 60 items of the COPE Inventory as well as the 17 items of the ARM-R were included in the final questionnaire that the respondents completed. For the biographical questions, we included items that enquired about the respondents' gender, age, marital status, ethnicity, how many children they had at the time, whether or not they were registered at the South African Council for Teachers (SACE) at the time, the number of years they had been teachers, and the subjects as well as the grades that they were teaching at the time of the

study. In addition, we included a question on whether or not (and if so, where and if sufficiently) the respondents had internet access to continue with their teaching duties at the time of the field work, yet also during the COVID-19 lockdown period.

The questionnaire was finalised in English and comprised 91 items with the majority of the items being Likert-type items. It took around 20 minutes to complete. When sending out the links of the questionnaire to the school principals for their distribution of the links to the teacher-respondents, we included a cover letter to provide the respondents with the titles of our studies (that of fellow PhD student Stephan Dippenaar and mine), as the respondents completed one questionnaire for both our studies. In the cover letter, we explained the purpose of the studies, the permission obtained for conducting the research, the current and future use of the data as well as ethical guidelines on data storage and confidentiality. The final questionnaire that was implemented can be perused in Appendix D.

According to Cohen et al. (2018, p. 361), internet-based research “is becoming commonplace in many branches of educational research” and “the predominant mode of conducting surveys [including questionnaires], superseding paper-based surveys, be they through email or websites, on computers, cellphones, tablets and an ever-increasing range of electronic devices”. When conducting online research, one has to remain cognisant of the fact that absolute online data security cannot be guaranteed. In being aware of this potential limitation, I set possible online security steps in place to support data security as far as possible as well as the non-traceability and anonymity of the respondents. In this regard, I made use of email communication within the private domain of the University of Pretoria’s email platform. I also assigned arbitrary codes to the respondents and participating schools, and made use of password secured documentation.

Cohen et al. (2018) mention another possible challenge by stating that the completion of online questionnaires may not be done honestly by the respondents, even though this potential limitation is not limited to an online format or implementation of data collection instruments, but applies to other modes of implementation of questionnaires too. In this regard, researchers are encouraged to try and determine whether the respondents had understood or perhaps misunderstood certain questions, may have been reluctant to disclose certain information or tended to provide a socially desirable answer when suspecting that all respondents had not provided honest answers (Cohen et al., 2018; Fielding et al., 2017; Fowler, 2009). Even though I was aware of this possible limitation when relying on online questionnaires for data collection, I faced the additional challenge of not

being able to check the respondents' understanding during their completion of the questionnaire, implying the risk of respondents misunderstanding questions or of a superficial coverage of the topics (Cohen et al., 2018). In an attempt to limit this possibility, I sent the questionnaire to three individuals prior to distributing it to the respondents to obtain feedback on the clarity of the biographically-related questions and items included in the questionnaire. Since the COPE Inventory and the ARM-R had already been tested and validated (consult Section 3.6) and were included in their original formats, all items drawn from these existing questionnaires were used as is. In addition to my attempt to avoid this potential limitation, I could rely on the second phase of qualitative data generation where the participants could elaborate on the results obtained from the questionnaire and explain their experiences and the strategies they had utilised for coping with the COVID-19 pandemic and its associated challenges.

However, online questionnaires may also result in honest responses to especially sensitive topics (Cohen et al., 2018; Fielding et al., 2017) due to limiting the researcher effect and allowing respondents to provide responses on a voluntary basis and not in a face-to-face setting, where some people may feel pressured to provide specific responses (Cohen et al., 2018). Other advantages associated with online questionnaires as data collection method include the turnaround time for completion as this may be quick, the fact that the method is inexpensive, and the possibility of obtaining a large volume of data (Cohen et al., 2018; Creswell & Poth, 2018; Fielding et al., 2017). Additionally, the final instrument that I used was environmentally friendly (paperless) and seemingly efficient as it included the two existing questionnaires I relied on as well as some additional information, enabling me to obtain data on this from a fairly large number of respondents. The possibility of wide distribution and not having to be reliant on physical distance (closeness) between respondents or a specific time of day for distribution and completion is seen as another advantage when using online questionnaires (Cohen et al., 2018; Vehovar & Manfreda, 2017). To be more specific within the context of my study, the teacher-respondents that took part in my study could complete the questionnaire at any time at their convenience between the 28 February and 12 April 2021.

The completion of an online questionnaire is said to entail an easy process as respondents in most cases simply need to check a response out of a few options (Cohen et al., 2018; Vehovar & Manfreda, 2017). In addition to this process of easy questionnaire completion, the software platform I utilised for the purpose of implementation (Qualtrics) was set up to prompt the respondents to complete all the items and to indicate their progress by means of

a progress bar. Specific software was not required on the part of the respondents, with internet access being the only requirement to complete the online questionnaire. As indicated earlier, only fully completed questionnaires (n = 240) were included in the data analysis phase, adding to the accuracy of the data I report on by excluding questionnaires where respondents terminated completion of the questionnaires prematurely.

As the questionnaire was completed online, quantitative data was automatically captured electronically by means of Qualtrics. I could thus benefit from the advantage of the data being ready for analysis immediately after the respondents had completed the questionnaire. This option positively contributed to effective time management during my study. In addition, various statistical tests could be executed since the electronically captured data could be ordered, ranked and sorted easily (Torrentira, 2020). The data analysis procedures are discussed in more detail in Section 3.4.

3.3.3.2 Qualitative data generation

For the second phase of my study, I primarily relied on online participatory focus groups that were audio-recorded to generate data. In addition, I utilised observation, field notes and a reflective journal to generate and document the data.

3.3.3.2.1 Online participatory focus groups

Dendle et al. (2021) explain that online focus groups are particularly useful when wanting to bring participants together that are not in the same location or may experience difficulty to attend face-to-face sessions. As such, this method was useful for my study due to the restrictions caused by the COVID-19 pandemic. In collaboration with fellow PhD student Stephan Dippenaar I relied on pre-formulated semi-structured and open-ended questions to guide the online participatory focus groups we jointly facilitated with 24 participants. We facilitated five online focus groups of approximately one hour each during the period of the 22nd of September 2021 to the 7th of October 2021. The number of participants in each session ranged from four to six.

We facilitated the online focus groups *via Kumospace*®, providing the opportunity for videoconferencing without participants having to download any specific software for participation. This online platform holds the additional benefits of being user friendly, providing the opportunity for researchers to create an inviting space by adding, for example, virtual flowers or virtual beverages to the virtual videoconference room, and the freedom

and opportunity for participants to *move around* within the virtual room during discussions by moving their images on the screen. In addition, the participants could provide their valuable input with minimal influence from external factors, because they did not have to be in physical proximity to the other participants at the time of the pandemic, when such interaction was restricted. Consequently, the participants could share their thoughts without having to feel that their health might have been compromised. The teacher-participants could therefore experience a safe and inviting videoconferencing room that was customised to create a virtual room imitating a welcoming space where they could share their knowledge and experiences of the strategies that they had relied on in response to the challenges experienced during the COVID-19 pandemic.

Although many of the fundamental principles for face-to-face and online focus groups are similar, the online medium also implies certain specific advantages (Abrams & Gaiser, 2017). One such an advantage is that teacher-participants who may have been reluctant to partake in an individual interview could engage in a group discussion during the online focus group, sharing their experiences and ideas with peers who faced similar challenges (Ravitch & Carl, 2016). In using this method, I could furthermore rely on group interaction between the participants (Babbie, 2021; Cohen et al., 2018; Denzin & Lincoln, 2018) with them discussing and jointly sparking ideas on the strategies that they had employed in response to the challenges they experienced as a result of the COVID-19 pandemic.

As such, the synchronous online participatory focus groups that I relied on for qualitative data generation allowed for the exploration of ideas and for participants to voice their opinions, to interact with one another, share their views and discuss information that related to the research questions, being prompted by the contributions of others or probed by us as the facilitators (Abrams & Gaiser, 2017; Babbie, 2021; Cohen et al., 2018; Dendle et al., 2021, Fielding et al., 2017; Mertens, 2014; Ravitch & Carl, 2016; Teddlie & Tashakkori, 2009). As a result, I was able to obtain insights from the interactions and dialogue between the participants (Babbie, 2021; Creswell & Poth, 2018; Fielding et al., 2017) that yielded rationally ground and robust data based on reflective discussions within a short period of time and at a low cost (Babbie, 2021; Creswell & Poth, 2018; Dendle et al., 2021; Mertens, 2014; Ravitch & Carl, 2016; Swain, 2018). Ravitch and Carl (2016) posit that this advantage of focus groups is based on the possibility of generating richer data in a focus group than in the case of individual interviews, based on the group interactions and dynamics when people participate in a group discussion. The use of focus groups can therefore enable the researcher to assess ideas within a group setting by creating specific conditions that can

allow for the necessary flexibility to probe and use follow-up and open-ended questions while communication between the participants can be observed and facilitated to generate data (Abrams & Gaiser, 2017; Babbie, 2021; Creswell & Poth, 2018; Dendle et al. 2021; Ravitch & Carl, 2016; Swain, 2018).

In line with the dynamic nature of focus groups, the teacher-participants in my study were able to comment on other teacher-participants' experiences, thoughts and responses, providing the possibility of generating emergent and amplified topics of discussion (Ravitch & Carl, 2016). According to Patton (2015), focus groups can, in this way, serve the purpose of quality control during data generation due to participants providing balanced views, with them mediating extreme or any false views shared by their co-participants. In this regard, we encouraged the participants to discuss and elaborate wherever they saw fit, even though we were guided by an interview guide (consult Appendix E). To this end, we steered the discussions where needed to maintain the necessary focus (Cohen et al., 2018), yet also allowed for the discussions to progress naturally, based on the input of the participants.

Challenges implied by online participatory focus groups relate to the facilitator requiring the necessary skills to implement this method with success (Creswell & Ploth, 2018) and maintain sound inviting relationships with the participants during discussions. In addition, responses may be difficult to analyse and logistical challenges may be experienced when wanting to schedule a time with a number of participants who have different schedules that need to be considered (Fielding et al., 2017; Mertens, 2014). As I am a trained educational psychologist, the creation of an inviting environment and facilitation of the discussions did not pose challenges to me. Even though the online platform was unfamiliar ground, I could rely on my training and experience to implement active listening, redirection of the discussions where necessary, empathy and paying attention to non-verbal cues in support of the successful facilitation of the online focus groups. I furthermore discussed the voluntary nature of participation as well as anonymity and confidentiality with the participants prior to commencement of the sessions, in support of our relationships of trust. During and prior to the thematic analysis process, I continually consulted with my supervisor and fellow PhD student to ensure sound analysis procedures. With regard to scheduling the online focus group sessions, I sent out various possible dates for attendance and grouped the participants within groups according to their preferences for a date of attendance. In this way, the online participatory focus groups I relied on implied flexibility in terms of the contact time that could be negotiated with the participants. Any challenges related to location that

could have hindered participation could also be ruled out (Cohen et al., 2018; Fielding et al., 2017).

Another challenge that is associated with online participatory focus groups concerns the fact that researchers cannot control the circumstances of the participants or the possibility of them, for example, being distracted by factors within their immediate environments while engaged in the online discussion (Cohen et al., 2018). In an attempt to address this potential challenge, I aimed to keep sessions concise while still ensuring that the topic was discussed sufficiently within each group discussion. I repeated questions and invited specific participants to respond where it appeared necessary. As background to this effort, I did not only attend to what was said by the participants, but additionally relied on my observations during the online focus groups in managing the flow and progress of the discussions.

All online participatory focus groups were digitally recorded after obtaining permission from the participants. Verbatim transcriptions were then created and used to conduct thematic analysis. The full transcripts of the online participatory focus groups are included in Appendix P. Throughout, the identities of the participants were kept confidential and pseudonyms were used for the purpose of transcriptions. This requirement was similarly kept in mind while compiling my field notes and reflective journal.

3.3.3.2.2 *Observation*

In support of the online participatory focus groups that I co-facilitated, I relied on observation as complementary qualitative data generation method (Ciesielska et al., 2018; Cohen et al., 2018). Observation in research entails the observing of, for example, settings, events, artefacts, routines as well as people, and can enable researchers to understand the situation that is being explored (Cohen et al., 2018; Creswell & Creswell, 2018; Marshall & Rossman, 2016). According to Ciesielska et al. (2018), observation is one of the most diverse research methods that can provide the researcher with the opportunity to adapt to a scientific context and the research problem, aligning with the pragmatist philosophy that guided my study.

As such, observation may be structured and systematic, or take a less structured form (Denscombe, 2014). I followed a less structured approach to observation during the online participatory focus groups partly due to the fact that I was not able to observe the participants in person and attend to all the non-verbal cues. However, I strived to be non-intrusive yet observe the process and participants as best as possible, making notes of what I saw and heard (Babbie, 2021; Cohen et al., 2018; Marshall & Rossman, 2016). Therefore, I observed

what was taking place during the online focus group sessions (Cohen et al., 2018), supporting my observations by means of field notes, audio-recordings and a reflective journal.

Based on the selected mode of the focus groups, I relied on non-participant observation, attempting to understand the interactions, relationships and views of the participants, without making evaluations or judgement calls (Ciesielska et al., 2018). I thus aimed to remain as neutral as possible but still be engaged throughout the discussions that were observed (Ciesielska et al., 2018). In this way, observation enabled me to gain insight into hidden messages and the dynamics of the group by attending to non-verbal communication, silences and implied communication (Draissi et al., 2021; Phillippi & Lauderdale, 2018). To this end, I observed the participants' use of voice and intonation, their spontaneity and to what extent prompting was necessary, their facial expressions and confirmability while other participants were sharing their views, any expressive movements as well as other non-verbal cues. This approach enabled me to obtain a better understanding of the contributions made by the participants during the online focus groups.

A distinctive advantage of observation when conducting qualitative research is that this method creates the opportunity to gather first-hand data from social situations (Babbie, 2021; Creswell & Creswell, 2018; Wellington, 2015). In this regard, Babbie (2021) as well as Cohen et al. (2018) posits that a unique advantage of observation in research is that it can yield authentic, valid data and rich contextual information. According to Cohen et al. (2018, p. 544), the researcher will be drawn "into the phenomenological complexity of participants' worlds; here situations unfold, and connections, causes and correlations can be observed as they occur" during the observation process, enabling a researcher "to catch the dynamic nature of events, to see intentionality and maybe to seek trends and patterns over time". As mentioned, observation is specifically useful to record non-verbal behaviour (Ciesielska et al., 2018; Cohen et al., 2018), which I took advantage of, even though the online nature of the focus groups limited me to an extent.

Potential limitations associated with observation as data generation method include that observations can be time-consuming and may be prone to bias in terms of how the observations are made or reported on (Cohen et al., 2018). In addition, this method may be selective and dependent on the researcher's opportunity to observe and sustain attention. In an attempt to address these potential limitations, I remained reflective and kept the focus of my observations in mind throughout the research process.

Therefore, I did not only observe others, but also my own reactions, thoughts as well as my interaction with my co-researcher and the participants by regularly engaging in self-reflection (Ciesielska et al., 2018). In addition, I remained attentive to the key features, patterns and similarities that could be identified, and of my role in the research process and how to link my observations to the data I obtained from the online participatory focus groups. The possibility to debrief with my co-researcher after each session allowed me to obtain thick descriptions that formed part of the field notes I compiled (Phillippi & Lauderdale, 2018).

3.3.3.2.3 *Field notes*

According to Phillippi and Lauderdale (2018), field notes are recommended when conducting qualitative research for the researcher to be able to document the required contextual information. At its core, field notes serve the function of constructing rich and thick descriptions of data generation sessions by means of, for example, focus groups and are useful to gain an understanding of participants' meaning-making (Cohen et al., 2018; Phillippi & Lauderdale, 2018). For my research I recorded descriptive field notes, which enabled me to re-visit the research process at later stages as required. I made notes of the dates, number of participants, interactions between participants as well as the discussions that occurred during the online participatory focus groups (consult Appendix T).

Descriptive field notes thus provided me with the opportunity to document my observations and keep record of the participants that partook in the research as well as the contributions they made. To this end, I compiled notes on hunches about what I was learning, and of the reactions of the participants during the sessions (Creswell & Creswell, 2018). In addition to the descriptive notes, I compiled reflective field notes to document my experiences, personal reflections, emotions, successes as well as areas of development throughout my study (Creswell & Creswell, 2018). In this way, I relied on reflexivity throughout the research process (Babbie, 2021; Cohen et al., 2018).

In spite of my intentions to compile my field notes during the data generation sessions, I occasionally focused on my engagement with the participants to the extent that I did not make notes at the time. I ascribe this occurrence to my personal as well as my professional preference as psychologist for not making extensive notes while engaging with individuals, thereby risking the researcher-participant relationship. As a result, I compiled the field notes of my observations as soon as I had the opportunity to do so after each session. Even though

it remains possible that I might not have captured all the detail of what I had observed, I revisited the recordings at later stages to elaborate on my field notes.

During the process of compiling reflective field notes, I was guided by the principle of reflexivity (Babbie, 2021; Cohen et al., 2018; Creswell & Poth, 2018; Denzin & Lincoln, 2018). In this regard, I recorded my notes in private after each session and allowed sufficient time to do this. I focused on not amending my reflections after debriefing with my co-researcher, yet my co-researcher and I continually reflected to compare our understanding and experiences with one another in support of authenticity and the verification of our observations as well as to strengthen the trustworthiness and rigour of our studies (Phillippi & Lauderdale, 2018).

3.3.3.2.4 Reflective journal

Reflection entails an active reflexive process that makes use of mental abilities to provide the opportunity for researchers to contemplate the course(s) of action(s) taken during a research process to consider alternatives and the possible outcomes of the process (Carpenter, 2018; Draissi et al., 2021; Or, 2018). In addition, the use of a reflective journal furthers the possibility of such reflection by providing a critical analysis of the context in which the research takes place, as well as the skills, assumptions, knowledge, emotions evoked and the values of the researcher (Carpenter, 2018).

The narratives that form part of my reflective journal are a culmination of my observations, reflective field notes and reactions regarding the phenomenon under study, which is in line with the description of a reflective journal by Draissi et al. (2021). To be more specific, I did not merely accumulate information during my reflective journaling, but also focused on exploring connections between knowledge, the results, the participants' contributions and my own observations (Babbie, 2021; Or, 2018). Such a focus aligns with an advantage of using a reflective journal as it may guide the knowledge acquisition and processing that take place during a study (Zulfikar & Mujiburrahman, 2018). Therefore, by using a reflective journal and field notes, I was able to provide a rich context and strengthen the data for analysis (Phillippi & Lauderdale, 2018).

By making use of a reflective journal, I became aware of my own growth as a researcher, the development of my professional practice and my emerging competence to apply the selected research methods (Ahmed, 2019; Draissi et al., 2021; Phillippi & Lauderdale, 2018). Even though the use of a reflective journal in research may be time-consuming, I

regard reflexivity as an important component of qualitative research, and therefore recognised and deliberately acknowledged my reflective role within the research process (Cohen et al., 2018; Phillippi & Lauderdale, 2018). In this regard, Phillippi and Lauderdale (2018) recommend that a researcher remain reflective during the research process and document any observations as soon as possible after completion of a data generation session, as I also aimed to do.

To this end, Berger (2015) recommends that researchers should spend the necessary time and focus on reflection as soon as possible after focus group sessions and states that detailed information can be added later on in an attempt to strengthen the comprehensive documentation of a research process. I continually attempted to be reflective by remaining cautious of the factors that could possibly have affected the research process and by documenting my observations and field notes accordingly. In addition, I captured my reflections on the decisions made throughout the research process as well as on the thoughts that guided these decisions. Excerpts from my reflective journal can be perused in Appendix S.

3.4 DATA ANALYSIS AND INTERPRETATION

Since I followed a sequential explanatory mixed methods approach, the quantitative and qualitative data was analysed during two separate phases and then interpreted and integrated as a whole. The goal of the quantitative phase of my study was to identify which, if any, cognitive strategies the respondents had employed in response to the challenges they faced as a result of COVID-19. In support of and in elaboration on these results, the goal of the qualitative phase of the study was to determine to what extent the participants perceived the employment of these identified cognitive strategies as being effective in coping with the COVID-19 pandemic and the associated challenges experienced by teachers.

Following the data analysis processes, I made interpretations and inferences in coming to conclusions in terms of the quantitative and qualitative data, as well as across the two strands of data. I utilised both descriptive and inferential statistics when analysing the quantitative data, using the Spearman correlation coefficient to address the research questions, drew inferences from the data and test the associated hypotheses as presented in Chapter 1. For qualitative data analysis, I followed a hybrid approach, relying on both deductive and inductive thematic analysis (Braun & Clarke, 2006; 2022; Crabtree & Miller,

1999; Fereday & Muir-Cochrane, 2006; Swain, 2018; Xu & Zammit, 2020). These processes are explained in more detail in the subsections that follow.

3.4.1 Quantitative data analysis

Quantitative data analysis is dependent on deductive reasoning (Leedy & Ormrod, 2013), implying that a researcher will start with a hypothesis (a premise) and then draw logical conclusions from the results that have been obtained (Cohen et al., 2018). In this case, the researcher predetermines the statistical procedures that form part of the research process (Cohen et al., 2018; Leedy & Ormrod, 2013).

For the current study, I analysed the data I collected from 240 respondents from 11 urban schools and four respondents from one semi-urban school as part of the first phase of the study. I made use of the expertise and services of the University of Pretoria's Department of Statistics in analysing the quantitative data. As part of the quantitative data analysis, the use of descriptive statistics provided me with the opportunity to describe the data, and therefore, the sample. The data that I analysed was not likely to be normally distributed, which implied the use of non-parametric statistics, as described in the subsection below. In addition, I made use of inferential statistics and specifically the Spearman correlation coefficient to draw inferences from the data and to test for correlation between the variables. As indicated, inferential statistics were not performed on the data collected from the teachers from semi-urban schools.

3.4.1.1 Descriptive statistics

According to Mertens (2014), descriptive statistics can be defined as statistics that is used to indicate or describe several characteristics that are common to a complete sample. As such, descriptive statistics are used to summarise numeric data to interpret the data by means of, for example, graphs and tables (Cohen et al., 2018; Teddlie & Tashakkori, 2009). It follows that descriptive statistics can provide a good understanding of and indicate general trends that can be identified in a set of data (Cohen et al., 2018; Creswell & Plano Clark, 2018; Maree, 2010; Teddlie & Tashakkori, 2009). Descriptive statistics can furthermore assist a researcher in the organisation, description and simplification of data (Cohen et al., 2018; Gravetter & Forzano, 2009).

The descriptive statistics that apply to the current study includes statistics on the respondents' language, gender, age, marital status, ethnicity, whether they were registered

at SACE at the time of the study, the number of years they had been teaching, and the subjects and grades they were teaching at the time of the field work. In addition, access to the internet, the location where the respondents had internet access (if any), their internet access during the COVID-19 lockdown period as well as the sufficiency of their internet access also formed part of the descriptive statistics I report on in the next chapter.

For numerical answers, a basic summary statistic such as the mean, standard deviation and median were calculated using *R*. Corresponding histograms of the values that were obtained are provided in Report 1 (Descriptive Results for Urban Schools) and Report 1 (Descriptive Results for Semi-urban Schools), included as Appendices I and J respectively. For categorical answers, frequency tables were obtained that indicate the proportion of observations that were equal to each value as well as a plot of these values.

3.4.1.2 Nonparametric statistics

As already indicated, I made use of nominal and ordinal data and non-probability sampling procedures, implying that normal data distribution is not probable. To this end, I used distribution-free tests (non-parametric statistics) that imply certain benefits yet also some limitations (Bless & Kathuria, 1993; Cohen et al., 2018; Corder & Foreman, 2014; Ferguson, 1981; Leedy & Ormrod, 2013; Mertens, 2014; Scott & Mazhindu, 2014).

Nonparametric tests are straightforward tests, that are easy to compute, and therefore convenient and time-efficient when used (Bless & Kathuria, 1993; Cohen et al., 2018). Nonparametric tests are known for flexibility in use, which support the nature of the pragmatist epistemology I adopted for the current study (Orcan, 2020). However, a limitation associated with nonparametric tests relates to these tests reportedly not being as powerful as parametric tests. I did not experience this limitation within the context of my study as sufficient statistical analyses were seemingly available to allow for hypothesis testing and the aims of the study to be met (Bless & Kathuria, 1993; Cohen et al., 2018; Scott & Mazhindu, 2014).

3.4.1.3 Inferential statistics

Inferential statistics are used when a researcher relies on a sample of a population to estimate the characteristics of a larger population and draw inferences, thereby permitting for the testing of hypotheses (Cohen et al., 2018; Leedy & Ormrod, 2013, Teddlie & Tashakkori, 2009). As described in Chapter 1, samples from a certain location that are

representative of samples from a comparable setting may allow for generalisation of the findings (Gravetter & Forzano, 2009). In this regard, it may be reasonable to assume that the results of my study may be generalisable to similar settings, as I rely on descriptive statistics to describe the sample. According to Teddlie and Tashakkori (2009), pragmatists place an emphasis on ideographic statements and are generally concerned with issues of transferability of results as well as with external validity, thereby justifying the value of inferential statistics when adopting a pragmatist epistemology.

For my study, a significance level of 5% was used to describe the inferences made from the sample (Cohen et al., 2018). Therefore, I worked on a 0,05-significance level (called alpha α) while doing hypothesis testing. To this effect, it can be deduced that a result occurs, on average, only 5% of the time and that such a result may additionally be ascribed to another/other factors that influenced the data (Corder & Foreman, 2014; Leedy & Ormrod, 2013). The p-value measures the definite probability of results associated with a study being ascribed to more than chance (O'Leary, 2004). Therefore, in this study, I determined whether the p-value was less than or equal to the significance level of 5%, and thereby established whether the calculated p-value fell within the critical region (Corder & Foreman, 2014). I planned to reject the null hypothesis in the case of a result being ascribed to factors other than chance, yet did not reject the null hypothesis otherwise (Leedy & Ormrod, 2013; Wheeldon & Ahlberg, 2012).

During quantitative data analysis, a type I error (rejecting the null hypothesis when it is true) or a type II error (not rejecting the null hypothesis when it is false) is possible (Cohen et al., 2018; Maree, 2010; Mertens, 2014). These errors can be attributed to the significance level that is selected for a study. In this regard, Drew et al. (2008) as well as Mertens (2014) recommend a 5% level of probability as acceptable for such studies. Support for an alternative hypothesis is therefore probable when the null hypothesis can be rejected (Maree, 2010). In order to test my formulated hypotheses, I used the Spearman correlation coefficient test. Consult Appendix K for the results and response analysis (Report 2 [Response Analysis for Urban Schools]).

3.4.1.4 Spearman correlation coefficient

I aimed to determine whether or not the variables mentioned in this section were associated with one another (Cohen et al., 2018; Leedy & Ormrod, 2013; Mertens, 2014). For this purpose, I used correlational statistics to describe the direction and the strength of the relationship between the two variables of coping strategies and resilience. Therefore, I correlated the results of the sections of the COPE Inventory (Carver, 2013; Carver et al., 1989) that specifically measure active coping, planning, the suppression of competing activities, restraint coping and the seeking of instrumental social support (problem-focused coping strategies), as captured in Appendix A, with the results of the ARM-R (Resilience Research Centre, 2019) included in Appendix B.

The Spearman correlation coefficient test is regarded as a suitable nonparametric test that is typically used when data is ordinal in nature to determine the nature and strengths of relationships between the variables (Cohen et al., 2018; Coleman, 2010; Leedy & Ormrod, 2013; Mertens, 2014; NCSS Statistical Software, n.d.). Coleman (2010, p. 3) contends that “the statistical strength of the Spearman correlation has been demonstrated to be as robust as that of the parametric Pearson’s r ”. By using this test, I endeavoured to determine whether or not a positive or negative relationship existed between the variables, and what the size of any correlation coefficient was (Coleman, 2010; Leedy & Ormrod, 2013; NCSS Statistical Software, n.d.). In other words, I attempted to determine to what degree one data set had influenced the other data set (Cohen et al., 2018; Coleman, 2010).

As indicated, the Spearman correlation coefficient test measures the degree of association (+1.0 to -1.0) of data that is ordinal in nature (Cohen et al., 2018; Coleman, 2010). A correlation number close to +1 or -1 indicates a strong correlation, numbers in the middle range indicate a moderate correlation, while a number close to 0 indicates a weak or no correlation (Cohen et al., 2018; Coleman, 2010; Leedy & Ormrod, 2013; Mertens, 2014). It is important to remain aware of the fact that correlation may not necessarily indicate causation and that if a correlation does exist, an association between variables will be indicated, with statistical tests alone not being enough to provide the reason for associations (Cohen et al., 2018; Leedy & Ormrod, 2013; Mertens, 2014). I therefore followed a mixed methods approach in order to refine, expand and clarify the results obtained by means of statistical testing (Creswell & Plano Clark, 2018; Edmonds & Kennedy, 2017; Pinto, 2010).

I stated the hypotheses for my study in terms of the population parameter, in the following format:

H₀: $\rho_s = 0$

H_a: $\rho_s \neq 0$.

Testing for statistical significance was done to examine whether or not to reject the null hypothesis. The null hypothesis states that no relationship exists between the variables. Should the null hypothesis test false, the alternative hypothesis will not be rejected due to the variables indicated being correlated (Cohen et al., 2018; Coleman, 2010). For this test, with $\alpha = 0,05$, the null hypothesis would be rejected if the p-value tested less than or equal to 0.05.

3.4.2 Qualitative data analysis

Braun and Clarke (2022) regard thematic analysis as a process during which patterns of meaning are identified and encoded, with this being viewed as the foundation of qualitative analysis. Babbie (2021) as well as Fereday and Muir-Cochrane (2006) elaborates by stating that thematic analysis can be regarded as a form of pattern recognition and the organisation of data into emerging themes. I specifically followed a hybrid approach, thereby incorporating deductive (top-down) with inductive (bottom-up) reasoning (Swain, 2018; Xu & Zammit, 2020) in an attempt to identify repeated meaning-making patterns across the analysed data sets (Vaismoradi et al., 2013).

The initial process of deductive reasoning resulted in a set of pre-empirical codes that stemmed from literature related to the COPE Inventory whereas the inductive phase of analysis resulted in a series of post-empirical codes that emanated from additional examination of the data (Crabtree & Miller, 1999; Swain, 2018). For the deductive phase of the data analysis, I thus made use of *a priori* assumptions derived from theory to set up codes for analysis (Consult Appendix M). In this way, I integrated existing literature based on the work of Carver (2013) as well as Carver et al. (1989) in relation to the COPE Inventory to identify theoretical indicators that could guide me in doing the deductive analysis (Van der Walt, 2012). The hybrid approach I followed allowed me to take a pragmatist stance with regard to deductive analysis while simultaneously allowing for additional themes to emerge from the data by means of inductive coding (Fereday & Muir-Cochrane, 2006).

I thus followed an eclectic, theory-driven approach, yet was guided by the guidelines suggested by Braun and Clarke (2022) as well as Crabtree and Miller (1999) in undertaking the analysis of the qualitative data. I focused on being reflective throughout the process as some of the qualitative data analysis steps occurred concurrently rather than sequentially (Swain, 2018). As a result, part of the initial phase of the qualitative data analysis process, I read through the data to develop a general understanding of the transcribed database before commencing with the analysis (Boyatzis, 1998; Braun & Clarke, 2022; Creswell & Plano Clark, 2018; Mertens 2014; Xu & Zammit, 2020).

According to Boyatzis (1998), Braun and Clarke (2022) as well as Creswell and Plano Clark (2018), coding forms a central part of qualitative analysis. Coding involves the recognition of an important moment, encoding this and then later developing themes around what had emerged after organising the data (Boyatzis, 1998). As such, the process of coding can be described as one of labelling ideas and grouping evidence to reflect perspectives (Creswell & Plano Clark, 2018; Mertens, 2014). The aim is to identify codes that describe most of the data (Joffe, 2012). As indicated already, I included predetermined (derived) topic codes from Carver (2013) and Carver et al. (1989) to inform the deductive part of the qualitative data analysis I completed. This method allowed me to initiate codes (*a priori* categories) from the existing theory that also informed the quantitative part of my research (Creswell & Plano Clark, 2018; Fereday & Muir-Cochrane, 2006). In completing the deductive phase of the analysis, I used the template approach, as described by Crabtree and Miller (1999). To this end, I made use of a codebook with *a priori* categories (table for analysis, included as Appendix M), using this as a tool for data management to organise segments of related or similar text for interpretation (Crabtree & Miller, 1999).

I included five broad thematic categories (*a priori* categories) in the table of analysis, namely active coping, planning, suppression of competing activities, restraint coping, and the seeking of instrumental social support (Carver, 2013; Carver et al., 1989). I then applied codes from the table of analysis to the text in order to identify meaningful units captured in the data. Hereafter, I sorted the segments of text for each coping strategy that had been identified (Crabtree & Miller, 1999). As part of this phase of the analysis process I moved back and forth and interwove and incorporated different data sources (Xu & Zammit, 2020) to identify and determine the cognitive strategies employed by the participating teachers in response to the COVID-19 pandemic, being guided by the work of Carver (2013) and Carver et al. (1989).

Next, I conducted inductive thematic analysis by again engaging with the data, and building patterns from labels into categories to derive an additional theme from the bottom up (Braun & Clarke, 2022; Creswell, 2012; Edmonds & Kennedy, 2017). For this purpose, data was organised into more abstract units of information by working back and forth among the identified codes until a final inductive theme could be identified, in addition to the themes identified during the deductive phase of analysis. Additional codes that were not derived from the theory described by Carver et al. (1989) were thus identified through inductive analysis, based on my identification of recurring ideas in the data (Boyatzis, 1998; Braun & Clarke, 2022). Hereafter, I connected the number of codes, and then reviewed, defined and named the final theme and related sub-themes (Braun & Clarke, 2022; Fereday & Muir-Cochrane, 2006; Xu & Zammit, 2020). More specifically, I identified a final pattern in the data (theme) by connecting codes that I could corroborate into an explanatory framework to present the findings (Crabtree & Miller, 1999).

I followed an abductive approach to map the findings (Hennein & Lowe, 2020) as part of the process of corroboration. In writing up the final analysis for this thesis (refer to Chapter 4), stories are told as the product of my data immersion, reflection and deep thinking (Braun & Clarke, 2022). I also aimed to expand and explain the findings in terms of how the teachers experienced the effectiveness of the cognitive strategies they had implemented in Chapter 5, with the ultimate aim of my findings informing resilience theory.

An advantage associated with thematic analysis relates to the flexibility of this method that can be applied across different ontological and epistemological positions (Braun & Clarke, 2022), as was the case for the current pragmatist study. Thematic analysis furthermore combines an analysis of occurrences and the frequency of codes with implicit meanings, thereby implying the advantage of complex and subtle interpretations of the data (Joffe, 2012). The way in which I combined deductive and inductive analysis by following a hybrid approach to qualitative data analysis enabled me to look for the themes (cognitive strategies) identified by Carver (2013) and Carver et al. (1989), yet to remain open and flexible for any additional themes (cognitive strategies) that could be identified in the data in an inductive way.

However, a limitation often associated with thematic analysis relates to the possibility of the analysis being poorly defined or demarcated (Boyatzis, 1998; Braun & Clarke, 2006; Xu & Zammit, 2020). To avoid this, I followed a rigorous approach and describe my research process as comprehensively and as transparently as possible in this thesis, for the reader

to be able to follow how the process was carried out (Swain, 2018). In addition to including a trail of evidence (Koch, 2006), I engaged in regular discussions with my supervisor and relied on reflexivity for the duration of my study.

3.4.3 Integration of quantitative and qualitative results

When doing data analysis within a mixed methods study, the researcher needs to integrate and connect the quantitative and qualitative data analysis processes (Creswell & Creswell, 2018; Teddlie & Tashakkori, 2009). According to Creswell and Creswell (2018), such integration will occur when a researcher connects the results obtained from the quantitative data to the qualitative data. In my study, the qualitative data generation sessions were guided by the results of the quantitative phase to investigate the quantitative results in greater depth by generating and analysing qualitative data that could provide explanations and more detail on the quantitative results (Cohen et al., 2018; Ivankova et al., 2006).

Wheeldon and Ahlberg (2012) explain that the combination of quantitative and qualitative results in meaningful ways will offer more than the sum of each part. In support of this view, Xu and Zammit (2020) state that the integration of deductive and inductive coding can provide a comprehensive and balanced view of the data that will not purely rely on the occurrences of codes that are decontextualised. Accordingly, my intent of integrating quantitative and qualitative data in a sequential explanatory mixed methods design was to connect the quantitative phase with the qualitative phase to be able to elaborate on the quantitative results I obtained. In this regard, Teddlie and Tashakkori (2009, p. 249) point out the following:

An enhanced understanding is possible only if the outcomes of research strands are effectively linked or integrated, if possible, areas of agreement or disagreement are identified through comparisons of results and inferences, and if the possibility of a higher order conceptual framework of the phenomenon is actively explored.

Teddlie and Tashakkori (2009) furthermore emphasise that the meaning-making process of a researcher will depend on the quality of inferences that can be made by considering the design quality of a study as well as the integrity of the interpretation of the data. In the current study, the contextualisation of numeric (quantitative) results took place by means of qualitative data (Cohen et al., 2018; Wheeldon & Ahlberg, 2012). After I had analysed the quantitative and qualitative data, I thus displayed the key concepts and results in a joint table (consult Chapter 4) to illustrate how the qualitative findings enhanced the quantitative results (Creswell & Plano Clark, 2018). Hereafter, the results displayed in the tables and graphs,

supported by the qualitative results I obtained, were used to determine how the results confirmed, contradicted or expanded current knowledge (Cohen et al., 2018; Creswell & Plano Clark, 2018; Teddlie & Tashakkori, 2009). The findings were subsequently situated within the existing literature and the conceptual framework that guided me in undertaking my research.

Consequently, the merging of the quantitative and qualitative results enhanced my understanding of the phenomenon I set out to explore. In Chapter 5, I integrate the results of the quantitative and qualitative phases of the study to provide a robust and meaningful picture of the findings of the study. Further to this discussion, I group the findings as they relate to the quantitative and qualitative research questions, and augment my discussion in terms of related literature (Babbie, 2021; Ivankova et al., 2006).

3.5 MY ROLE AS RESEARCHER

My experience in the field of education within the urban and semi-urban contexts enabled me to relate to the teachers that partook in the study. I constantly reflected on potential factors that could have affected the participants' response to the COVID-19 pandemic, paying specific attention to gaining insight into the teacher-participants' experiences, without my own ideas having an effect. I explicitly reflected on who I was, on the possible assumptions I might have had when undertaking this research, and on the possible effect of my own biases and personal values (Babbie, 2021; Cohen et al., 2018; Teddlie & Tashakkori, 2009; Wheeldon & Ahlberg, 2012).

Throughout, I reminded myself that I was an instrument of research that was collecting, generating, analysing and interpreting data in an attempt to understand a specific phenomenon (Henning et al., 2004). By making use of bracketing, I intentionally attempted to clear my mind of preconceived ideas and listen without prejudgment to the contributions of the participants (Babbie, 2021; Moustakas, 1994) to prevent my own experience of the COVID-19 pandemic from influencing the research findings. My own knowledge and experience of the possible impact of the pandemic on people in the education sector supported me in easily building rapport with the participants and having some background knowledge of the challenges they might have experienced and had to cope with.

An important aspect of ensuring rigour during the qualitative phase of my study was thus to remain aware of my potential influence as a researcher, on the data generation and analysis processes. As such, I endeavoured to position myself in a way that could ensure authenticity

(Cohen et al., 2018; Rule & John, 2011). As a practising psychologist, I faced the further challenge of remaining neutral throughout the research process, setting aside my prior knowledge of the subject matter, my experiences in working with clients in a therapeutic capacity, and my formal training in the theory of resilience (Babbie, 2021; Robinson, 2002). I could, however, draw on my skills of thoughtful questioning, empathy, trust, active listening, perceptive probing and reflective listening to gain rich information during the process of qualitative data generation (Salmons, 2012). However, as stated, I remained cognisant of potential bias and therefore remained reflective, sincere and transparent throughout the research process (Cohen et al., 2018; Tracy, 2010). In addition, I sought verification in conversation with my supervisor and followed a process whereby my data interpretations were corroborated by a peer researcher as well as an external coding specialist. I specifically relied on a reflective journal and member checking to limit the influence of potential subjectivity in analysing and interpreting the data (Cohen et al., 2018; Flick, 2008).

My role as researcher can furthermore be explained in terms of the functions I performed in order to be able to address the research questions. In preparation of the study, I versed myself in the strengths and weaknesses of both quantitative and qualitative research to be able to combine these strategies effectively (Tashakkori & Teddlie, 2003). The flexibility of pragmatism allowed me to integrate existing theory on resilience with the cognitive strategies that the teacher-participants may have employed in order to cope, yet I had to maintain a distanced view to obtain a holistic picture and remain reflective during the entire research process (Cohen et al., 2018; Denzin & Lincoln, 2018; Ryan, 2006). To this end, I adopted a learning role as a researcher (Ryan, 2006), fulfilling the role of impartial onlooker (Van de Ven, 2007). In support, my data interpretations were done in collaboration with a peer researcher and external coder, and involved continual discussions and reflections with my supervisor. Throughout, I thus endeavoured to be self-critical, flexible, open-minded and reflective as I conducted my study, analysed the data and reported the findings in this thesis (Cohen et al., 2018; Tekin & Kotaman, 2013).

Prior to the commencement of data collection and generation, I obtained the necessary permission to conduct the study from the institution where I am enrolled as well as the Gauteng Province Department of Education. Additionally, I contacted the principals of schools within the Gauteng North and Tshwane South Districts within the Gauteng Province to recruit participants. Hereafter, I provided the principals with the necessary background documents and obtained their and the school governing bodies' written permission to conduct research at the various schools (consult Appendix H). The quantitative phase of the

study involved the completion of online questionnaires that teachers could complete in their own time. The online participatory focus groups were scheduled after school hours, aiming not to interfere with the participants' responsibilities at school. Since the quality of the data was dependent on how the participants viewed the legitimacy and value of the research, I endeavoured to establish sound rapport and maintain good relationships with the participants, providing them with detailed information about the purpose of the study and the processes involved before obtaining their consent for participation (Teddlie & Tashakkori, 2009).

3.6 STANDARDS OF RIGOUR AND QUALITY CRITERIA

In this section, I discuss validity and reliability (as part of the quantitative phase of the study) as well as trustworthiness (qualitative phase). The extent to which a quantitative researcher can derive meaningful conclusions and learn about the investigated phenomenon and the likelihood of gaining statistically significant results rests on the validity and reliability of the study (Cohen et al., 2007; Heale & Twycross, 2015; Leedy & Ormrod, 2013). More specifically, in order to find correlations between variables, the measurement thereof should take place reliably and in a valid manner, with data being captured accurately and without any distortions (Leedy & Ormrod, 2013; Roni et al., 2020; Teddlie & Tashakkori, 2009).

The instruments that I used for quantitative data collection therefore had to meet the criteria of validity and reliability (Cohen et al., 2018; Leedy & Ormrod, 2013). I also relied on internal consistency in support of reliability by making use of the Cronbach alpha. In addition, I implemented various strategies to meet the quality criteria of credibility, dependability, confirmability, transferability and authenticity, as described by Guba (1981) as well as Lincoln and Guba (1985).

3.6.1 Reliability of quantitative results

If an instrument is reliable, it will measure the construct it targets in a consistent manner over time (Creswell & Plano Clark, 2018; Foxcroft & Roodt, 2013; Gravetter & Forzano, 2009; Mertens, 2014; Roni et al., 2020; Teddlie & Tashakkori, 2009; Wheeldon & Ahlberg, 2012). For this purpose, I administered the quantitative data collection instrument in a consistent fashion (Leedy & Ormrod, 2013) by providing all the respondents with the same opportunity to answer the questionnaire. In particular, I paid attention to the coefficient of reliability (Cronbach's alpha) associated with the data collection instrument.

Cohen et al. (2018) regard reliability as an overarching term that indicates consistency, dependability and replicability over time, and across groups of respondents and instruments. As such, reliability is concerned with accuracy, precision and whether or not the results of a study can be believed (Cohen et al., 2018; Heale & Twycross, 2015; Roni et al., 2020). Babbie (2021) defines reliability as the quality of methods of measurement, suggesting that equivalent data can repeatedly be collected for the same phenomenon by making use of repeated observations. This implies that, if research is conducted in a similar context with a similar group of respondents and yield similar results, the research results can be regarded as reliable (Babbie, 2021; Cohen et al., 2018).

As internal consistency among items predicts the correlation of the items that comprise a scale, it can provide an indication of reliability. As such, the extent to which the items included in a scale measures one construct will provide an indication of internal consistency (Heale & Twycross, 2015). For this purpose, the University of Pretoria’s Department of Statistics assisted me to conduct coefficient of reliability testing (internal consistency) by calculating the Cronbach alpha. As the maximum value of this coefficient is 1, it may be derived that high reliability (0,90), moderate reliability (0,80) or low reliability (0,70) is associated with the Cronbach alpha (Cohen et al., 2018; Maree, 2010). In this regard, Heale and Twycross (2015) posit that values of 0,7 and higher can be regarded as an acceptable reliability.

In terms of the two existing instruments I relied on in compiling a questionnaire, the Cronbach alpha is 0,846 for Personal resilience (as part of the ARM-R) and 0,835 for Relational resilience (Resilience Research Centre, 2019). In terms of the scales of the COPE Inventory (Carver, 2013), the Cronbach alpha and its interpretation for each scale is presented in Table 3.4 (also refer to Appendix K).

Table 3.4

Internal consistency of the COPE Inventory

SCALE	CRONBACH ALPHA	INTERNAL CONSISTENCY
Active coping	0,96	Excellent
Planning	0,982	Excellent
Suppression of competing activities	0,952	Excellent
Restraint coping	0,953	Excellent
Seeking of instrumental social support	0,845	Good
Positive reinterpretation and growth	0,948	Excellent

SCALE	CRONBACH ALPHA	INTERNAL CONSISTENCY
Use of emotional social support	0,942	Excellent
Acceptance	0,965	Excellent
Denial	0,921	Excellent
Religious coping	0,963	Excellent
Mental disengagement	0,986	Excellent
Focus on and venting of emotions	0,949	Excellent
Humour	0,984	Excellent
Behavioural disengagement	0,943	Excellent
Substance use	0,864	Good

A moderate to high internal consistency within the said instruments is confirmed by the scores captured in Table 3.4. In addition to relying on internal consistency, I combined the two instruments into one questionnaire and administered this in a consistent fashion (Leedy & Ormrod, 2013) in support of reliability.

According to Cohen et al. (2007), reliability is a necessary condition and requirement for validity, even though validity may not be a necessary condition for reliability, despite it potentially being a sufficient condition. Reliability can therefore be seen as a precondition for validity (Gravetter & Forzano, 2009). As such, by enhancing the reliability of an instrument, the validity may also increase (Leedy & Ormrod, 2013).

3.6.2 Validity of the results

A measurement instrument will meet the criterion of validity if it measures what it claims to measure (Cohen et al., 2018; Foxcroft & Roodt, 2013; Gravetter & Forzano, 2009; Heale & Twycross, 2015; Mertens, 2014; Roni et al., 2020; Teddlie & Tashakkori, 2009). In a concise summary, Fuller (2010) argues that validity simply confirms that no content was lost in a research process or translation from the premise to the conclusion of a study. In this regard, external validity refers to the extent to which results can be generalised to a wider population, situations, times or settings, while internal validity is described as the extent to which claims can be made in terms of cause-and-effect relationships (Cohen et al., 2007, 2018; Creswell & Plano Clark, 2018). Additionally, construct validity (quantitative validity) is evident when the scores obtained from respondents represent meaningful indicators of a measured construct (Creswell & Plano Clark, 2018; Heale & Twycross, 2015; Teddlie & Tashakkori, 2009). To this end, I defined the constructs that apply in my research through a literature review and then used data collection instruments that could specifically measure these constructs (Cohen et al., 2018).

Creswell (2009) emphasises the importance of a researcher addressing threats to internal as well as external validity. Possible threats to internal validity include maturation, history, mortality and selection (Babbie, 2021; Creswell, 2009; Creswell & Creswell, 2018; Mertens, 2014), while external validity may be threatened by any aspect posing a limitation in terms of the probability of generalising the results (Cohen et al., 2018; Gravetter & Forzano, 2009). In my study, I took the necessary care to employ strategies that could address the potential threats to accurate assessments and correct inferences from the integrated data (Creswell & Plano Clark, 2018; Mertens, 2014).

The threat of maturation refers to the psychological and/or biological changes that participants may undergo during the course of a research study (Babbie, 2021; Cohen et al., 2018; Mertens, 2014). In the current study, this threat was remedied by the fact that the various participants probably changed or matured in a similar manner and that minimal time elapsed between the quantitative and qualitative phases of data collection and generation (Creswell, 2009; Creswell & Creswell, 2018). Next, the threat of history relates to events potentially occurring during a research process that may influence the results and produce effects that are then mistakenly ascribed to these results (Babbie, 2021; Cohen et al., 2018; Mertens, 2014). Within the context of my study and at the time of data collection, an effective timeline was important to obtain valid data and results (Cohen et al., 2018). The reason for this relates to the responses of the participants concerning the adversities that they had experienced and needed to respond to during the COVID-19 pandemic. Data on these authentic responses was fundamental to address the research questions and obtain relevant findings. As such, I worked according to a set timeline for data collection and generation to avoid unnecessary time passing.

Mortality, as another possible threat to validity, may occur when participants drop out of the research process in the course of a study (Babbie, 2021; Cohen et al., 2018; Creswell, 2009; Creswell & Creswell, 2018; Mertens, 2014). I planned for this potential threat by including a request for further participation in the online questionnaire, aiming to gain commitment from the participants that indicated their willingness to participate in the follow-up qualitative phase. In my study, I also had to consider the threat of selection (findings resulting from the specific characteristics of the respondents), resulting in me including respondents from several schools and securing the participation of 240 individuals to allow for the possible transferability of findings to similar settings (Cohen et al., 2018; Creswell, 2009; Leedy & Ormrod, 2013; Mertens, 2014; Teddlie & Tashakkori, 2009).

Another potential threat to validity when implementing a sequential explanatory mixed methods design relates to the failure to identify quantitative results that can sufficiently address the research questions. In an attempt to avoid this potential threat, I considered various possibilities for explaining the results of my study before deciding on a suitable method. I furthermore remained cautious of the possible threat of contradictory results that may stem from a combination of quantitative and qualitative data. To this end, I relied on qualitative questions that could shed light on any such possible contradictory results. In addition, I attempted to avoid the potential threat of not including the results obtained during the quantitative phase when the qualitative data generation occurred. Consequently, I purposefully decided to generate qualitative data with participants that had formed part of the initial phase of quantitative data collection in an attempt to obtain the best possible explanations and clarifications for the initial quantitative responses (Cohen et al., 2018; Creswell, 2009; Creswell & Plano Clark, 2018).

Next, any aspect that can limit the probability of generalising the results of a quantitative study poses a threat to external validity (Cohen et al., 2018; Gravetter & Forzano, 2009). In this regard, Cohen et al. (2018) posit that a description of the independent variable in a research study can support external validity. As such, I described the cognitive strategies (independent variable) that teachers may have employed in Chapter 2. In an attempt to maximise the possibility of generalisability to similar contexts, data was collected directly from the respondents within the context of the schools they worked at. External validity in this study may be supported by my description of the sample through the use of descriptive statistics in Chapter 4. Consult Report 1 (Descriptive Results for Urban Schools) in Appendix I and Report 1 (Descriptive Results for Semi-urban Schools) in Appendix J for descriptive information on the teachers who constituted the sample for the quantitative phase of the study.

Finally, validity in quantitative studies is determined by the way in which data is collected and reported on (Struwig & Stead, 2001). Creswell (2009) cautions that inaccurate inferences made as a result of inadequate statistical assumptions may threaten statistical conclusion validity. In an attempt to avoid this potential pitfall, I took meticulous care of adhering to sound research procedures during data collection and analysis, and relied on verifying statistical procedures through comparison with existing literature and consultation with the Department of Statistics at the University of Pretoria. In addition, regular contact with my supervisor and the allocated statistician supported the probability of accurate data collection, analysis and reporting. In line with Creswell and Creswell's (2018)

recommendation to explain quantitative results in support of validity, I also selected respondents from the quantitative sample for the qualitative phase of my study.

Even though it was not the aim of my study to determine the validity and reliability of the instruments I incorporated in the online questionnaire, I could rely on the fact that these instruments had been developed in such a way that reliability and validity were supported. The subscales of the ARM-R (personal resilience and relational resilience) had previously been validated through Rasch analysis (Jefferies et al., 2019), thereby confirming that I could rely on the said instruments as being reliable and valid and as instruments that could support my purpose of determining the cognitive resilience of teachers being forced to cope with a world pandemic by focusing on the cognitive strategies that the participating teachers had employed in response to the pandemic.

3.6.3 Trustworthiness of qualitative results

According to Lincoln and Guba (1985), trustworthiness in qualitative research implies that certain quality criteria are met. These are credibility, dependability, confirmability, transferability and authenticity (Guba & Lincoln, 1994; Teddlie & Tashakkori, 2009). Closely related, I also considered Tracy's (2010) categorisation of qualitative criteria, relating to a worthy topic, rich rigour, sincerity, credibility, resonance, making a significant contribution, and ensuring ethical and meaningful coherence.

3.6.3.1 Credibility

Credibility, which is comparable to internal validity in quantitative research, is concerned with truth value and the level of confidence that is associated with the findings of a study (Cohen et al., 2018; Denzin & Lincoln, 2018; Lincoln & Guba, 1985; Mertens, 2014; Seale, 2002). Credible research therefore implies that the way in which participants perceive a construct relates to the way in which the researcher portrays the views of the participants (Cohen et al., 2018; Mertens, 2014). It follows that a researcher will feel confident that the data interpretation, observations and conclusions are supported by the raw data in the case of credible research, thereby corresponding with the participants' perceptions (Creswell & Creswell, 2018). As such, the extent to which the findings of a study are truthful is associated with credibility.

Credibility can, for example, be supported by avoiding researcher bias and progressive subjectivity through triangulation, peer debriefing and member checking (Cohen et al., 2018;

Creswell & Plano Clark, 2018; Denzin & Lincoln, 2018; Guba, 1981; Lincoln & Guba, 1985; Mertens, 2014; Onwuegbuzie et al., 2010; Pinto, 2010). In an attempt to guard against biased interpretations of the data, I continually reflected on my own background, ideas and subjectivity, aiming to remain open-minded in terms of my own prejudices and orientations that could have influenced my interpretations of the data if not guarded against. For this purpose, I kept a reflective journal (Denzin & Lincoln, 2018), and engaged in regular discussions with my supervisor as well as peer debriefing sessions with my co-researcher. As a result, self-reflection and therefore reflexivity enabled me to create an honest and open narrative that may resonate with the readers (Creswell & Creswell, 2018).

I also relied on triangulation in my attempt to ensure credibility, which entails the utilisation of a combination of data collection/generation and analysis procedures and inferences (Cohen et al., 2007; 2018; Denzin & Lincoln, 2018; Guba, 1981; Teddlie & Tashakkori, 2009). Not only could I obtain rich data during the discussions and observations during the focus group sessions; I was also able to rely on triangulation of data generation methods (Cohen et al., 2018) in my effort to elaborate on and explain the quantitative results I obtained. Through triangulation, I was able to examine the evidence captured in the various data sources and build up a coherent justification for the themes that I had identified (Creswell & Creswell, 2018). This, in turn, enabled me to address the research questions with richness, and in detail by making use of both quantitative and qualitative data, as proposed by Cohen et al. (2007; 2018).

Following the qualitative data analysis I completed, I conducted member checking to allow the participants the opportunity to verify the preliminary results (Cohen et al., 2018; Creswell, 2014; Denzin & Lincoln, 2018; Hamilton & Corbett-Whittier, 2013; Rule & John, 2011). For this purpose, I requested the participants to confirm the truthfulness of my interpretations of the qualitative data in terms of the themes that I had identified in support of credibility and the accuracy of my account of their perceptions (Cohen et al., 2018; Creswell & Creswell, 2018; Creswell & Plano Clark, 2018; Koch, 2006; Teddlie & Tashakkori, 2009). I relied on email communication with all the participants of the qualitative phase of the study to complete the member checking process (Consult Appendix Q).

Finally, in support of credibility, I related my results to existing theory on resilience and possible cognitive strategies when having to cope with adversity. I include a detailed description of the research methodology in this thesis, thereby adding to the readers' understanding of the study and its findings (Flick, 2008; Guest et al., 2012). In support, I

include an audit trail as part of my discussions in the chapters and as part of the appendices (Babbie, 2021; Cohen et al., 2018; Creswell & Creswell, 2018; Di Fabio & Maree, 2012; Rule & John, 2011).

3.6.3.2 Dependability

Dependability, which is comparable to reliability in quantitative research, concerns the possibility of the findings of a study being repeatable or consistent when the study is repeated with the same (or similar) participants, within the same (or similar) contexts (Babbie, 2021; Babbie & Mouton, 2001; Cohen et al., 2018; Denzin & Lincoln, 2018; Lincoln & Guba, 1985; Mertens, 2014; Seale, 2002). When dependability or consistency is taken into account, the process of inquiry, by implication also the suitability of the research-related decisions, is considered (Denzin & Lincoln, 2018; Guba, 1981; Seale, 2002; Teddlie & Tashakkori, 2009). As such, an audit trail can support the dependability of a study (Cohen et al., 2018; Creswell & Poth, 2018; Denzin & Lincoln, 2018; Guba & Lincoln, 1985; Seale, 2002) as was done in the current study.

My descriptions of the current study and research process as well as the trail of evidence included in the chapters and appendices of this thesis may enable other researchers to undertake a similar study and arrive at comparable conclusions (Cohen et al., 2018; Guba, 1981; Koch, 2006; Sandelowski, 1986; Seale, 2002). More specifically, my detailed descriptions of the decisions I made about the methodological, theoretical and analytic processes throughout this thesis, and the audit trail that is included, may enable others to repeat the study and reach similar conclusions (Denzin & Lincoln, 2018; Koch, 2006; Tracy, 2010). By following a mixed methods approach, I could compensate for the potential limitations of the various methods I relied on through the strengths of the other methods, thereby ensuring triangulation and strengthening the possibility of dependable findings (Cohen et al., 2018; Denzin & Lincoln, 2018; Guba, 1981).

3.6.3.3 Confirmability

Confirmability, which is comparable to objectivity in quantitative research, implies that the findings of a study have been determined by the participants and the conditions of a research process rather than by the motivations, perspectives or biases of the researcher (Cohen et al., 2018; Lincoln & Guba, 1985; Mertens, 2014; Seale, 2002). As part of quality control, the product of an inquiry that confirms that the researcher's interpretations are indeed supported

by the results of a study will be internally coherent in the case of confirmability (Cohen et al., 2018; Teddlie & Tashakkori, 2009).

As already indicated, researcher and observer bias is typically associated with qualitative research as the background, ideas and values of a researcher may influence the way in which the data is interpreted during data analysis. To this end, I acknowledged the presence of bias and involved others from the outset and throughout my study in an attempt to avoid my bias from influencing the findings of my study. I made use of a reflective journal, relied on my co-researcher and supervisor during data generation and analysis, and obtained the participants' confirmation of my initial analysis and interpretation through member checking (Cohen et al., 2018; Denzin & Lincoln, 2018; Teddlie & Tashakkori, 2009). In support of the strategies I employed, I describe the research process and the way in which I conducted data analysis and interpretation in detail in this thesis, thereby allowing the reader to replicate the study in a similar research context (Babbie, 2021; Denzin & Lincoln, 2018; Guba, 1981; Koch, 2006). In addition, I include evidence from the raw data in my discussion of the results in Chapter 4 to illustrate my interpretations and the processes that I employed to reach conclusions (Creswell, 2014). Reflexivity throughout the research process enhanced the possibility of confirmable findings.

3.6.3.4 *Transferability*

Transferability, which is comparable to external validity in quantitative research, relates to the way in which a researcher can “determine the extent to which the findings of a particular inquiry have applicability in other contexts” (Seale, 2002, p. 104) or with other participants (Cohen et al., 2018; Lincoln & Guba, 1985; Mertens, 2014). It concerns the question whether or not the findings of a study are applicable to other contexts and can thus be transferred to similar sites. Transferability can be supported through the generation of rich data and a detailed description of the research context in which case the reader may be able to decide if transferability is possible and to what extent the findings are applicable to other contexts (Cohen et al., 2018; Creswell & Creswell, 2018; Guba, 1981; Koch 2006; Lincoln & Guba, 1985; Mertens, 2014; Seale, 2002).

If the conclusions of a mixed methods study can be applied to other settings or contexts, such a study can be described as having inference transferability (Guba, 1981; Teddlie & Tashakkori, 2009). Even though the explicit aim of my study was not to transfer the findings to other contexts, the descriptive results I obtained from the quantitative data analysis, in

combination with and supported by the qualitative data and detailed contextual information I included in this thesis in terms of the research context, place, time, process, transcriptions, field notes and biographical information may allow the reader or other researchers to transfer the findings of the current study to similar contexts (Creswell & Creswell, 2018; Koch, 2006; Guba & Lincoln, 1994).

3.6.3.5 Authenticity

Seale (2002) indicates that the criterion of authenticity in qualitative research will be met when a researcher is able to capture a range of different realities. In such cases, the views of others can be appreciated while developing a deeper understanding of the phenomenon under study. In an attempt to ensure authenticity, I drew from multiple data sources in coming to conclusions, thereby enhancing the usefulness of the findings (Cohen et al., 2018; Flick, 2008). Throughout, I relied on principles of fairness, mutual understanding and sophistication (Cohen et al., 2018; Guba & Lincoln, 1994; Seale, 2002).

Authenticity in qualitative research can take three forms, namely ontological authenticity, catalytic authenticity and tactical authenticity (Lincoln & Guba, 2005). In striving to ensure this, I attempted to provide a balanced view of the various views, claims, concerns, voices, values, beliefs and perspectives of the participants in this thesis, yet also reported on contradictions – thereby adhering to the criterion of fairness (Cohen et al., 2018; Denzin & Lincoln, 2018). As a result, I considered the various participants' voices during the process of inquiry, providing them with the opportunity to be represented, having their stories treated with balance and in a fair manner (Denzin & Lincoln, 2018).

Next, ontological authenticity required of me to provide a sophisticated and fresh understanding of the situation I investigated (Cohen et al., 2018). Ontological authenticity implies a raised level of awareness by research participants (Denzin & Lincoln, 2018), as seemed evident in my study, with the participants developing a better understanding of their own cognitive coping strategies and how this supported resilience as the study progressed. By providing an audit trail and making use of member checking, I was able to enhance ontological authenticity. Finally, my study meets the criterion of catalytic authenticity, as I, as researcher, gave rise to action, as well as tactical authenticity since the research seemingly benefitted those involved by providing a platform to them to voice their opinions, values and experiences of the ways in which they had responded to adversity (Cohen et al., 2018; Denzin & Lincoln, 2018).

3.7 ETHICAL CONSIDERATIONS

I respected ethical guidelines throughout the research process, during the phases of planning, data collection or generation, analysis and reporting of the results and findings (Babbie, 2021; Creswell & Creswell, 2018; Fielding et al., 2017; Mertens, 2014; Roni et al., 2020). Accordingly, I obtained ethics clearance from both the Ethics Committee of the Faculty of Education at the University of Pretoria (consult Appendix F) as well as the Gauteng Department of Basic Education (Appendix G) before commencing with my research. Next, I obtained permission from the school principals and respective school governing bodies (Appendix H) to conduct research in the selected schools. I then obtained informed consent from the teacher-respondents when implementing the online questionnaire (Cohen et al., 2011; 2018; Denzin & Lincoln, 2018; Fielding et al., 2017; Teddlie & Tashakkori, 2009).

In obtaining informed consent, the principle of voluntary participation was emphasised, thereby indicating the right of the participants to withdraw from the research study at any time if they wished to do so (Babbie, 2021; Cohen et al., 2018; Creswell & Creswell, 2018; Roberts & Allen, 2015). The purpose (Creswell & Creswell, 2018; Roni et al., 2020) of the study and the research process were explained as well as the expectations of and the potential benefits of participation. I similarly emphasised the protection of the participants' rights and the associated ethical principles before commencement of the online focus groups. Throughout, the participants had the right to respect, privacy (non-traceability) and confidentiality (Babbie, 2021; Cohen et al., 2018; Creswell & Creswell, 2018; Leedy & Ormrod, 2013), protection from harm (Creswell, 2009), as well as dignity and respect for their welfare (Babbie, 2021; Cohen et al., 2007; Gravetter & Forzano, 2009; Teddlie & Tashakkori, 2009).

I specifically paid attention to the ethical guidelines for research *via* an online platform and remained cognisant of the potential factors that I could not control, such as hackers breaking into emails (Cohen et al., 2018; Fielding et al., 2017). As such, the participants were not required to provide any identifying information during the completion of the online questionnaire, except for the email addresses of those who were willing to partake in the second phase of the research. The teachers who provided their email addresses during the first phase of the study could furthermore indicate their willingness to participate in the second phase of the study on a private platform (Cohen et al., 2018; Fielding et al., 2017), since I corresponded with those participants on a one-on-one basis during the second phase

of my study. Throughout, I adhered to the principles of non-maleficence (preventing harm) and beneficence (Babbie, 2021; Cohen et al., 2007; 2018) by keeping the contact details of the participants confidential.

In addition, I considered the interaction between myself and the participants as well as between the participants themselves during the focus groups, remaining cognisant of the ethical principles of anonymity and confidentiality (Marshall & Rossman, 2016). I requested the participants to keep the information discussed during the online participatory focus groups confidential, even though I have no guarantee that this has been the case. Throughout the research process, I thus upheld the necessary ethical guidelines and remained sensitive to the participants, striving towards maintaining meaningful connections between the participants and me, and fostering a sense of inclusion, humanity, equality and respect (Bettez, 2015; Cohen et al., 2018). Accordingly, I treated the participants in my study as *experts* and communicated my intent to obtain their views and insights from the onset of the study.

I followed systematic and rigorous approaches during data collection/generation and analysis to make my research auditable and to provide explanations of the processes during research (O'Leary, 2004). Additionally, I reflect on possible limitations in a later chapter to provide a transparent trail of the research process (Rubin & Babbie, 2014). Throughout, I focused on the building and maintaining of relationships of trust with the participants and regarded them as equals in the research study (Cohen et al., 2018; Creswell & Creswell, 2018). I avoided deceiving the participants in any way by not withholding information pertaining to my study from them nor by collecting harmful information (Babbie, 2021; Cohen et al., 2018; Creswell & Creswell, 2018). To this end, I refrained from using leading questions and involved the participants as active collaborators (Babbie, 2021; Cohen et al., 2018; Creswell & Creswell, 2018; Denzin & Lincoln, 2018). None of the participants were exposed to physical harm or risk and I also remained cautious of potential psychological or emotional harm when a participant would, for example, experience a negative emotion due to the challenges implied by the COVID-19 pandemic. As such, I was honest and open about the possible sensitivity regarding this topic and was respectful of the matter at hand. An atmosphere of respect and trust lay the foundation for empathy and active listening, which led to the generation of rich data in a safe and inviting space. The need to refer any participant for debriefing during these encounters did not arise.

In support of confidentiality and anonymity I assigned arbitrary code numbers to the participants and participating schools (Cohen et al., 2018; Fielding et al., 2017; Mertens, 2014; Teddlie & Tashakkori, 2009). Furthermore, I did not report on the data and related findings in any way that might result in the identification of a specific participant or school. As researcher, I additionally adhered to the prescriptions concerning the safe storage of the raw, analysed and interpreted data for 15 years in a locked cabinet at the University of Pretoria, in the form of saved password protected files on a flash drive. Only the research team had access to the data in the form of password protected electronic files (Fielding et al., 2017), with the transcriber and translator of the qualitative data (audio-recordings) signing declarations to confirm the protection of the participants' identities and contributions (refer to Appendices N and O).

After data generation, I provided an opportunity for debriefing to the participants by inviting questions in relation to the information shared on their experiences, their reflections and possible insights that they came to during the process of data generation. Relevant ethical considerations also guided the process of reporting on the results and findings that I obtained. Therefore, I do not misrepresent the findings and results in reporting on this in my thesis and during dissemination of the findings (Babbie, 2021; Creswell, 2009; Gravetter & Forzano, 2009; Leedy & Ormrod, 2013). In addition, I aimed to use language that is free of bias (Creswell, 2009) and remained reflexive in order to report on the findings in an accurate and honest way. I avoided the disclosing of only positive findings by also reporting on contradictory findings (Creswell & Creswell, 2018). Findings were not falsified, fabricated or omitted (Cohen et al., 2018). In this regard, I comprehensively describe the selected procedures during the research process (Creswell, 2009) and give credit and acknowledgement to all the sources that I consulted in this thesis (Cohen et al., 2018; Gravetter & Forzano, 2009; Leedy & Ormrod, 2013).

In my view, my previous experience and training in research contributed to me ethically completing this study, yet I remained cognisant of my own competencies and possible limitations. I engaged in regular consultation with my supervisor, thereby creating opportunities for guidance during the entire research process. In summary, I focused on acting ethically and responsibly throughout my research study, during the various phases of data collection/generation, analysis and reporting.

3.8 CONCLUSION

In this chapter, I discussed the research methodology of my study in detail. The sequential explanatory mixed methods research design I selected allowed me to analyse, describe and make inferences from the data from a pragmatist perspective by conducting statistical tests and doing both deductive and inductive thematic analysis, following a hybrid approach. By including quantitative and qualitative data, I was able to reach the aim of my study, address the research questions and test the associated hypotheses.

In Chapter 4, I present and discuss the results of my study. I commence by reporting on the quantitative results after which I present the qualitative results in terms of the themes that I identified in both a deductive and follow-up inductive way. In the last part of the chapter, I integrate the quantitative and qualitative results, after which I relate these to existing literature in Chapter 5, where I discuss the findings of the study.



CHAPTER 4: RESULTS OF THE STUDY

4.1 INTRODUCTION

In Chapter 3 I explained the empirical part of my study. I described the methodological choices I made, and how I implemented a sequential explanatory mixed methods design, anchored in pragmatism. In my discussion I reflected on the suitability of these choices in terms of the benefits of mixed methods research and pragmatism and how these enabled me to address the research questions, yet also on which potential limitations these choices implied. After explaining how the respondents/participants were selected, I described the data collection/generation, capturing/documentation and analysis procedures. I elaborated on the ways in which I attempted to meet the standards of rigour and the quality criteria, and explained the ethical principles I respected.

In this chapter, I present the results of the study, reporting on the completed quantitative and qualitative data analysis. In presenting and discussing the quantitative results, I refer to the hypotheses I formulated in Chapter 1, against the background of the related research questions. I include graphic representations and tables to enhance my presentation of the quantitative results.

Next, I present the qualitative results of the study, referring to both the deductive and inductive themes with sub-themes that I identified as a result of the hybrid data analysis approach I followed. I enrich my discussion of the results with extracts from the data. As a final part of the chapter, I integrate the quantitative and qualitative results as introduction to the discussion of the findings that follows in Chapter 5.

4.2 QUANTITATIVE RESULTS

In this section, I present the results I obtained following quantitative statistical analysis of the online questionnaire. As indicated earlier, the quantitative data was used to answer the first two secondary research questions and ultimately describe how teachers demonstrated cognitive resilience (adaptive coping) during the time of the COVID-19 pandemic (also refer to Chapter 6). As indicated in Chapter 3, two existing questionnaires, the COPE Inventory and ARM-R were combined into one online questionnaire with the addition of some biographical questions for the purpose of my research. The questionnaire was fully completed by 240 respondents from urban schools and four from semi-urban schools. I only

report on the data from the 240 fully completed questionnaires in my discussion in this chapter, for the reasons explained in the previous chapter. Even though not included in this chapter, the descriptive results of the respondents from the semi-urban schools can be viewed in Annexure J.

4.2.1 Descriptive results

In this section I present the descriptive statistics for the online questionnaire for the urban schools. Even though ordinal data was primarily analysed, I report on the descriptive statistics to provide a description of the sample as this may allow for the generalisation (or transference) of findings from this study to a comparable sample in a similar context, as suggested by Gravetter and Forzano (2009).

4.2.1.1 Biographical information of the respondents

The sample of the study is described in terms of gender, age, marital status, ethnicity, how many years the respondents had been teaching and the subjects they were teaching at the time of data collection, whether they had internet access and if so, where the location for the access was and how they could perform their teaching duties at the time. The general information for the 240 respondents from urban schools is summarised in Table 4.1.

Table 4.1*Biographical information of respondents*

	OVERALL (N = 240)	PERCENTAGE
Gender		
Female	175	72.9%
Male	65	27.1%
Age		
Mean (SD)	41.329 (12.183)	-
Median	39	-
Range	20 – 67	-
Marital Status		
I do not want to say	2	0.8%
In a relationship	23	9.6%
Married	166	69.2%
Other*	4	1.7%
Single	45	18.8%
Ethnicity		
Indian	1	0.4%
White/Caucasian	239	99.6%
Number of children		
One child	33	13.8%
Two children	82	34.2%
Three children	26	10.8%
Four or more children	7	2.9%
None	92	38%

*All of the respondents that indicated “Other” reported that they were divorced

All of the respondents (N = 240) reported on in this section were employed at schools in the urban school context at the time of data collection and were proficient in Afrikaans and/or English as per the selection criteria. Most of the respondents were females (175, 72.9%), with only 65 (27.1%) being males. The mean age of the respondents was around 41 years and four months with a standard deviation of around 12 years and 2 months at the time of the research. The median age was 39 years, with a range of 20 to 67. The majority of the respondents (166, 69.2%) were married while 45 (18.8%) reported that they were single at the time. For the remainder of the respondents, 23 (9.6%) were in a relationship while four (1.7%) were divorced and two (0.8%) opted not to reveal their relationship status. All but

one of the respondents (239, 99.6%) indicated their ethnicity as Caucasian, with the remaining respondent (0.4%) being of Indian descent. The majority of the respondents had children (62%), compared to 92 (38%) respondents reporting that they did not have children at the time of the study.

4.2.1.2 Professional registration and experience in the teaching profession

Table 4.2 provides an overview of the number of respondents that were registered with the South African Council for Teachers (SACE) as well as their number of years' experience in teaching at the time of the study.

Table 4.2

Information related to teaching

	OVERALL (N = 240)	PERCENTAGE
SACE Registration		
No	9	3.8%
Yes	231	96.2%
Number of years teaching		
5 years or less	43	17.9%
Between 6 and 10 years	41	17.1%
Between 11 and 15 years	43	17.9%
Between 16 and 20 years	24	10%
Between 21 and 25 years	24	10%
More than 25 years	65	27.1%

As indicated in Table 4.2, 96% (231) of the respondents reported that they were registered with SACE while 3.8% (9) were not registered with this professional body at the time of the study. Respondents with more than 25 years of experience accounted for 27.1% (65) of the sample (the largest category), with 17.9% (43) of the respondents indicating less than five years' experience and 17.9% (43) having between 11 and 15 years of experience. An additional 17.1% (41) of the respondents indicated that they had between six and ten years' teaching experience. An equal number of the respondents (24, 10%) fell in the categories of teaching experience between 16 and 20, and between 21 and 25 years.

4.2.1.3 Grades and subjects taught

Table 4.3 provides an overview of the grades that were taught by the teachers at the time of the field work. Grades 12, 9, 10 and 11 (in descending order) were selected with a higher frequency than the other grades. The results on this item confirm that all the respondents met the selection criteria of the study as presented in Chapters 1 and 3, with all of them teaching Grade 1 to 12 learners.

Table 4.3

Grades taught by the respondents

	COUNT*
Grade 1	28
Grade 2	15
Grade 3	10
Grade 4	16
Grade 5	22
Grade 6	26
Grade 7	23
Grade 8	78
Grade 9	84
Grade 10	82
Grade 11	75
Grade 12	90

*Note that no percentage calculation is included as the respondents could select more than one option

In terms of the subjects taught by the respondents, a broad range of answers was obtained due to the question allowing an open-ended answer. The respondents mentioned Afrikaans, English, Life Sciences, Natural Sciences, Mathematics, Tourism, Accounting and Physical Sciences.

4.2.1.4 Internet access of respondents

Table 4.4 and Table 4.5 capture the results related to the internet access of the respondents. In Table 4.4 the respondents' accessibility to the internet at the time of the study, allowing them to continue with their educational duties, is indicated, while Table 4.5 indicates the

respondents' access to the internet during the COVID-19 lockdown period prior to data collection.

Table 4.4

Respondents' internet access during the time of the field work (post-lockdown)

	OVERALL (N = 240)	PERCENTAGE
Internet access at the time of field work		
No	0	0.0%
Yes	240	100%
Location of internet access*		
School	236	98.3%
Home	220	91.7%
Personal Mobile Dongle	50	20.8%
Public spaces	9	3.8%
Other	1	0.4%
(Specified: Phone)		
Friends or relatives	23	9.6%

*Note that the respondents could select more than one option

As indicated in Table 4.4 all of the respondents had internet access during the time of data collection, allowing them to continue with their educational duties during the time of the study. Internet access was obtained from various locations, but primarily from the respondents' homes (91.7%) and the schools where they worked (98.3%). Only one of the respondents indicated that the internet was accessed *via* the person's mobile phone, with 3% of the respondents mentioning accessibility to the internet in public spaces.

Table 4.5*Respondents' internet access during the COVID-19 lockdown period*

Internet access during lockdown	OVERALL (N = 240)	PERCENTAGE
No	7	2.9%
Yes	233	97.1%

Sufficient internet access during lockdown	OVERALL (N = 233)	
About half the time	8	3.43%
Always	108	46.35%
Most of the time	114	48.93%
Sometimes	3	1.29%

During the COVID-19 lockdown period, almost all (97.1%) of the respondents thus had access to the internet. The majority of them had access all of the time (108, 46.35%) or most of the time (114, 48.93%). Only seven of the respondents (2.9%) indicated that they did not have internet access during this time.

4.2.1.5 Summative description of the sample

When undertaking mixed methods research, a detailed description of the sample may allow for the transference (or generalisability) of the results to a sample in a similar context (Gravette & Forzano, 2009). The descriptive results from the statistical tests provided in the preceding sections apply to the respondents that formed the sample from the urban schools (Gravetter & Forzano, 2009; Mertens, 2014), for this purpose.

In summary, at the time of the study, the sample can be described as teachers who were teaching learners from Grades 1 to 12 at urban schools in South Africa. Not all the teachers were teaching all of the grades. However, Grades 12, 9, 10 and 11 (in descending order) were indicated to be taught at a higher frequency than the other grades. The teacher respondents taught a variety of subjects, including English, Afrikaans, Mathematics, Natural Sciences, Life Sciences, Accounting, Tourism and Physical Sciences. Not all of the teachers taught all of the subjects.

The majority of the teachers were female (72.9%), Caucasian (99.6%) and had children (62%) at the time of data collection. The ages of the teachers ranged from 20 to 67 with a mean age of around 41 years and 4 months. Teachers who had more than 25 years of experience accounted for 27.1%, the largest category of the sample.

All the teachers had internet access at the time of the study and almost all of them (97.1%) had access to the internet during the COVID-19 lockdown period. Almost all the teachers (96%) were registered with SACE at the time of the field work.

4.2.2 Results of the cognitive strategies respondents relied on, as measured by the COPE Inventory

The 60-item four-point Likert scale COPE Inventory (Carver, 2013) measures the way in which individuals respond when facing stress and adversity. The scales of the inventory include active coping, planning, suppression of competing activities, restraint coping, the seeking of instrumental social support, positive reinterpretation and growth, the use of emotional social support, acceptance, denial, religious coping, mental disengagement, a focus on and venting of emotions, humour, behavioural disengagement and substance use (Carver, 2013). In line with the purpose of my study, I focused on problem-focused coping levels only, with these being active coping, planning, suppression of competing activities, restraint coping and seeking instrumental social support. As such, I report on the results related to any act of changing the source of stress, or problem-solving in this section (Carver et al., 1989), as these relate to cognitive strategies and processes. In addition to reporting on the items related to problem-focused coping, I include a response analysis of the other scales as background to my discussion of the inductive themes I identified further on in this thesis, where I refer to these scales.

The responses to the items of the scales I report on are presented graphically. When reviewing the results, it is important to note that the percentages are reported on per item that was responded to. Consult Appendices I and K for full reports of the results, more specifically Appendix K (Response Analysis for Urban Schools) with regard to the response analysis of the additional scales, these being positive reinterpretation and growth, the use of emotional social support, acceptance, denial, religious coping, mental disengagement, focusing on and venting of emotions, humour, behavioural disengagement, and substance use.

4.2.2.1 Active coping

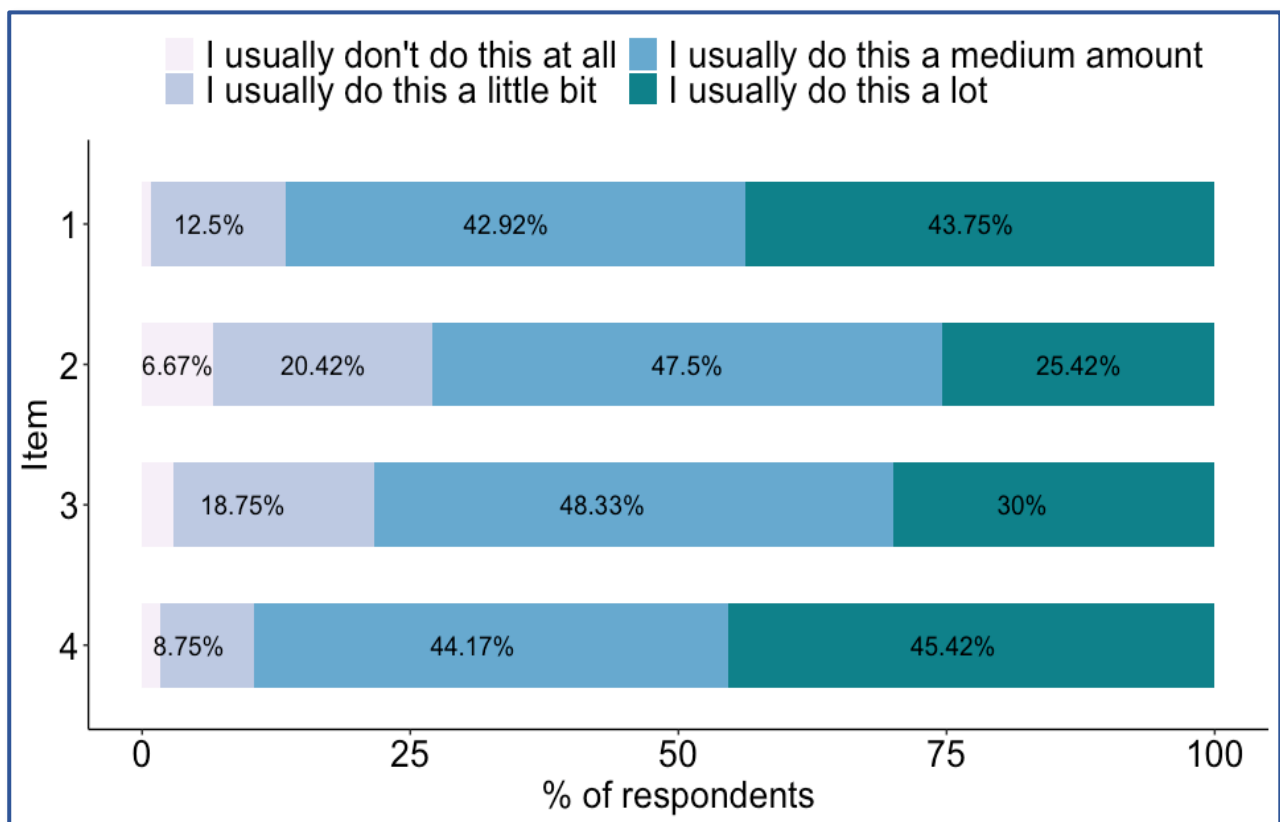
The following items are included in the Active coping scale of the COPE Inventory as possible cognitive coping strategies that may be relied on when having to cope with a challenge:

1. I concentrate my efforts on doing something about it.
2. I take additional action to try to get rid of the problem.
3. I take direct action to get around the problem.
4. I do what has to be done, one step at a time.

In Figure 4.1, the distribution of the scores for the items related to the Active coping scale is displayed.

Figure 4.1

Response analysis for the Active coping scale



As illustrated in Figure 4.1, active coping as a strategy was employed more often than not by the respondents. The majority of the respondents (43.75%) indicated that they focused their efforts on doing something about a presenting problem a lot of the time. Closely related, 47.5%, the majority of the respondents for this item, reportedly also took additional action to try and get rid of the problem, with 48.33%, the majority, taking direct action to get around the problem to a medium extent of time when faced with a challenge. Finally, 45.42% of the respondents indicated that they did what had to be done during times of challenge, one step at a time, a lot of the time. If the percentage of the respondents who relied on the strategies included in the Active coping scale a lot of the time is combined with those who relied on

these strategies to a medium extent, it is clear that the majority of the respondents strongly relied on active coping skills during times of stress and adversity, such as those brought upon by the COVID-19 pandemic.

4.2.2.2 Planning

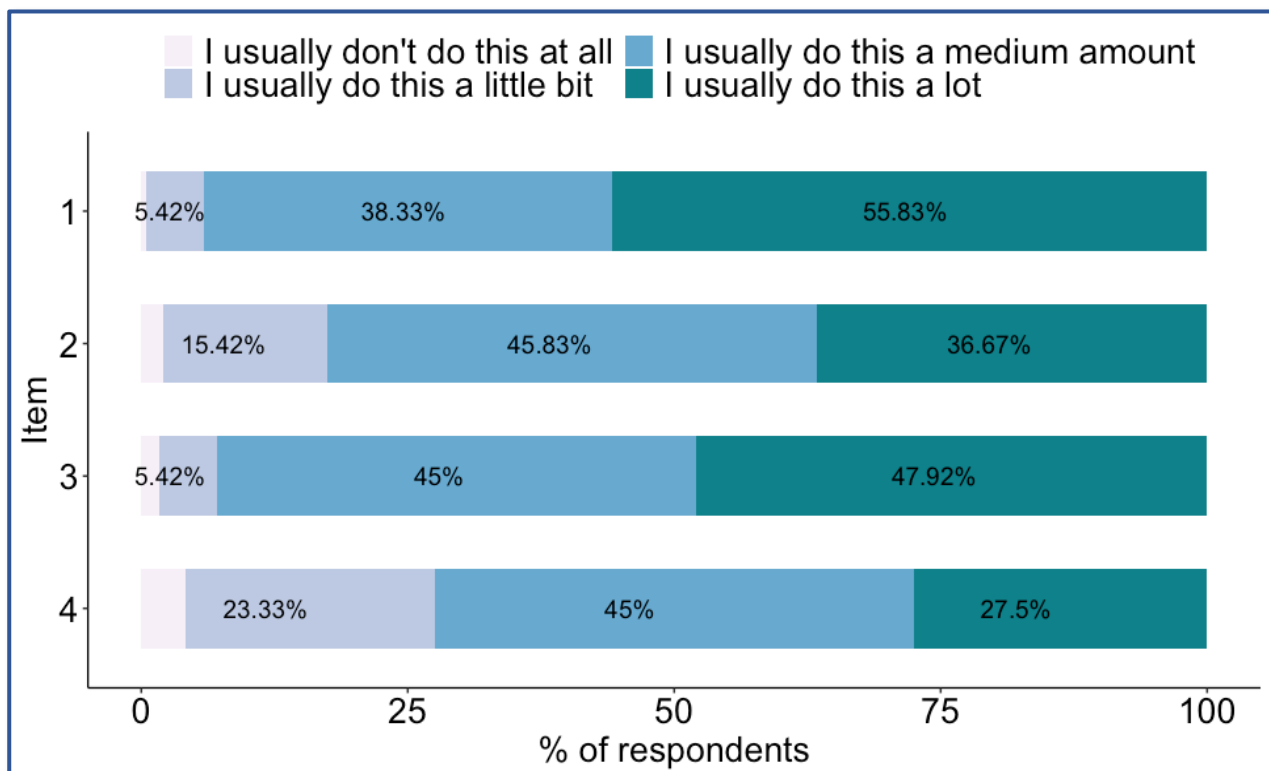
The following items are included in the Planning scale of the COPE Inventory as possible cognitive coping strategies that may be relied on when having to cope with a challenge:

1. I make a plan of action.
2. I try to come up with a strategy about what to do.
3. I think about how I might best handle the problem.
4. I think hard about what steps to take.

Figure 4.2 captures the distribution of scores for the items related to the Planning scale.

Figure 4.2

Response analysis for the Planning scale



It can be deduced from Figure 4.2 that planning was employed to a great extent by the respondents as a strategy to cope with the COVID-19 pandemic and the implied challenges they faced as teachers. To be more specific, making a plan of action was employed as

strategy by 55.83% of the respondents, and thinking about how best to handle the problem by 47.92%, a lot of the time. Trying to come up with a strategy about what to do was used by 45.83% of the respondents to a medium extent, with 45% of the respondents indicating that they thought hard about the steps to take when facing a challenge to a medium extent of time. As in the case of the Active coping scale, a combination of the percentages of respondents who relied on the various items related to planning to a medium or high extent indicates that the majority of the respondents tended to strongly rely on these strategies during times of stress or adversity.

4.2.2.3 *Suppression of competing activities*

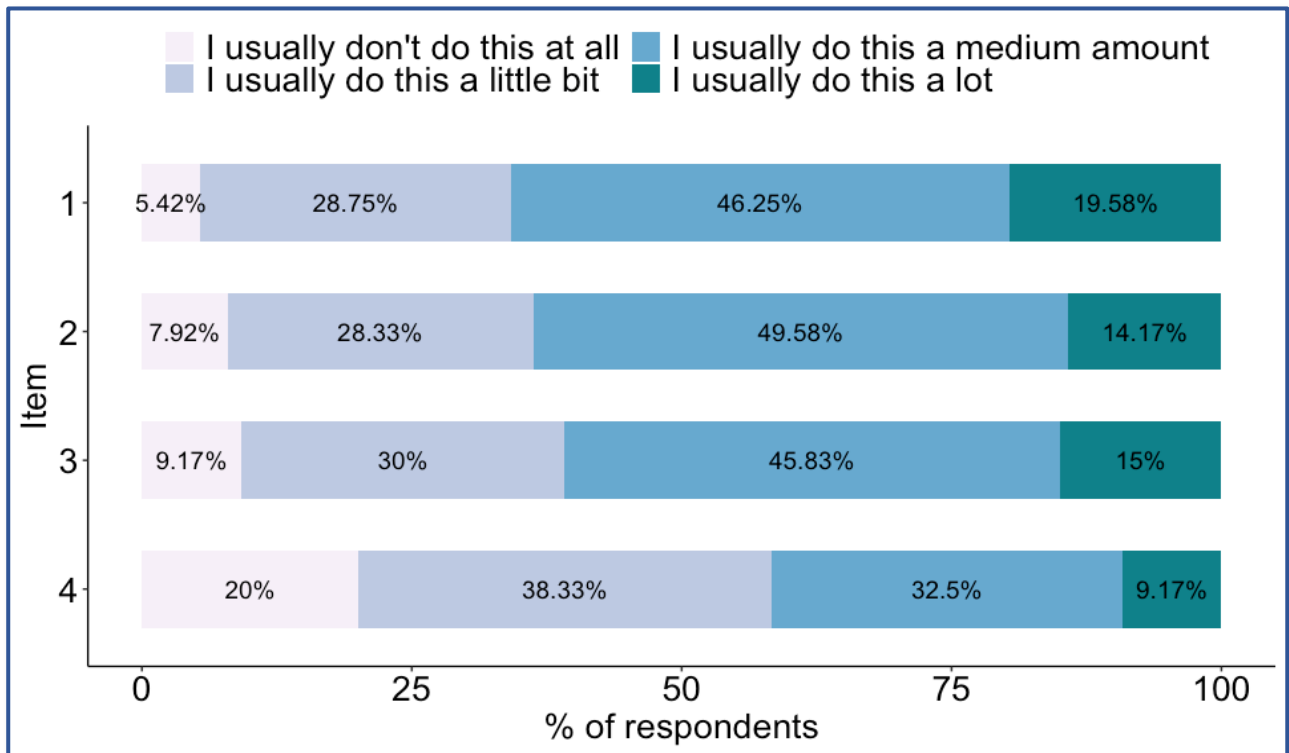
The scale on Suppression of competing activities of the COPE Inventory involves the following items:

1. I keep myself from getting distracted by other thoughts or activities.
2. I focus on dealing with this problem, and if necessary, let other things slide a little.
3. I try hard to prevent other things from interfering with my efforts at dealing with this.
4. I put aside other activities in order to concentrate on this.

Figure 4.3 provides an indication of the distribution of scores for the items related to the Suppression of competing activities scale.

Figure 4.3

Response analysis for the Suppression of competing activities scale



According to the distribution indicated in Figure 4.3 the respondents did not frequently put aside activities to concentrate on a presenting problem. The majority of the respondents (38.33%) indicated that they employed this strategy to a little extent. However, the majority of the respondents indicated that they relied on the respective strategies to a medium extent for the other related items included in the scale. More specifically, 46.25% of the respondents indicated that they would keep themselves from getting distracted by other thoughts or activities; 49.58% that they would focus on dealing with the particular problem, and if necessary, let other things slide a little; and 45.83% that they would try hard to prevent other things from interfering with their efforts to deal with the problem, to a medium extent of the time. Once again, if combining the percentages of respondents that relied on these strategies to a medium extent with those relying on them a lot of the time, it seems clear that the majority of the respondents often relied on these three strategies when facing stress of adversity, even though the majority of the respondents did not tend to put other activities aside when having to concentrate on a pressing challenge.

4.2.2.3 Restraint coping

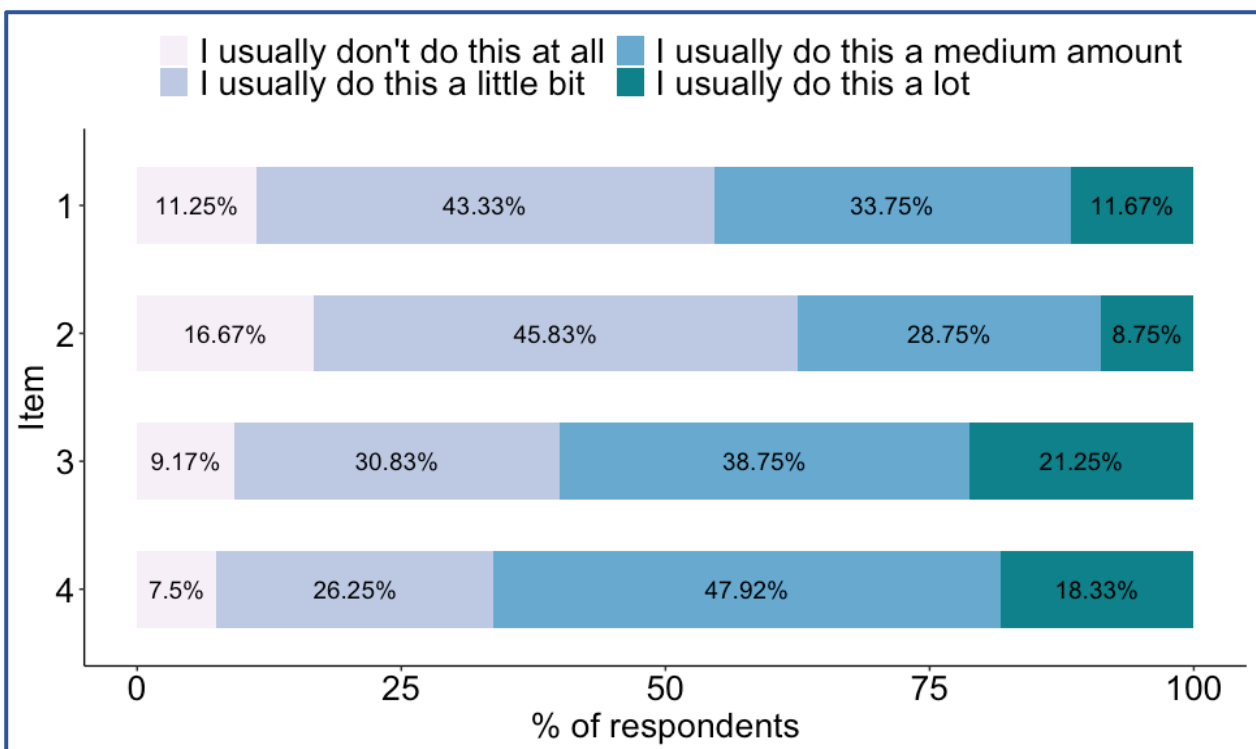
The following items are included in the Restraint coping scale of the COPE Inventory, as possible cognitive coping strategies that may be relied on when having to cope with a challenge:

1. I restrain myself from doing anything too quickly.
2. I hold off doing anything about it until the situation permits.
3. I make sure not to make matters worse by acting too soon.
4. I force myself to wait for the right time to do something.

The distribution of scores for the items related to the Restraint coping scale is presented graphically in Figure 4.4 below.

Figure 4.4

Response analysis for the Restraint coping scale



As captured in Figure 4.4 the majority of the respondents did not frequently employ the strategies associated with restraining themselves from doing anything too quickly (43.33%) and holding off doing anything about a problem until the situation permitted (45.83%). The strategy of ensuring that matters do not get worse by acting too soon was implemented by the majority of the respondents (38.75%) to a medium extent, with another substantial

number of respondents (30.83%) relying on this strategy to a limited extent. For the last item on this scale, 47.92% of the respondents indicated that they would force themselves to wait for the right time to do something, a lot of the time.

4.2.2.4 Seeking instrumental social support

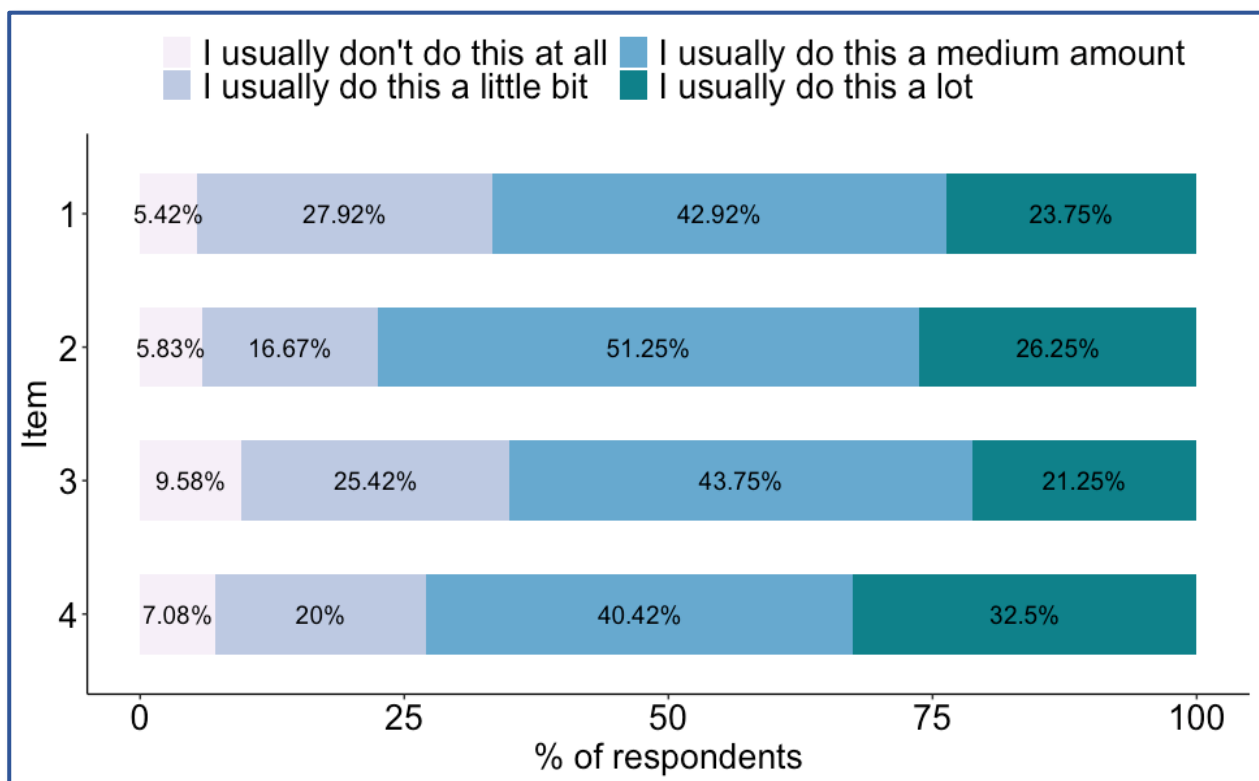
The following items apply for the scale related to the Seeking of instrumental social support on the COPE Inventory:

1. I try to get advice from someone about what to do.
2. I talk to someone to find out more about the situation.
3. I talk to someone who could do something concrete about the problem.
4. I ask people who have had similar experiences what they did.

Figure 4.5 below indicates the distribution of scores for the items related to the Seeking instrumental social support scale.

Figure 4.5

Response analysis for the Seeking instrumental social support scale



In Figure 4.5 it is clear that the respondents relied on the strategy of seeking instrumental social support more frequently than not when responding to stress or adversity. The majority

of the respondents indicated that they tended to employ the four strategies (items on the scale) to a medium extent, with an additional proportion of the respondents relying on the strategies a lot of the time.

To be specific, 42.92% of the respondents indicated that they tried to get advice from someone else about what to do in a stressful situation to a medium extent, 51.25% would talk to someone else to find out more about the situation, 43.75% would talk to someone who could do something concrete about the problem, and 40.42% of the respondents would ask people who had had similar experiences what they did in such a challenging situation. All of these strategies were relied on to a medium extent of time by the majority of the respondents. When combining the percentages of the respondents seeking instrumental social support as a strategy to a medium extent of time with those who relied on these strategies a lot of the time, it is clear that the respondents fairly strongly relied on instrumental social support when having to cope with challenges such as those related to the COVID-19 pandemic.

4.2.3 Results on the resilience of the respondents, as measured by the Adult Resilience Measure-revised (ARM-R)

The ARM-R (Resilience Research Centre, 2019) is a 17-item five-point Likert scale questionnaire intended to measure social-ecological resilience by focusing on information related to the personal and relational resilience of the respondents (Jefferies et al., 2019; Resilience Research Centre, 2019). Even though the response analysis of the ARM-R does not in itself provide an indication of the correlation between resilience and coping, which is indicated further on in Table 4.6, I include the analysis in this section, with this being refined and enhanced by the qualitative data, presented in Section 4.3.

4.2.3.1 Personal resilience

The following items are included in the Personal resilience scale for which the respondents were requested to indicate the extent to which the statements applied to them:

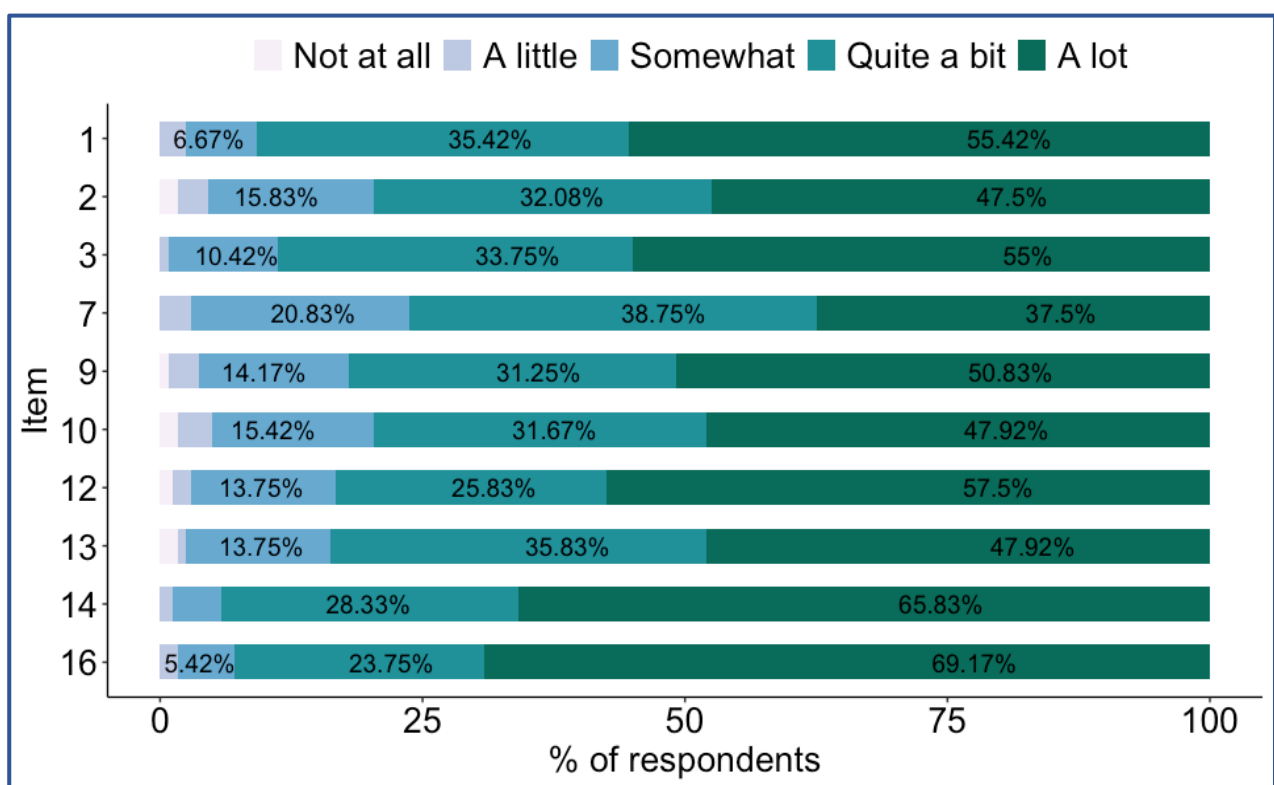
1. I cooperate with people around me (Item 1).
2. Getting and improving qualifications or skills is important to me (Item 2).
3. I know how to behave in different social situations (Item 3).
4. People like to spend time with me (Item 7).
5. I feel supported by my friends (Item 9).
6. I feel that I belong in my community (Item 10).

7. My friends stand by me during difficult times (Item 12).
8. I am treated fairly in my community (Item 13).
9. I have opportunities to show others that I can act responsibly (Item 14).
10. I have opportunities to apply my abilities in life (like skills, a job, caring for others) (Item 16).

The results for the Personal resilience scale are captured in Figure 4.6.

Figure 4.6

Response analysis for the Personal resilience scale of the ARM-R



As indicated in Figure 4.6, the majority of the respondents indicated that the statements related to them a lot, except for the statement People like to spend time with me (Item 7), where the majority of the respondents indicated Quite a bit. This implies that the majority of the respondents agreed that the various statements (except for Item 7) were true in their lives.

The statements that applied to the respondents to a greater extent, with the associated percentages of the respondents indicating that these statements applied to them, in relation to less indicated frequencies of statements, include the following:

- ❖ I cooperate with people around me (55.42%).
- ❖ I know how to behave in different social situations (55%).
- ❖ I feel supported by my friends (50.83%).
- ❖ My friends stand by me during difficult times (57.5%).
- ❖ I have opportunities to show others that I can act responsibly (65.83%).
- ❖ I have opportunities to apply my abilities in life (like skills, a job, caring for others) (69.17%).

When combining the percentages of the respondents who perceived all of the statements to be true for them (categories Quite a bit and A lot), it appears as if the majority of the respondents demonstrated personal resilience. The respondents therefore appeared to have demonstrated personal resilience during the COVID-19 pandemic.

4.2.3.2 Relational resilience

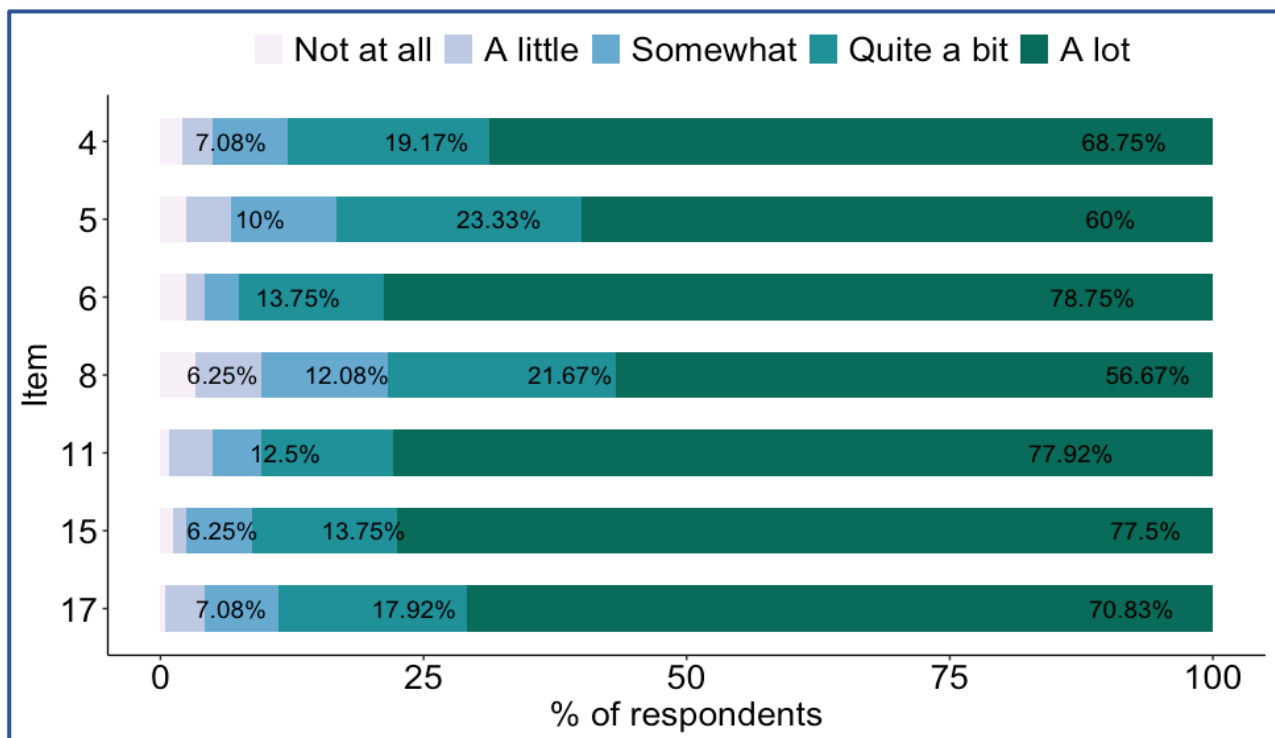
The following items apply for the Relational resilience scale:

1. My family has usually supported me through life (Item 4).
2. My family knows a lot about me (Item 5).
3. If I am hungry, I can get food to eat (Item 6).
4. I talk to my family/partner about how I feel (Item 8).
5. My family/partner stands by me during difficult times (Item 11).
6. I feel secure when I am with my family/partner (Item 15).
7. I enjoy my family's/partner's cultural and family traditions (Item 17).

Figure 4.7 provides an overview of the results obtained for the scale on Relational resilience.

Figure 4.7

Response analysis for the Relational resilience scale of the ARM-R



As captured in Figure 4.7, the majority of the respondents indicated a strong agreement on all the items included in the relational resilience scale. The majority of the respondents indicated that all of the statements applied to them a lot of the time, as listed below:

- ❖ My family has usually supported me through life (68.75%).
- ❖ My family knows a lot about me (60%).
- ❖ If I am hungry, I can get food to eat (78.75%).
- ❖ I talk to my family/partner about how I feel (56.67%).
- ❖ My family/partner stands by me during difficult times (77.92%).
- ❖ I feel secure when I am with my family/partner (77.5%).
- ❖ I enjoy my family's/partner's cultural and family traditions (70.83%).

This implies that all the statements were indicated as applicable in the lives of the majority of the respondents, most of the time. These results therefore point to a reliance on relational resilience by the respondents during the COVID-19 pandemic.

4.2.4 Spearman correlation coefficient

In this section I present the results of the inferential statistics (correlation test) for the online questionnaire in an attempt to illustrate how the participating teachers demonstrated

cognitive resilience (adaptive coping) during the time of the COVID-19 pandemic. As indicated earlier, I only include the results for teachers from urban schools (also included in Appendix K) with those obtained from the four respondents from semi-urban schools being available in Appendix L.

The following research questions relate to the results presented in this section:

- ❖ **Question 1:** Which cognitive strategies were utilised by teachers in South Africa in response to the challenges implied by the COVID-19 pandemic?
- ❖ **Question 2:** Which cognitive strategies show a correlation with teacher resilience in response to the challenges implied by the COVID-19 pandemic?

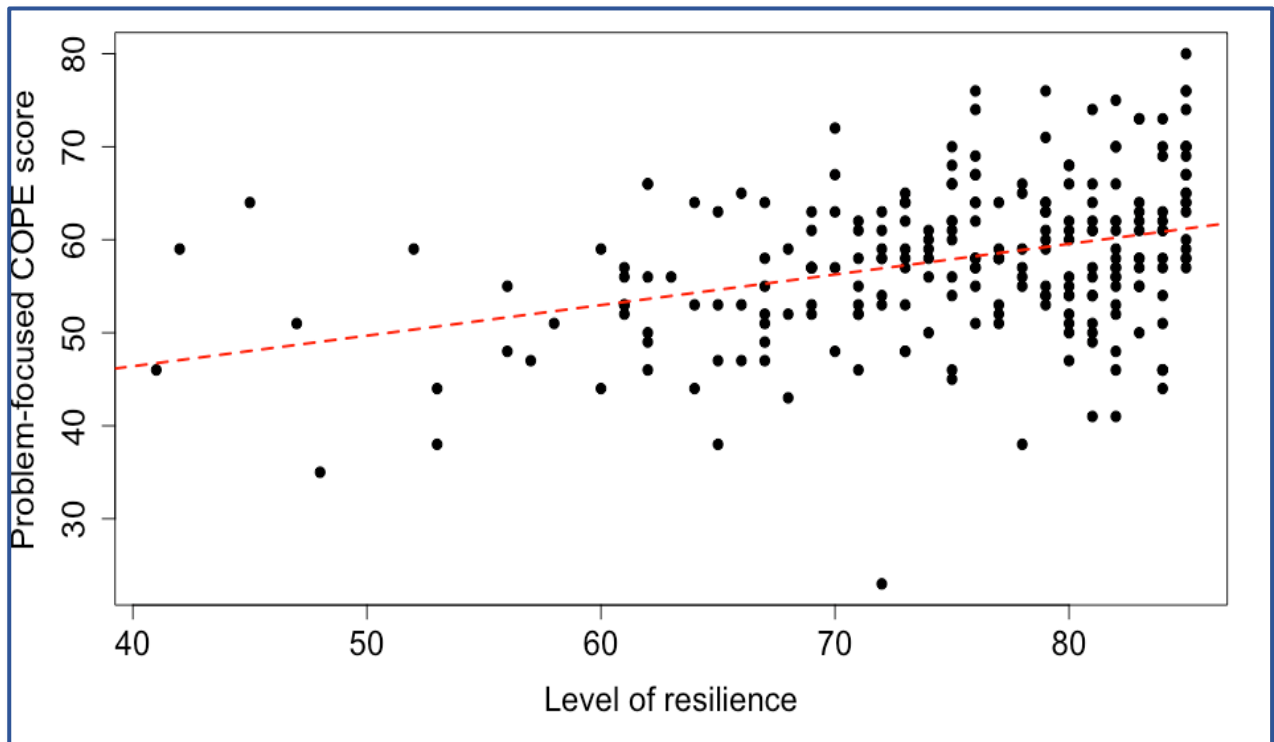
To address the research questions, I formulated the following hypotheses and tested these for statistical differences:

- ❖ **Null hypothesis (H₀):** There is no relationship between the cognitive strategies that teachers utilised in response to the COVID-19 world pandemic and teacher resilience.
- ❖ **Alternative hypothesis (H₁):** There is a relationship between the cognitive strategies that teachers utilised in response to the COVID-19 world pandemic and teacher resilience.

The scatterplot included as Figure 4.8, graphically presents the correlation between the sum of the problem-focused COPE Inventory items and the ARM-R resilience measure. The scales of the COPE Inventory that include active coping, planning, suppression of competing activities, restraint coping, and the seeking of instrumental social support are in this way correlated with the resilience score, based on the results of the ARM-R.

Figure 4.8

Problem-focused COPE Inventory score vs. level of resilience



The Spearman correlation coefficient value tested to be 0.327 (p -value = <0.001), which indicates a positive and significant correlation between problem-focused coping and resilience. The specific correlation values for each of the scales of the problem-focused, emotion-focused and additional scales in relation to the resilience measure are provided in Table 4.6 below that indicates the correlation between the COPE Inventory (Carver, 2013 – refer to Appendix A) and the ARM-R (Resilience Research Centre, 2019 – refer to Appendix B).

Table 4.6*Correlation between the scores of the COPE Inventory scales and ARM-R*

SCALE	CORRELATION VALUE	P-VALUE
Problem-focused coping		
Active coping	0.29	<0.001*
Planning	0.31	<0.001*
Suppression of competing activities	0.13	0.048*
Restraint coping	0.13	0.044*
Seeking instrumental social support	0.36	<0.001*
Emotion-focused coping		
Positive reinterpretation and growth	0.34	<0.001*
Use of emotional social support	0.46	<0.001*
Acceptance	0.21	0.001*
Denial	-0.19	0.003*
Religious coping	0.25	<0.001*
Additional scales		
Mental disengagement	-0.23	<0.001*
Focus on and venting of emotions	0.06	0.388
Humour	-0.14	0.028*
Behavioural disengagement	-0.23	<0.001*
Substance use	-0.10	0.143

*Statistically significant

The correlation values and p-values between the scales of the COPE inventory and the ARM-R are presented in Table 4.6. As indicated, all the scales related to the problem-focused coping levels (active coping, planning, suppression of competing activities, restraint coping and seeking instrumental social support) that were investigated in my study measured a p-value smaller than a 0.05 correlation coefficient. Furthermore, denial, mental disengagement, humour, behavioural disengagement and substance use negatively correlate with resilience. All the scales on problem solving (active coping, planning, suppression of competing activities, restraint coping and seeking instrumental social support) positively correlate with resilience.

The interpretation of the correlation values is captured in Table 4.7, compiled and interpreted according to the guidelines provided by Schober et al. (2018).

Table 4.7*Interpretation of correlation values*

SCALE	CORRELATION VALUE	INTERPRETATION
Problem-focused coping		
Active coping	0.29	Weak correlation
Planning	0.31	Weak correlation
Suppression of competing activities	0.13	Weak correlation
Restraint coping	0.13	Weak correlation
Seeking instrumental social support	0.36	Weak correlation
Emotion-focused coping		
Positive reinterpretation and growth	0.34	Weak correlation
Use of emotional social support	0.46	Moderate correlation
Acceptance	0.21	Weak correlation
Denial	-0.19	Weak correlation
Religious coping	0.25	Weak correlation
Additional scales		
Mental disengagement	-0.23	Weak correlation
Focus on and venting of emotions	0.06	Negligible correlation
Humour	-0.14	Weak correlation
Behavioural disengagement	-0.23	Weak correlation
Substance use	-0.10	Negligible correlation

As indicated in Table 4.7, a weak correlation is evident between the various problem-focused coping scales and resilience. Even though these correlations were found to be weak, a positive correlation was still tested, with the interpretation of this being further discussed in Chapter 5.

Even though my study focused on the problem-focused strategies of coping, I also include the emotion-focused coping and additional scales due to the possibility of enriching these results with the results obtained from the qualitative data. As indicated in Table 4.7, a weak correlation exists between all of the scales comprising emotion-focused coping, except the use of emotional social support that has a moderate correlation with resilience. Denial, as emotion-focused coping strategy, is negatively correlated with resilience, while the other scales are positively correlated. As part of the additional scales, mental disengagement, humour and behavioural disengagement all negatively correlate with resilience with a weak correlation, while substance use has a negative and negligible correlation with resilience. In addition, a focus on the venting of emotions had a positive but negligible correlation with resilience.

4.3 QUALITATIVE RESULTS

As background to my discussion of the qualitative results, I include an overview of some of the uncertainties experienced by the participants during the initial phases of the COVID-19 pandemic, as reported by them to provide background information on the context within which the participants had to cope during this uncertain time. After providing the necessary background on the context that the participants had to cope with, I present the qualitative themes that relate to their way of coping.

4.3.1 Contextual background to qualitative results

Even though the focus groups centred on discussions of the strategies that the participants had relied on to cope with the challenges associated with the pandemic, they also shared their concerns, thereby providing rich contextual background. In this way, the focus groups provided the participants with a platform to share their frustrations and experiences, allowing for their voices to be heard at a time when face-to-face contact was restricted.

Contributions¹⁵ such as the following serve as examples of the participants' responses, indicating the level of uncertainty, frustration, concerns, challenges and fears they initially experienced on a personal and work-related level with which they had to cope:

- ❖ "... those first few weeks were rather difficult on a psychological and emotional level. ... I have never, in my whole life been as tired" (P2.1¹⁶, Section 24).
- ❖ "I think it was the greatest challenge for me ... to me it was genuine one of my biggest challenges" (P1.2, Sections 8 and 52).
- ❖ "In the beginning everything was so terribly negative ... everyone watched the mortality numbers each day" (P1.1, Section 188).
- ❖ "... everything sky-rocketed and ... I was so scared ..." (P1.2, Section 61).
- ❖ "We are all fighting a battle" (P2.2, Section 89).
- ❖ "... for me, it is a huge challenge ... it was extremely stressful for me" (P3.2, Section 88).
- ❖ "You yourself are filled with fear and anxiety about this disease and you are obliged to help a child handle it" (P4.1, Section 42).

¹⁵ The participants' contributions are supplied verbatim and have not been edited, as reflected in Appendix P.

¹⁶ Codes used to indicate the numbers of the focus groups and participants, as indicated in Table 4.9.

In addition to the participants having to cope with feelings such as these in their own lives, they faced some difficulties in relating to the learners at schools who were experiencing similar challenges. The participants, for example, stated, “those children sat in that classroom like zombies ... they did not talk ... they literally looked as if they were panic-stricken” (P1.4, Section 119), with the teachers having “to help the children” but “it was a struggle because the children didn’t want to work” (P1.1, Section 59). Additionally, the participants indicated that the wearing of masks and keeping social distance interfered with the support they could provide to learners, as “they can’t see when you smile ... behind a mask ... it makes it that much worse” (P1.2, Section 128). Consequently, the participants apparently wished “the masks would go away” (P5.2, Section 100).

As a result, the participants seemingly felt frustrated due to them not being able to comfort and support learners to the extent that they had been able to do prior to the pandemic. The participants thus felt internally pressured to support the learners, even though they themselves struggled with feelings of uncertainty. Therefore, even though the participants allegedly felt responsible for the wellbeing of the learners, they were unsure about how to support the learners at certain times. In this regard, a participant expressed frustration by stating that the “first instinct when a child falls and gets hurt is, you pick up, hold and wipe tears and not to have been able to do it was very difficult ... a piece of normality in this crazy era” (P5.1, Section 94). In confirmation, another participant mentioned, “That is what I miss at this stage, to take a child’s hand or to touch a child’s shoulder and say, it’s okay, I see you, I understand” (P5.3, Section 92), thereby also pointing to a level of frustration due to teachers not being able to attend to the needs of the learners as had been the custom prior to the pandemic.

Closely related, it appeared as if the participants in their roles of teachers, experienced their responsibility to emotionally support and motivate the learners during this time as burdensome, amidst their own levels of uncertainty. To this end, a participant stated, “The pressure was also upon a person, to keep yourself intact, even when you feel you are losing the plot” (P2.3, Section 20). Another participant explained that it was important to “try our best to motivate them (the learners)” (P3.4, Section 42), with another emphasising the importance that “one has to count your words and manage the discussions you have in front of children ... it’s my responsibility ... to take responsibility and lead in this situation ...” (P4.3, Section 68). Other participants focused on the examples set by teachers, saying, “Children are mimicking us teachers more than ever before” (P4.1, Section 77), and “Human nature comes into play and demonstrates that you’re a flock creature ... if everyone, does

it, you do it as well” (P4.2, Section 80). Contributions such as these emphasise the teachers’ role in modelling positive coping behaviour to the learners at a time when most people felt uncertain of what the future held.

As mentioned, the participants experienced a range of challenges in their personal lives during the time of the COVID-19 pandemic. For example, they voiced the experienced challenge of balancing their work and personal lives, attending to self-care, yet also devoting the necessary time to their families. In this regard, a participant summarised her experience of this challenge in the following way: “It comes with other feelings of guilt and balls that one tries to balance in the air, not to drop them, like the time I spend with myself, is time of which I deprive my husband and children” (P 2.3, Section 65). The participants furthermore felt that the imposed national restrictions hampered their ability to physically reach out to their loved ones and stated, “... one couldn’t go anywhere, that was bad” (P5.6, Section 71) and, “... this illness has taken us away from our loved ones” (P5.2, Section 90). To this end, the participants seemingly experienced difficulty in fulfilling their multiple roles of, for example, parents, spouses and friends.

In addition to the challenges of supporting learners and coping with difficulties on a personal level, the participants experienced some challenges to continue with and fulfil their educational duties as teachers. They seemingly experienced this challenge as a result of them not being sufficiently trained to use online platforms for teaching activities, and due to logistical difficulties related to the presentation of lessons and execution of general teacher responsibilities. The participants indicated that they found the use of technology and online platforms for an educational purpose to be difficult, “especially for people who were born before computers” (P3.5, Section 76), as “we have lots of personnel who were not comfortable with computers ... and then you have to make a video or something ... and initially one is uncomfortable the whole time” (P3.5, Section 76). In confirmation of this view, another participant noted, “Technology doesn’t really appeal to me ... it really has not been a priority in my life, but as she [another participant] says, we were forced” (P3.3, Section 84). As a result, several participants, especially those who had not had experience in working with and *via* technology, seemingly found the continuation of their work-related duties to be a challenge.

In elaboration on this reported experience, another participant stated, “The academic part was a challenge for me ... I am this loud person and this guy who cannot stand still in front of a class, but who walks around and who ... cracks jokes” (P1.2, Section 50). When allowed

to return to school following the lockdown period, the participants reportedly initially had to circulate among classes instead of learners doing so, as was the case prior to the pandemic, resulting in them having to carry “your own pen box, your own black board eraser, your stationery ... the whole package that has to be carried from class to class is overwhelming” (P2.1, Section 5). All these alternative ways of teaching seemingly resulted in the participants being challenged in their profession. In this regard, even everyday duties, such as the marking of books appeared to pose challenges to teachers, as captured in the following statement: “... and now I have that extra pressure of working through 144 different books that children touch all the time and I know it was a huge problem for people” (P2.1, Section 18). It seems clear that the participants’ experiences of the various work-related and logistical challenges they faced might, in turn, have added to their concerns related to the COVID-19 pandemic and what it implied for individuals and families.

In the next section, I present the qualitative results I obtained following the deductive analysis I completed, where I was guided by the problem-focused coping scale of the COPE Inventory (using *a priori* categories), which was followed by an inductive phase of analysis. The way in which I completed my analysis can be viewed in Appendix P, with the table that guided me in analysing the data being included in Appendix M.

4.3.2 Qualitative results

In Table 4.8, I summarise and provide an overview of the themes and related sub-themes¹⁷ that I identified during data analysis. In my discussion of the results that follows in the subsequent sections, I include extracts from the data as supportive evidence.

¹⁷ The inclusion criteria for the deductive analysis phase were based on the *a priori* categories related to the COPE Inventory, while for the inductive phase the inclusion criteria were based on any other cognitive strategies that could support coping. In addition, exclusion criteria included any activities or strategies that did not support coping with the challenges implied by the COVID-19 pandemic, and were not cognitive strategies in nature.

Table 4.8

Overview of qualitative themes and sub-themes

	THEMES	SUB-THEMES
DEDUCTIVE ANALYSIS	THEME 1: ACTIVE COPING	Sub-theme 1.1: Keeping busy and doing tasks Sub-theme 1.2: Adapting to changed circumstances Sub-theme 1.3: Acquiring new skills
	THEME 2: PLANNING	Sub-theme 2.1: Taking things one step at a time Sub-theme 2.2: Maintaining a routine Sub-theme 2.3: Staying in control of what is possible
	THEME 3: SUPPRESSION OF COMPETING ACTIVITIES	Sub-theme 3.1: Prioritising what is important at the time Sub-theme 3.2: Conscious disengagement
	THEME 4: RESTRAINT COPING	Sub-theme 4.1: Accepting the situation for the time being Sub-theme 4.2: Remaining calm
	THEME 5: SEEKING INSTRUMENTAL SOCIAL SUPPORT	Sub-theme 5.1: Seeking advice or information Sub-theme 5.2: Relying on relationships with significant others
INDUCTIVE ANALYSIS	THEME 6: NURTURING A GROWTH MINDSET	Sub-theme 6.1: Engaging in self-discovery and personal growth Sub-theme 6.2: Drawing on reflective practices Sub-theme 6.3: Maintaining self-care Sub-theme 6.4: Nurturing spirituality Sub-theme 6.5: Exercising optimism

In presenting the qualitative results in the following sub-sections, I relied on the coding system presented in Table 4.9. The five analysed online focus groups that are included in Appendix P followed the same coding system.

Table 4.9

Codes used to indicate the numbers of the focus groups and participants

FOCUS GROUP	PARTICIPANT CODE	SECTIONS
Online participatory focus group 1		
Participant 1	P1.1	
Participant 2	P1.2	
Participant 3	P1.3	1 - 222
Participant 4	P1.4	
Participant 5	P1.5	
Online participatory focus group 2		
Participant 1	P2.1	
Participant 2	P2.2	
Participant 3	P2.3	1 - 106
Participant 4	P2.4	
Online participatory focus group 3		
Participant 1	P3.1	
Participant 2	P3.2	
Participant 3	P3.3	1 - 126
Participant 4	P3.4	
Participant 5	P3.5	
Online participatory focus group 4		
Participant 1	P4.1	
Participant 2	P4.2	
Participant 3	P4.3	1 - 88
Participant 4	P4.4	
Online participatory focus group 5		
Participant 1	P5.1	
Participant 2	P5.2	
Participant 3	P5.3	
Participant 4	P5.4	1 - 111
Participant 5	P5.5	
Participant 6	P5.6	

4.3.2.1 Theme 1: Active coping

Theme 1 reports on the processes and active steps that were taken by the participants to cope with the teaching-related stressor(s) they experienced as a result of the COVID-19 pandemic, as captured in Section 4.3.1. The *a priori* assumption that guided the identification of the sub-themes for this theme relates to any steps taken by the participants in an attempt to alleviate, remove or lessen the effects of stressors (Carver et al., 1989). The three sub-themes that I identified entail the following strategies: keeping busy and doing tasks; adapting to changed circumstances; and acquiring new skills in an attempt to alleviate, remove or lessen the effects of the experienced stressor(s).

4.3.2.1.1 *Sub-theme 1.1: Keeping busy and doing tasks*

According to the participants, they coped with the COVID-19-related challenges they faced (consult Section 4.3.1) through direct action by staying busy or doing general tasks at hand. One of the participants, for example, noted, “You take what you have and do the best you can” and, “You do what you have to do” (P1.3, Sections 28 and 106). During the same focus group, another participant mentioned, “This is what we must do, let’s go” (P1.4, Section 44). In support, another participant reported that he “did the work that I had to do by staying busy with other things” (P1.5, Sections 168 and 174) and expressed the following view: “Remain busy was the most important” (P1.5, Section 177). Another participant emphasised, “We were absolutely focused on what we were busy doing” (P1.4, Section 44).

Therefore, the participants seemingly kept themselves busy with what had to be done to actively cope with the challenges they faced as a result of the COVID-19 pandemic. To this end, a participant explained that he “was so busy in that time” (P4.1, Section, 2), thereby indicating continuous involvement in tasks at hand. Another participant confirmed this experience, sharing the view that the fact that he remained busy supported his coping, as evident in the following words: “Work keeps me busy” (P4.2, Section 13).

However, the participants did not only keep themselves busy with work-related tasks; they reportedly also took care of household chores and attended to matters that required attention at home. They, for example, mentioned that they “fixed a number of things at home, and built new things” (P5.2, Section 27). As a result, it is evident that the strategy to remain busy was implemented by the participants in terms of any task at hand – whether it involved a school-related task or something that required attention at home. In terms of this result, I noted the following: “It appeared as if many of the participants experienced that they were forced to stay busy by using various means to cope” (Field notes, 22 September 2021), and upon reflection, “I was at first surprised to find that most of the participants expressed the need to stay busy. Contrary to what I initially anticipated, uncertainty associated with COVID-19 seems to have forced people to use productive actions as a means to cope and continue with work-related activities. This highly stressful time with its novel challenges brought about a need to stay productive in many teachers” (Reflective journal, 7 October 2021).

4.3.2.1.2 *Sub-theme 1.2: Adapting to changed circumstances*

According to the participants, they had no other choice than to remain flexible and adapt to the changed situation and associated challenges they faced as a result of the COVID-19 pandemic, as referred to in Section 4.3.1. The following entry in my reflective journal captures the idea of having to adapt to continue with teaching duties: “Even though challenges may vary from school to school, teaching still needs to occur” (Reflective journal, 28 September 2021). In confirmation, the participants indicated that they made a conscious decision to adapt, learnt to live with the pandemic and its associated challenges, and did what was required of them to do. These experiences are captured in the following contributions:

- ❖ “We are adaptable” (P1.2, Section 8).
- ❖ “Yes, we have all adapted” (P1.5, Section 168).
- ❖ “I had no choice but to adapt” (P2.1, Section 10).
- ❖ “Yes, we were forced”; “It forced me to move on” and “Teachers must be adaptable” (P3.3, Sections 81, 94 and 114).
- ❖ “... and one just had to jump in and swim. It’s not as if the world waited for you” (P4.1, Section 4).

Even though the participants seemingly adapted to the sudden change they experienced in a *spontaneous* manner, many of them experienced this process of sudden adaptation as challenging in itself. One of the participants, for example, explained, “It was hard and it was an adjustment” (P1.1, Section 59), with another participant confirming this view in the following words: “It was a great adaptation to adjust to that” (P1.3, Section 10). To others, the process of adapting to the changed circumstances implied that they had to revisit their expectations at the time, as evident in the following contributions:

- ❖ “Expectation management ... I had to manage my expectations” (P1.4, Section 44).
- ❖ “Managing my expectations better” (P1.4, Section 103).

Overall, the participants apparently valued the fact that they were *forced* to adapt. They mentioned, “To adapt and to remain adaptable is extremely important ... so, I think it is a benefit, if one can do it” (P3.2, Section 105) and further stated, “One was forced to consider other situations and to work around them” (P5.3, Section 31). According to the participants, their experience of adapting to the sudden change made them realise that human beings are adaptable to change, as summarised in the following extract taken from the data: “I’ve

learnt now that one can do it if you want to” (P3.1, Section 73). Another participant shared this view and confirmed that “human beings are very adaptable ... we are adaptable” (P4.4, Section 82). In support of this view, I made a note during one of the focus groups, stating, “Upon comment of P4.4, the other participants nodded and agreed about the statement that human beings are adaptable” (Field notes, 4 October 2021).

To cope with change and challenges by adapting implies the use of active coping by the participants in alleviating the effects of the COVID-19 pandemic (the stressor). It appeared as if the participants viewed this coping strategy in a fairly positive light, yet as something that required a conscious decision and constant effort on a daily basis. This view is captured in the following contribution of a participant: “It is a decision you have to take, every morning, every day” (P4.3, Section 68). Upon reflection and in confirmation, I noted the following:

I find it intriguing that for the participants to be able to adapt to the challenges associated with COVID-19 implied rapid changes in the way that they were used to do things. It seems as if the pandemic accelerated the tempo of change for most of the participants due to the fact that no option was given to them in terms of the way they needed to respond. The path of change and managing COVID-19 was greatly dictated by National Government and school management structures. Instead of resisting this change, the participants were mostly able to adapt quickly and, in some cases, even appeared to embrace change. Their ability to do this seems to help them to cope with the pandemic in an improved way (Reflective journal, 7 October 2021).

4.3.2.1.3 Sub-theme 1.3: Acquiring new skills

The participants indicated that the activities they engaged in required of them to acquire new skills as part of their coping efforts. Many of the participants reported that they gained such skills *via* online platforms, with their (for some, newly-acquired) technological skills supporting them to augment their skills and cope with the challenges they faced as a result of the pandemic. To provide examples, the participants noted the following:

- ❖ “... had to learn new skills” (P1.1, Section 7).
- ❖ “... throughout this time, we suddenly had to learn so many new skills” (P2.1, Section 12).
- ❖ “We have definitely learnt skills that we did not have” (P3.2, Section 90).

The participants specifically referred to using technology to cope with the challenges they faced. For example, one of the participants explained, “I use my technology every single day ... to me it is second nature” (P1.4, Section 44). Even though many of the participants seemed comfortable with the regular use of technology, the move towards a strong reliance

on technology implied the acquisition of additional skills for others. A participant made the following remark in this regard: “We attended many courses to enable us to teach and mark in Google Classroom” (P2.1, Section 12). During my own reflections, I captured the necessity of appropriate skills and facilities for teaching during the time of the pandemic in the following excerpt: “It remains important that teachers working in all types of school have the technological facilities and the know-how to support continued education, as was required during the COVID-19 lockdown” (Reflective journal, 4 June 2021).

Some of the participants seemingly regarded the acquisition of new skills as a personal accomplishment that could support their teaching practice. For example, one of the participants indicated, “The skills that we’ve acquired with online teaching to do all those types of things ... it takes one to the next level ... one underestimates yourself and thinks you won’t be able to do it, but then it is actually unbelievable how much one learns” (P3.5, Section 76). Another participant concurred by stating, “I taught myself to put a reasonably decent PowerPoint together” (P5.5, Section 60). This experience was confirmed by yet another participant reporting that the use of technology initially posed a challenge to her, but that she relied on active coping by acquiring new skills and, “One learns to use it and you are able to do it” (P1.3, Section 106). In addition, and referring to an additional skill that was acquired, another participant said, “Another skill that we acquired was to make videos” (P3.3, Section 74). As part of my reflective process, I noted the following in this regard: “The participants seem to take pride in the accomplishment of learning new skills” (Reflective journal, 30 September 2021).

In addition to the participants gaining technological skills as part of the active coping strategy they employed, they indicated that they had also acquired some general skills as part of their efforts to cope. In this regard, one of the participants indicated that he thought it important “to try out new things” and “instead of watching TV, my wife, little daughter and I, built small hedges and did different things” (P1.5, Section 177). Another participant stated the following: “New skill that you have acquired ... whether it is baking a banana loaf, or attempt(ed) playing a new instrument” (P1.3, Section 191). As such, it seems clear that the participants tried out a range of new things during the time of adapting to the changes implied by the COVID-19 pandemic, keeping themselves busy and focused to cope.

Many of the participants seemingly regarded the range of skills that they had acquired as beneficial for long-term coping. They specifically mentioned the value of strengthening their communication skills during the time, saying, “The communication that we were forced to

acquire last year has helped me a lot this year; communicate better about what needs to happen”, and that the skills acquired are “definitely something that I learnt from last year” (P1.4, Sections 92, 96 and 98). In support of these contributions, the following excerpt highlights my increased awareness of the participants’ expression of the importance of acquiring new skills to cope during the pandemic:

It seemed as if participants not only acquired new skills as part of their cognitive coping strategies, but that they found meaning in the acquisition and long-term value therein. Participants also appeared to be creative in the process of coping by endeavouring to acquire skills in novel activities (Reflective journal, 30 September 2021).

4.3.2.2 Theme 2: Planning

In terms of the thinking (cognitive) processes that the participants relied on to deal and cope with the stressors related to the COVID-19 pandemic, many of the participants seemingly employed action strategies that required planning. To be more specific, the participants seemingly thought about how to cope with stressors and how best to deal with the challenges they faced by implementing action strategies (Carver et al., 1989), with this possibility forming the *a priori* assumption I used to identify sub-themes for this qualitative theme. The sub-themes of planning – how to best handle challenges – that I identified are the following: taking things one step at a time; maintaining a routine; and staying in control of what is possible.

4.3.2.2.1 Sub-theme 2.1: Taking things one step at a time

The participants reported that they had divided tasks into smaller parts to be able to manage them in an attempt to avoid feeling overwhelmed when having to cope with the challenges implied by the COVID-19 pandemic. Responses such as the following serve as examples of how the participants made use of this strategy:

- ❖ “One had to learn to do stuff portion by portion” (P1.1, Section 2).
- ❖ “... therefore, I just have to take it day-by-day” (P2.3, Section 22).
- ❖ “... for a short while ... only did half-half” (P2.1, Section 49).
- ❖ “...you take it day-by-day ... you decide, okay, today they say this and you just do it (P5.3, Section 31).

From these examples it is clear that the participants attempted to deal with the challenges and difficulties they faced in stepwise fashion. It appears as if the participants might have felt overwhelmed by the tasks they were facing and might have experienced these as

exhausting. As a solution, they planned their way of dealing with such demands (action strategy) one step at a time. In documenting my observations during the focus groups where the participants discussed their strategy to follow a step-by-step approach, I noted: “She (P2.3) indicated that she had followed a stepwise manner to handle the situation” (Field notes, 28 September 2021).

4.3.2.2.2 *Sub-theme 2.2: Maintaining a routine*

The second sub-theme related to planning as action strategy entailed the participants hanging on to some sort of a routine amidst the time of uncertainty brought about by the COVID-19 pandemic. In this regard, the participants disclosed that, due to them being structured and aware of ways how to manage challenges, they were able to plan and monitor their efforts to cope with the challenges they faced. For them, a predictable routine therefore seemingly implied planning in terms of time and activity management.

Examples of how the participants related their ability to cope to the importance of a predictable and timely routine are captured in statements such as, “Because we are very structured” (P1.1, Section 59), “back in routine” (P1.3, Section 161), and “then you have routine” (P3.1, Section 48), with regard to their teaching responsibilities. Closely related, the participants emphasised, “Everything now has to be worked out well in advance” (P1.3, Section 10), “It just needs to be planned” (P1.3, Section 31) and, “You must constantly be aware of how it will have to work” (P2.1, Section 5), with statements such as these attesting to their experience that the maintenance of a routine could support coping. Even though this experience of the participants appeared to have required planning on the side of teachers, the participants were of the opinion that “it helped by establishing a measure of routine again ...” (P5.1, Section 16), with contributions such as these once again confirming the preference of teachers to follow some sort of structure or routine during the challenging time brought about by the COVID-19 pandemic.

Personal preferences and situational circumstances, however, seemingly influenced the planning and routines followed by the participants. In this regard, a participant, for example, indicated that she would work late hours, stating that she worked “until 19:00, 19:30 at night” and that she had “to move towards the bedroom at 21:00, otherwise I cannot get up early to continue working” (P2.1, Section 63). Closely related, yet as a possible solution, some other participants emphasised the importance of maintaining a balance, referring to “a certain routine of walking” (P3.2, Section 52) and saying, “There’s a time for work and a time for

play” (P5.4, Section 47). Contributions such as these capture the participants’ tendency to plan for and engage in routine activities during this challenging time, in addition to taking care of their work-related responsibilities. One of the participants that was busy with further studies and experienced high levels of uncertainty, reportedly felt “saved ... because there was some routine” (P5.1, Section 81).

Despite the value experienced from maintaining some sort of routine, the participants seemed aware of contextual factors that could influence their routine. They, for example, shared the experience that plans could be forced to change, saying, “You plan for plan A, but at the same time there is a plan B, C, D, E, A2, B2, because one has to consider all options” and, “You plan for any possible situation” (P5.3, Sections 31 and 33). Despite the possibility of their plans being influenced by various factors, the participants apparently attempted to maintain routine as far as possible, as evident in the following contribution: “For me, planning is rather ... I prefer to come in earlier and get everything ready for the day, then I am set” (P2.2, Section 51).

In addition to planning the tasks associated with their work, the participants apparently relied on planning to maintain a routine and balance in other areas of their lives. To mention an example, one of the participants stated that she “made plans to spend time with friends and spend time with family” (P1.3, Section 106). Another participant described the value of a cup of coffee in the mornings by referring to “the plans that people made for that gem in the morning” (P2.1, Section 68).

In summary, by maintaining a routine, the participants were seemingly able to cope with stress and adversity as such a routine could support them in managing their time and activities, thereby providing a sense of structure within uncertain times. In this regard, I noted the following during one of the focus groups: “Participants appeared spontaneous, in sharing their views and ideas. Minimal prompting was necessary for contributions, specifically in terms of their daily routines kept during the lockdown, which implies the importance of such routine and structure to cope with the challenging times” (Reflective journal, 22 September 2021). In confirmation, I documented the following view following another focus group: “In the context of COVID-19, routines seem to be providing a sense of predictability in the background of an otherwise disrupted and unpredictable environment” (Reflective journal, 28 September 2021).

4.3.2.2.3 *Sub-theme 2.3: Staying in control of what is possible*

The participants indicated the importance of remaining in control as far as possible by planning for and maintaining a clear structure as discussed in the previous section. For the participants, structured control and being organised, however, apparently also implied good space management. In this way, the organisation of the participants' physical environment and the working demands they faced, for example, allowed for careful planning and in effect a better chance of coping with the sudden change and challenges brought about by the COVID-19 pandemic.

In this regard, the participants referred to actions such as going "to school 10 minutes earlier" (P2.2, Section 51), mentioned that "organisation is really important" (P2.2, Section 51) to "sort out and get in order" (P3.3, Section 54), and explained, "One feels that you will handle it in your own way ... you sort out that which you have to handle now" and, "You still need to carry on with your daily planning" (P1.3, Section 28). Another participant made the following contribution in confirmation of this emphasis on control and structure: "I organise my stuff in the mornings and then I know everything I need is here. And also, when I am in my classroom, I have shelves for certain things" (P2.2, Section 51). In support of this contribution, another participant stated, "As far as your organisation is concerned, it is easier to take five books and five sets of everything than 10 sets" (P2.1, Section 49).

Closely related, another participant, when discussing their ways of coping during this challenging time, noted, "We made plans" (P1.4, Section 44), while another stated that she felt "in control of everything" and everything fell "into its place again" (P3.3, Section 54) when executing control in her life. Upon reflection, I noted, "The action of planning seemed to provide the participants with some sense of control and structure over the daunting environment brought about by the pandemic" (Reflective journal, 30 September 2021). Along the same lines, a participant suggested an implied value for learners in cases where teachers would ensure structure, saying, "If I could manage it, it's very important to set an example to show the children ... and to manage it, so that the children see ... my teacher ... handle it systematically and gets through it" (P4.3, Section 68). External protocols and guidance seemingly supported the participants in these attempts to cope, as captured in contributions such as the following: "Check in on your emails to see what today's protocol is" (P5.1, Section 14).

As part of my reflections following one of the focus groups, I noted the following: “It seems as if the participants value not only the capacity personally to regulate factors that they are able to have control over, but also external support and the provision of protocols to guide structure. This provides an indication of the value they seemingly placed on procedures and directives from the management team in the school system” (Reflective journal, 7 October 2021). The above-mentioned excerpts from the data all emphasise the importance of being well-prepared, organised and in control (to the extent that it is possible) when facing change, as experienced by the participants. As such, control and guidance within the system in which the participants functioned seemed important to support planning as cognitive coping strategy.

4.3.2.3 Theme 3: Suppression of competing activities

In this section, I report on the possible strategy of suppressing channels of information that may compete with one’s ability to remain focused when having to manage stressor(s) in life. The participants in the current study seemingly tended to suppress activities that had the potential to compete with their efforts to cope by avoiding distractions and focusing on what was urgent. The *a priori* assumption that guided my analysis for this theme relates to participants “putting other projects aside, trying to avoid becoming distracted by other events, even letting other things slide, if necessary, in order to deal with the stressor”, as proposed by Carver et al. (1989, p. 269). In addition, I included a second supportive *a priori* assumption that states that mental (conscious) disengagement “occurs via a wide variety of activities that serve to distract the person from thinking about the behavioral dimension or goal with which the stressor is interfering” by “using alternative activities to take one’s mind off a problem” (Carver et al., 1989, p. 269). The sub-themes that I identified for this strategy of coping relate to the participants prioritising what is important at the time, and conscious disengagement.

4.3.2.3.1 Sub-theme 3.1: Prioritising what is important at the time

The participants indicated that they attempted to remain focused on their priorities when having to cope with the challenges caused by the COVID-19 pandemic. For example, they identified the priority of staying positive, constantly reminding themselves “... not to focus on the negative” (P4.3, Section 68). The participants were seemingly of the view that prioritisation can be applied as a coping strategy, as illustrated by the following contributions:

- ❖ “... see what is the most important” (P1.1, Section 2).

- ❖ "... and to stay in the moment" (P5.3, Section 38).
- ❖ "... focus on things that I am sure works for me and I go with that" (P1.3, Section 191).

The participants' ability to remain aware of and focus on what is important is captured in contributions such as the following: "To know what is now the most important, what must I give attention to and what should I rather leave to someone else to do" (P1.4, Section 98). Along the same lines, another participant posed a statement combined with a question, saying, "One realises later, okay, what must I prioritise ... what will be important ... what should I not stress about, but important things?" (P1.1, Section 188). Some of the participants, however, seemingly experienced this coping strategy as difficult to employ, and, for example, noted, "You don't know what you should do, or not" (P1.3, Section 10), even though they dealt with the challenge and attempted to "... sort it out" (P1.2, Section 66), thereby supporting their own coping through prioritisation. As part of my reflections following one of the focus groups, I noted the following: "It appears to me that participants not only realised that prioritisation might assist their coping to channel their energy to managing situations of more importance at the time, but that they also had the opportunity to use this coping strategy in future, which might add to their ability effectively to conduct work-related tasks" (Reflective journal, 22 September 2021).

Despite the participants relying on the strategy of prioritising what is important and attending to this, prioritisation as cognitive coping strategy seemingly did not only enable the participants to attend to important situations prior to working on less important ones; it apparently also helped them realise the value of prioritisation. This, in turn, provided the participants with the capacity to concentrate their effort and energy on a presenting challenge, identified by themselves as a priority, as implied by the following contribution: "... some days we saw what we could do and what not, other days we decided we could do those things that we have not yet felt able to handle" (P5.4, Section 45). As part of my reflections, I noted, "While some participants raised the topic of prioritising during today's focus group, many others seemingly agreed with P1.4 when referring to the fact that she focused mainly on things that were most important to her at a given time" (Reflective journal, 22 September 2021). This implies that the participants' focus was apparently directed on their priorities at the time, and not on the priorities of others, indicating their attempt to cope by not using their energy on less important activities.

4.3.2.3.2 *Sub-theme 3.2: Conscious disengagement*

The participants indicated that they had made conscious decisions to disengage from activities and/or thought processes that could compete with their ability to or focus on the effective management of stress and adversity as a result of the COVID-19 pandemic. Other activities, the delegation of tasks and/or a disengagement from other thought processes and activities apparently assisted the participants in being able to do so. Overall, the participants seemingly viewed it as important to detach themselves, saying, “[It was important] not to get entangled in this bubble in which we are living now” (P1.5, Section 177). In this regard, one of the participants explained that she had made a conscious decision to use technology only when needed and disengaged from this activity during other times, saying that she “only used technology for academics” (P1.3, Section 31). However, another participant seemingly valued being involved in technology-related activities, saying that by becoming part of a technology committee, “it also took my mind off other things” (P1.5, Section 170).

Closely aligned, the participants indicated that they tended to filter what they listened to and would, for example, switch “off Jacaranda¹⁸, just, when I knew it was time for the traffic report, quickly switched it on” (P4.1, Section, 9), or ignore conversations in the media, responding with, for example, “Say no ... don’t tell me” (P4.1, Section, 64). Suppression of the opinions of and debates among others to support their own coping were related to conscious disengagement, according to the participants. In this regard, a participant stated, “The more people you ask, the more opinions you get and the more mixed up you become” (P4.1, Section 57), and that she furthermore “did not get caught up in arguments with people” (P4.1, Section, 59).

Other examples of how the participants disengaged from certain situations to cope are captured in contributions such as, “To get through this day, put up your feet, drink your wine and literally let go” (P1.2, Section 61), “See past the negative things” (P1.5, Section 174), and, “So I don’t have to think about it so much” (P4.2, Section 13). One of the participants disclosed that he “suddenly got heaps and heaps of more responsibilities this year and it actually placed me where I don’t micro-manage as I previously did” (P1.4, Section 92), thereby disengaging from added responsibilities that may have hindered his ability to cope. On a personal level, another participant referred to avoiding people who seemed negative,

¹⁸ A local radio station in South Africa.

saying, “The negative people one tried to push away quickly” (P1.1, Section 199) in an attempt to consciously disengage from added stress.

Closely related, the participants indicated that they “found someone with whom I did not discuss school matters” (P2.2, Section 6.2), thereby pointing to the importance of engaging with people who would probably not add to the stress they were experiencing during certain times. In this regard, I reflected as follows, after one of the focus groups: “Participant P2.2 indicated her tendency to engage in conversations that allowed her to disengage from work-related conversations in an effort to cope better” (Reflective journal, 28 September 2021). In line with this, I reflected on a comment by P1.3 who presented a similar seriousness when referring to the fact that she avoided (ghosted) people on the phone during this time in the following way: “From what I can gather, P1.3 seems to have avoided the further emotional drain of being on her phone to improve her coping with the already exhausting challenges associated with the pandemic” (Reflective journal, 22 September 2021).

It appears as if the participants deliberately relied on conscious disengagement by also suppressing certain thoughts and activities, while engaging in other activities that could potentially occupy their mental and physical energy and prevent them from effectively coping with the challenges they faced as a result of the COVID-19 pandemic. Therefore, in addition to avoiding and disengaging from certain conversations, thoughts and activities, the participants consciously avoided any situation that could prevent them from coping effectively.

4.3.2.4 Theme 4: Restraint coping

This theme relates to the tendency of the participants to wait for an appropriate opportunity to deal with the stressors and adversities they faced due to the COVID-19 pandemic rather than merely employing efforts to cope, without doing the necessary planning. In this regard the participants seemingly held back during the initial phases of change due to the circumstances being out of their control. Acceptance of the changes followed, with the participants attempting to remain calm about the sudden changes and challenges they experienced. The *a priori* assumption that applies to this theme indicates that restraint coping includes “waiting until the appropriate opportunity to act”, “holding oneself back”, “not acting prematurely” and entails “an active coping strategy in the sense that the person’s behavior is focused on dealing effectively with the stressor, but it is also a passive strategy in the sense that using restraint means *not* acting” (Carver et al., 1989, p. 269). The two

sub-themes that I identified accordingly relate to the participants accepting the situation for the time being, and to their attempting to remain calm.

4.3.2.4.1 Sub-theme 4.1: Accepting the situation for the time being

The participants indicated that they simply accepted some of the challenges they faced during the initial phases of the pandemic, deciding to act upon these challenges at a better suitable time. In this regard, the participants noted that it was necessary to “accept it as it is” and to “take it as it comes and the outcomes will be exactly the same” (P2.3, Section 39), thereby indicating the tendency of initially simply accommodating the changes related to the pandemic within their lives and then dealing with these at a later stage, when they felt ready to do so. One of the participants explained this coping strategy in the following way: “One gets to a point where you say, do you know, just let go ... you realise that the time has come for you to stand back ... you have to stand back” (P4.2, Section 17).

In this regard, the participants seemingly also became aware of the various avenues to coping, or of the fact that “there are many ways to cope,” yet emphasised that “time helped tremendously” to accept the changes (P1.1, Section 188) and to deal with the stressors in a timeous manner. In this way, the participants apparently utilised their increased available time outside the school as a resource for coping.

By accepting the challenging situation for the time being, the participants employed a passive strategy of not acting on the stressor directly but rather focusing on things they never had time for. These included, “small tasks for which one doesn’t always have time during a term or during holiday time” (P3.3, Section 54), “where one never had time, just to read a while and be lazy” (P3.1, Section 56), doing “things we never have time for under normal circumstances” (P3.4, Section 62) and “now had a little more time for” (P3.2, Section 60). By channelling their energy to other activities that they seemingly never had time for rather than focusing on coping with the immediate challenges they faced, the participants reportedly experienced a sense of peace. In explaining this, one of the participants said the following: “Peacefulness that one had during lockdown that you could feel, gosh, but there is actually a life as well” (P3.1, Section 103). In confirmation, I reflected as follows: “The participants seemingly felt at peace with the acceptance of the challenging situation for the time being” (Reflective journal, 30 September 2021).

According to the participants, they “lived a day-to-day existence” at the time, believing that “cope [coping] was just to wait” (P5.1, Section 14). This act of passively waiting implies that

they did not act prematurely but waited for the opportune moment to act and deal with the sudden change and challenges they faced. The participants summarised their initial reaction of simply accepting the situation for the time being in the following ways:

- ❖ “... what must happen, has to happen ... you must take what comes to you” (P4.2, Section 13).
- ❖ “I learnt to live with it” (P3.1, Section 73).
- ❖ “... we carry on” (P4.3, Section 68).
- ❖ “You could not afford to be disappointed about it” (referring to changes) (P1.4, Section 44).

From the above-mentioned contributions, it seems as if the participants' acceptance brought about an experience of relief, especially with regard to them fulfilling their teaching duties, within the uncertain times associated with the COVID-19 pandemic. They appeared to have experienced a sense of solace upon acceptance of the situation and the challenges the pandemic implied, and seemingly felt comfortable in waiting to deal with the challenges at a more appropriate time. In this regard, the participants stated, “We just carry on, one makes peace” (P3.5, Section 76) and, “Afterwards, it didn't bother” (P2.1, Section 18) them to accept that their working requirements had, for example, been amended. One of the participants summarised her experiences as follows: “It is okay not to switch on my computer today and fiddle around with work ... tomorrow is another day, we'll handle it when I feel stronger again and able to handle it” (P2.3, Section 22).

In summary of this sub-theme, I include the following contribution of a participant during one of the last focus groups:

But, yes, just to relax and to know, I don't have to and I cannot control everything. I am also not going to control everything. Just go with the flow. So, I think in a way it's just to let go and to be in the moment. When everything works out, you take it and carry on. But at other times, you can't. I think it's that notion that you cannot control everything ... but then you just realise that you can't do anything about your situation, you just have to be, there, there. As soon as it changes, you carry on ... one has to realise you cannot control everything ... if you can't do anything about the situation, either leave it or just go with it. I do, however, think this was a way of saying, you know, you can do nothing now, so I (the world) am forcing you. It's as if the world said, I am forcing you to relax (P5.3, Sections 31 and 36).

In making sense of the way in which the participants seemingly accepted their changed situation shortly after the outbreak of the COVID-19 pandemic, I reflected as follows:

I experienced some confusion at first about the participants' need to come to terms with, in other words to accept the situation, as opposed to their urge to control their environment through, for example, planning and maintaining a routine. Yet, as I closely reviewed what was said, I became aware of the likelihood that they merely attempted to maintain some level of control over that which they could, while they additionally made use of acceptance as a way of coping with that which were out of their control (Reflective journal, 7 October 2021).

Therefore, amongst various other strategies, the participants apparently coped by accepting the situation for the time being and holding off on immediately doing something about the challenges they faced when realising that the factors were out of their control during the time. Within this process of acceptance, the participants subsequently appeared to experience a sense of relief and comfort, allowing them to use the added time in other ways in support of their coping.

4.3.2.4.2 Sub-theme 4.2: Remaining calm

The participants seemingly also implemented the cognitive strategy of remaining calm in a challenging situation and not acting prematurely when having to deal with the challenges implied by the COVID-19 pandemic. Responses such as the following serve as examples of the participants' implementation of this coping strategy:

- ❖ "... it doesn't help to stress about everything now" (P1.1, Section 188).
- ❖ "... you have to remain calm throughout. You must keep your cool" (P2.2, Section 16).
- ❖ "... going to enter calmly and accept it as it is" (P2.3, Section 39).
- ❖ "... now I have to take a deep breath" (P4.2, Section 17).

The participants therefore apparently did not deflect or deny the need to cope; they simply focused on understanding how to do so within an appropriate timeline while remaining calm due to them not being in the position to change the situation they were facing. In reflecting on statements such as these made by the participants (in conjunction with the other sub-theme discussed), I related the strategies employed by the participants to teacher resilience. To clarify, I noted that the participants apparently relied on intrapersonal factors, including self-regulation and cognitive strategies, in support of their coping with the challenges implied by the COVID-19 pandemic. I namely noted the following: "It seemed that remaining calm in a situation might be the physical and emotional response to the cognitive process of accepting what cannot be changed" (Reflective journal, 30 September 2021). As such, the participants' reliance on remaining calm during the time of the pandemic might not only have

supported their resilience at the time, but might similarly be relied on when having to cope with challenges in the future.

4.3.2.5 Theme 5: Seeking out instrumental social support

In seeking for instrumental social support, the participants seemingly reached out to others, or had the need to do so for advice, to discuss work, or obtain support in terms of their personal wellbeing. The *a priori* assumption that applies to this theme stipulates that individuals will seek “advice, assistance or information” (Carver et al., 1989, p. 269) when implementing this coping strategy.

4.3.2.5.1 Subtheme 5.1: Seeking advice or information

The participants reportedly relied on the strategy of seeking trusted advice and guidance from others to cope with the challenges they faced. One example of how the participants put this strategy into practice is demonstrated by the fact that they created WhatsApp groups to engage with one another, share and seek advice or information from peers, and discuss working arrangements and plans. In addition, the participants relied on online platforms for discussions with others that could assist and guide them. For example, they explained that they “tried to once a week arrange a Teams¹⁹ meeting, so that we as heads of the grade could talk to each other, besides talking to our friends and colleagues at school ... co-operation was very important” (P3.1, Section 24).

In elaboration, another participant referred to the purpose of such online discussions in terms of shared experiences and feelings, saying, “We arranged a weekly meeting to say, listen, all of us are feeling slightly lost, all of us reach a point where we say, I am not sure any more ... then we started to arrange meetings more often ... academically, it has helped” (P1.3, Section 31). Similarly, another participant focused on obtaining feedback from and bouncing ideas with others during these encounters, explaining, “Follow up and say, listen, this is approximately where I am ... you just compare yourself with someone else, or yes, just get some more inputs, to hear, listen here, how do you feel about this ... and then the worst is, the answer is ... I felt just the same” (P1.3, Section 28). Another participant concurred and stated, “Everyone sat together to do their tasks ... our grade sat together every day, outside in the sun and conversed and spoke about what we had to do, what was

¹⁹ Digital platform used for virtual meetings.

important ... I saw more of how she did ... and all of us could contribute to it" (P1.1, Section 59).

From these examples, it is clear that the participants relied on interaction with peers (both in person and/or virtual) to deal with the teaching-related challenges they experienced as a result of the COVID-19 pandemic. In addition, the participants reportedly relied on interaction with peers when experiencing medical uncertainties and seeking associated advice or guidance. In this regard, a participant, for example, explained that she received guidance when "someone else tells you what works for him or her" (P1.3, Section 31), to manage some of the challenges experienced at the time. Other participants similarly declared that they "used each other as a sounding-board" (P3.2, Section 18) and that "people opened up more and sound-boarded with each other" (P4.1, Section 31). In this regard, I noted the following during one of the focus groups: "Participants elaborated on the realisation of supportive relationships both in terms of planning to handle challenges and the value of sound-boarding with colleagues, friends and family" (Field notes, 4 October 2021).

However, some of the participants indicated the tendency to more strongly rely on professionals for advice, as captured in the following contribution: "I chose to put questions that I had about COVID-19, to one specialist only and that's all" (P4.1, Section 57). As such, it seems clear that the participants relied on friends as well as professionals to seek work-related, personal and medical/health-related information and advice in support of their efforts to cope with the COVID-19 pandemic. As part of my reflections, I noted the following about this result:

Participants' seeking social support, in many cases, was driven by the need for clarity (advice and information) as opposed to mere social interaction. Although some participants appeared to value social interaction, others indicated to avoid such interaction. After analysing this, I realised that the social interactions that they avoided were those that were perceived in a negative light; drawing from their energy to cope within a situation that already required of them to cope (Reflective journal, 7 October 2021).

4.3.2.5.2 Sub-theme 5.2: Relying on relationships with significant others

The participants by implication relied on relationships to cope by seeking the assistance of others in the form of information and the mental energy to carry on during the trying times as well as of support and guidance on both personal and professional levels. The significant relationships they reportedly relied on included those with family members, life partners and colleagues. In this regard, a participant explained that the deepening of family relationships "has enabled me to move forward" (P4.2, Section 15), thereby explaining her coping during

the COVID-19 pandemic. Other participants shared this view, highlighting the importance of close relationships and support by others, as evident in the following contributions:

- ❖ "... the partner with whom you are, has a very big influence on who you are and how you've experienced the whole matter" (P2.1, Section 3).
- ❖ "I found my joy in my children and my husband and plugged into them a bit and I almost want to say, stole some of their energy – positive energy" (P2.3, Section 22).
- ❖ "My partner has however had an enormous impact on how I experienced it because I had an outlet all the time, just to say, this is what I feel like, this is how I don't feel, I hate it, I like this, this is horrible. I could share my feelings" (P2.1, Section 3).
- ❖ "I was constantly in contact with my friends and loved ones ... I was technologically in contact, actually constantly with my friends and family, contributed to it" (P1.4, Section 44).
- ❖ "... if it weren't for my support system, my mom and dad and my sisters who lived so close to us, I would really have suffered in that hard lockdown ... I think that support of my parents and my family helped me a lot" (P5.3, Section 54).
- ❖ "... to still have contact with my family. Even telephonically, because we couldn't get there, but I could at least talk to them and hear that they are well and there were no problems" (P2.1, Section 3).
- ❖ "... really need my friends and family in my life" (P5.1, Section 79).
- ❖ "I think then one realises, time with your loved ones is very valuable and one should make time for it" (P3.5, Section 101).

In terms of the participants relying on their relationships with colleagues to cope at the time, contact with their peers seemingly resulted in the participants realising that others shared similar views and experiences, which apparently added to a sense of coherence. In this regard, I noted the following: "It appeared as if the participants portrayed a sense of coherence among themselves and that they shared experiences, not only on a concrete level of coping, but also on a deeper meaningful one" (Reflective journal, 30 September 2021). In support, a participant elaborated as follows: "For all of us it was actually the same, because all of us were in the same situation ... I wasn't the only one who had to teach online ... I wasn't the only one who was suddenly in this situation, it's all of us ... our big consolation was, you were never alone" (P4.3, Section 21), while others said, "Knew you were not alone in your uncertainty" (P4.3, Section 21) and "I need my colleagues" (P4.2, Section 36).

Accordingly, the participants could reportedly rely on their shared experiences to cope. This idea is succinctly captured in contributions such as, “The burden that you have to carry ... so much lighter, because you are not carrying it alone” (P4.3, Section 23), “Colleagues have also supported one another tremendously throughout this difficult time” (P4.4, Section 29), “We carried and also supported one another” (P3.1, Section 91), and “Played an important role to create a feeling of community” (P5.1, Section 16). All these excerpts attest to the participants’ reliance on peer relationships as supportive coping strategy.

The participants’ interactions with their colleagues also appeared to have motivated them, as captured in the following excerpt: “If you felt you did not know how you would go forward, a chat with a colleague always made you feel better ... just to see all of us go through the same fears carried us through this time” (P4.4, Section 29), which reportedly resulted in them experiencing “some relief” (P4.1, Section 33). Another participant elaborated on the drive for discussions with peers, saying, “Staff members look(ed) each other up, you chat, you joke and you tell and make up stories” (P1.3, Section 168). Similarly, another participant indicated that “there was an unbelievable energy between the teachers” (P4.2, Section 75), which appeared to facilitate and support the coping of the participants who engaged in interaction and relied on their relationships with colleagues. It therefore seems clear that an experienced sense of trust, belonging and unity between the participants supported their coping during the challenging time associated with the COVID-19 pandemic.

Moving outside their work circle, the participants emphasised the importance of people in general standing together and being there for one another. For example, they remarked, “People just helped each other” (P2.1, Section 43), and, “Within this worldwide pandemic, it almost grouped all human beings together and one saw how other people coped” (P4.2, Section 13). The value of relying on relationships with others was related to fellowship and community, as evident in the following excerpt: “I can see that a number of us are standing together, I think that what we could mean to each other and how we could give each other hope, was a strong coping mechanism in our situation” (P3.2, Section 16). Following one of the focus groups, I noted in this regard, “Some participants seem(ed) to be positively influenced by a sense of support brought about by each other during the focus groups” (Reflective journal, 4 October 2021). In confirmation, the following contributions were made:

- ❖ “... your circle of friends is very important” (P2.2, Section 26).
- ❖ “... it helps to turn to people who are stronger than oneself when one feels weaker, just to hear someone else say, everything will be okay” (P2.3, Section 22).

- ❖ "... it is important to surround yourself with the right people ... so, I think, one looked in-depth at the people with whom you surround yourself" (P1.1, Section 199).

In summary, the participants thus seemingly spent time with people who could support them, relying on significant others to cope with the challenges they faced. The participants' circle of significant others apparently included family members, friends, colleagues and even the learners whom they were teaching at the time. In the words of the participants, they "realised that I definitely need people, I get my energy from people, from interaction with them" (P5.5, Section 86), "got my energy-bounce from my children, my learners ..." (P4.2, Section 36), and, "I need people, I am energised when I spend time with people ... it doesn't tire me it makes me live ... I followed up with friends ..." (P1.3, Section 106). In support of these contributions, I reflected as follows: "I feel that a focus of today's discussion was emphasising the importance of a relational component during coping with challenges implied by COVID-19" (Reflective journal, 7 October 2021).

4.3.2.6 Theme 6: Nurturing a growth mindset

This inductively derived theme focuses on the way in which the participants seemingly employed and nurtured a growth mindset by using various related cognitive strategies in support of their coping with the challenges implied by the COVID-19 pandemic. The five sub-themes I identified include the participants' tendency to engage in self-discovery and personal growth; drawing on reflective practices; maintaining self-care; nurturing spirituality; and exercising optimism.

4.3.2.6.1 Sub-theme 6.1: Engaging in self-discovery and personal growth

According to the participants, self-discovery and personal growth, which imply the development of various coping skills, supported their attempts to cope with the challenges associated with the COVID-19 pandemic. To them, this implied the possibility of their identities being strengthened in the process in terms of who they believed themselves to be. It is furthermore apparent that the participants were, as a result, able to develop additional interpersonal, intrapersonal as well as professional skills that apparently resulted in personal growth. The following contributions serve as examples:

- ❖ "... could also learn more about myself and also, learnt more patience, actually patience" (P1.2, Section 50).
- ❖ "... experienced an unbelievable development at the time" (P1.4, Section 44).

- ❖ "... discovered a lot about myself ... have now also learnt a lot about myself" (P1.2, Section 8).
- ❖ "... much self-development has taken place in this time ... you've improved yourself" (P3.1, Section 79).
- ❖ "... one grows in your personality as well as in your being" (P3.1, Section 91).
- ❖ "... actually learnt more about myself, than I've learnt in the past 33 years ... it has taught me to handle different situations" (P1.5, Section 168).

Contributions such as these highlight the possibility of cognitive processes related to self-discovery and independent learning having supported the personal growth and identity development of the participants. The participants seemingly realised this possible effect of having to cope with challenges and the growth stemming from this, as evident in the following words: "The moment when there are challenges, you know, growth and development take place" (P3.5, Section 93). Closely related and in confirmation of this statement, another participant mentioned, "It is good to have obstacles to overcome, that is what keeps you alive ... it makes you feel you are not a robot" (P4.2, Section 36).

The participants furthermore indicated the perception that they had exceeded their own expectations, making comments such as the following: "One did not know what you were capable of" (P2.2, Section 37), "You can actually cope with much more than you think you can ... you are a stronger person than you had thought ..." (P3.1, Section 91), and, "One underestimates yourself and thinks you won't be able to do it, but then it is actually unbelievable how much one learns" (P3.5, Section 76). When compiling my reflective notes, I made the following comment: "I was surprised at the level of growth experienced by the participants, which they related to them having to cope with challenges associated with the pandemic. I was especially in awe of the demonstration that the participants were to a great extent able to create meaning in relation to how they viewed themselves" (Reflective journal, 7 October 2021). The participants therefore appeared to infer value from the challenging times they had experienced, more specifically in terms of their personal development during the time, as well as their ability to cognitively respond to adversities and cope with change and the challenges they faced.

The participants indicated several intrapersonal, interpersonal and professional skills that they had allegedly relied on in coping with the pandemic. These included communication and delegation skills as well as self-regulation abilities, with some of these strategies reportedly not being used prior to the pandemic. A participant, for example, indicated that,

in coping with the work-related challenges implied by the pandemic, he was forced to “improve my communication with people ... I delegate ... communicate better about what needs to happen ... I think it has definitely improved communication” (P1.4, Sections 92, 96 and 126). In addition to these skills, the participants indicated that they had developed the skill of “self-control” (P2.4, Section 76), as well as “compassion” (P2.2, Section 89) for others as part of their own coping processes.

Besides realising the value of these skills for their own personal development, the participants demonstrated an awareness of the potential value of their personal growth and wellbeing for those around them. To be more specific, the participating teachers appeared to value the importance of their own wellbeing in the coping process to be able to support others. In this regard, they emphasised the importance of “prioritising yourself” (P1.1, Section 188) and, “despite everything ... the best person that you could be” (P5.3, Section 38), for the sake of their own coping processes as well as those around them. In summary, a participant stated, “I think the most important for me was to prioritise which was first to present the best possible you to a child” (P1.2, Section 8). In support, other participants confirmed the importance of teachers in the lives of others, as captured in the following excerpts: “We are sometimes the only positive influence they (the learners) get” (P2.2, Section 58) and, “You must remain standing” (P2.3, Section 20). As such, the participants therefore seemingly prioritised their own wellbeing in support of the wellbeing of others, implying an awareness in terms of their own development and growth as part of the coping process.

As part of their self-discovery, the participants apparently gained self-knowledge and clarity about their purpose in life. In this regard, they, for example, explained this realisation as follows: “... learnt that I will never be able to be a house-wife” (P3.1, Section 68), and “intrinsically realised ... am a born teacher” (P4.2, Section 36). In support of the last comment, I made the following field notes: “P4.3 communicated agreement on the statement made by P4.2, in terms of the realisation that she is a born teacher” (Field notes, 4 October 2021).

In summary, I present the following report by one of the participants, speaking to the aspects of personal growth and self-discovery during trying times, specifically those associated with the COVID-19 pandemic:

And one had to get out of one's comfort zone. And you had to risk and try to succeed in doing things. I think at a stage the stress levels were very high and so on, but if you've managed it, you feel like you've attained something. Yes, you

feel you've empowered yourself. You feel you've improved yourself. Things that you would not have attempted earlier, or would have looked at, you investigated and realised that you can actually (P3.1, Section 86).

4.3.2.6.2 Sub-theme 6.2: Drawing on reflective practices

The participants seemingly remained aware of their own areas of growth and personal insight through the practice of reflexivity. To them, the ability to gain and maintain perspective was related to their reflective practices. This view is captured in contributions such as the following:

- ❖ "... practice to keep the thoughts clear, gain some perspective and to break away from everything around me ... to self-talk and gain perspective" (P2.3, Section 22).
- ❖ "... it gave me lots of perspective, especially in the time that we had to be on our own and we were completely on our own" (P1.1, Section 188).
- ❖ "... personally had to spend much time with myself, and I realised what is important to me" (P1.1, Section 188).

Based on the participants' reports, it is clear that they relied on reflective practices to cope with their work-related challenges, yet also to ensure progress and success. In this regard, the participants seemingly experienced positive reframing, resulting in them adjusting their work-related activities where needed. One of the participants explained this by referring to an example in terms of a perceived discrepancy between the virtual image he portrayed and that of who he truly was. The participant said the following: "I think the image that I placed on a screen and the image I present face-to-face in class, did not correspond" (P1.2, Section 50). This participant was subsequently guided by reflective practice to adjust his working style to address the apparent discrepancy. In support of this experience, another participant regarded the action of "reflecting on where we are" (P1.3, Section 31) as important for the facilitation of academic success, which allegedly formed part of their coping process.

Therefore, the participants seemingly utilised reflective practices to support their coping efforts during the COVID-19 pandemic, not only reflecting on their acts and values, but also on their role in the teaching context and as part of a team. The participants apparently valued the practice of reflection following their perceived ability to cope with the pandemic, implying the possible use of this cognitive strategy when having to cope with challenges in the future. One of the participants provided his conviction by, for example, stating that he "believes if one could get through this year-and-a-half, two years, then what lies ahead will be fairly easy ... we have learnt to start from nothing" (P1.5, Section 168).

As part of my own process of researcher reflection, I captured the following related views:

The willingness of the participants to demonstrate vulnerability was refreshing in an uncertain time where individuals aimed to overcome COVID-19-related challenges. The ability of the teachers to be open to their own reflective processes not only during the online participatory focus groups, but also during their personal cognitive coping processes was admirable (Reflective journal, 7 October 2021).

4.3.2.6.3 Sub-theme 6.3: Maintaining self-care

The participants reported that they also relied on the strategies of setting healthy boundaries, developing life-skills, partaking in hobbies and maintaining healthy lifestyle habits to cope with the challenges implied by the pandemic. These strategies imply a focus on self-care, which according to the participants, would remain priority to them in future. One of the participants, for example, remarked, “Self-care to me is actually a point on which I keep a close eye now” (P3.1, Section 103), with another saying, “Self-care ... good for our health” (P3.4, Section 112). Overall, the participants thus appeared to realise the importance of practising and maintaining self-care to cope with not only the challenges they faced as a result of the COVID-19 pandemic, but also with other challenges they could be facing in future.

As indicated, one of the self-care strategies that the participants reportedly relied on in support of their coping with the challenges implied by the pandemic relates to healthy eating habits and making use of supplements to augment these habits. In this regard, the participants indicated that “COVID caused us to also look at our health ... one inevitably has to start looking at what you are putting into your body, you look at what you eat, how often you eat ... in a positive way, people also started looking at their own health” (P1.5, Section 193) and, “We also started eating healthy” (P4.2, Section 49), thereby highlighting their tendency to better attend to their own health during this challenging time. In alignment with these health-related self-care strategies and attempts to attend to one’s own health, a participant declared, “I now get a B-complex injection ... every two weeks” (P2.1, Section 24). It therefore appears as if the participants came to the realisation that the maintenance of healthy eating habits would not only support their coping during the COVID-19 pandemic, but was necessary to continue with in support of their coping and general wellbeing in future.

In addition to healthy eating habits, the participants emphasised their reliance on physical activity in having to cope during the COVID-19 pandemic. Accordingly, the participants indicated to have “coped with the whole COVID by beginning to jog and it was my outlet”

(P1.5, Section 168), and, “For me, P1.5, it was also to exercise” (P1.3, Section 191). Another participant similarly indicated, “It is just jog, exercise ... I am a member of a running club ... they gave us a challenge every week ... during the hard-lockdown for me personally it was very good, because it motivated me to keep on running ... jogging, it is my sanity” (P3.1, Section 48), thereby highlighting the benefits of physical exercise at the time. Similarly, another participant declared that she made “a point of it to exercise, to jog or so” (P2.3, Section 65).

Contributions such as these emphasise the value that the participants seemingly placed on physical exercise as part of their coping process. In confirmation of these reports, I noted the following: “The participants discussed jogging as a coping strategy” (Field notes, 22 September 2021) and, “... participants relied on self-care; one in particular seemed to have made progress in terms of physical health by starting to jog ...” (Field notes, 22 September 2021).

In terms of the benefits experienced as a result of physical activity and exercise, the participants referred to such activities serving as an outlet of energy and also as a way to improve one’s condition. They made the following comments: “One actually builds yourself up”; “I started playing tennis” (P1.1, Section 188) and, “went for long walks every morning ... it was good and pleasant exercise ... any physical exercise; it is an excellent outlet for any person” (P3.2, Section 52). Based on these indications by the participants, it appears as if a strong reliance on various types of physical exercise supported their coping during the pandemic, with them seemingly holding the view that continued exercise may in future similarly facilitate coping during difficult times.

In addition to physical activities, the participants reportedly engaged in some other recreational activities during the COVID-19 pandemic as part of the coping strategies they employed. One example of such a recreational self-care activity was mentioned by a participant when referring to taking time for “that cup of coffee” (P2.1, Section 68). Participants furthermore reportedly engaged in practising hobbies and other recreational activities such as reading, cooking, doing needlework or singing in a choir. In the words of the participants, “just to read a while and be lazy”, “trying new hobbies or trying out new recipes”, “to do something that is relaxing because, do you know, it’s good for the soul because, you know to make time to paint or to sew ... are what I felt add that value to my life” (P3.1, Sections 56, 58 and 103), and “I coped by attending choir every week” (P5.1, Section 14). In confirmation, another participant stated, “I read a lot, that I thoroughly

enjoyed” (P5.5, Section 60), whilst others referred to activities such as gardening (P3.2, Section 60 and P3.4, Section 62) and cooking (P3.1, Section 58). As such, it seems clear that the participants engaged in various recreational activities and hobbies in support of their efforts to cope during the COVID-19 pandemic.

In addition to eating healthily and making use of healthy supplements, engaging in physical activities and exercise, and taking up hobbies/recreational activities as self-care strategies, the participants apparently attempted to remain cognisant of how they were spending their time to ensure that their actions would support their own wellbeing and coping efforts. The participants namely tended to set healthy boundaries for themselves in terms of the activities they engaged in and with whom they shared information. They noted the importance of investing time in oneself to cope with challenges, making remarks such as the following: “Just taking time for yourself” (P2.2, Section 26). Another participant concurred by stating, “You had to set new boundaries ... one must know what is comfortable for you, permissible for you as a person ... you have to set boundaries and be sensitive to each one’s experience of the whole COVID situation” and further, what “I [she] had to learn was to set boundaries and to say no” (P2.2, Sections 16 and 26). Closely related, the participants seemingly started to set boundaries with whom to share personal matters after becoming aware of the fact that “some people do not understand one like others do” (P2.2, Section 46).

In summary, it appears as if the participants employed various cognitive strategies in support of their own self-care and ultimate efforts to cope during the COVID-19 pandemic. They seemingly realised the value of relying on self-care strategies (such as healthy eating habits, physical activity, recreational activities and hobbies, as well as setting healthy boundaries) not only during the pandemic, but also in future when having to cope with challenges.

4.3.2.6.4 Sub-theme 6.4: Nurturing spirituality

The participants indicated that they relied on religious practices and strategies to assist them in their efforts to cope with the challenges implied by the COVID-19 pandemic. Following one of the focus groups, I noted the following: “It stood out for me that an emphasis on spiritual resources in coping was present in today’s group” (Field notes, 4 October, 2021). To be more specific, it appeared as if family values, a value orientation, traditional habits, resilience in terms of heritage/cultural identity, purpose, and meaning-making all contributed to the spiritual dimension of the participants’ coping during the COVID-19 pandemic.

When referring to the religious practices they relied on, the participating teachers mentioned activities such as prayer, having Communion and engaging in quiet time. The following contributions serve as examples: “We made it very practical; on Sundays we have Holy Communion” (P4.2, Section 47), “We prayed a lot” (P4.1, Sections 6) and, “Quiet time has also always been important to me” (P2.1, Section 24). In confirmation, another participant demonstrated her reliance on religious practice as well as the value that she placed on faith in support of coping and a purpose in life in the following way: “In the morning, for my quiet time, to get that Spiritual injection into my day and to say to myself ... He believes in me and my ability to cope ... I do in fact serve a purpose where I am” (P2.3, Section 22).

It appeared as if the participants viewed their religion and religious orientation as a way of life that could support them during any challenging time. To this end, a participant, for example, emphasised, “My faith in God has been my anchor ... I realised how deeply anchored my faith was” (P4.2, Section 13), and later on, “It was a way in which to ground myself” because “one receives strength from the Word of God” (P4.2, Section 36 and 51). Another participant foregrounded the importance of a relationship with the Lord, saying, “I live to have a relationship with the Lord ... that is priority in my life ... that is first to me and it gave me security in a time when there was no security” (P1.4, Section 44). In further support, the participants related coping to “the religious part ... you can bring it back to faith” (P4.3, Sections 21 and 23), saying that it was “definitely my faith” (P2.2, Section 26) that sustained coping, and “that is the way in which we now cope ... I depend heavily on my faith” (P4.2, Section 49). It therefore seems apparent that the participants relied on a deep and meaningful connection in terms of their religious orientation when having to cope with the pandemic, with this being a cornerstone for their coping efforts.

In addition to valuing the personal dimension of religion and spirituality, the participants apparently realised the value of being thankful for their family and traditional habits in the challenging time of the pandemic. In this regard, the participants indicated, “I am thankful for this time” (P3.2, Section 88), and, “Lockdown was one of the best things that could have happened in our family ... we also learnt so much about each other” (P1.2, Section 46). In support of this view, another participant referred to “resilience that one should transfer to the children” (P3.5, Section 109), demonstrating the possibility of transferring personal experiences to children. I captured the following reflection after the focus group during which this contribution was made: “I perceived a sense of pride, passion and conviction from P3.5 while she was speaking. It appeared as if she was speaking from the heart and from a belief in the importance of teaching children how to demonstrate resilience” (Reflective journal, 30

September 2021). In confirmation of their reliance on spirituality, another participant indicated, “God made human beings so that we have a mechanism to go into second gear and pull through ... our forefathers walked over the Drakensberg” (P4.2, Section 13). The same participant noted, “One falls back on ways in which you were brought up” (P4.2, Section 53), thereby referring to their cultural background and tendency to rely on traditional habits when having to cope with adversity, as in the case of the COVID-19 pandemic.

In addition to valuing their cultural roots, the participants appeared to find meaning and value in their working context, and more broadly, their general existence. To this end, a participant explained how she had experienced meaning in her work by emphasising that teachers “focus on the children ... its more on the children, to help them and support them ... then you feel you are there for a reason” (P3.1, Section 2). In line with this view, a participant from another focus group shared the experience of being made aware of the overall value orientation of life, saying, “It jerked us back and showed us the important things in our lives” (P5.5, Section 86).

In reflecting on this sub-theme and the way in which the participants seemingly relied on spirituality to be able to cope, I documented the following ideas:

During the focus group, the impression was that an emphasis was placed on the value of religion and spirituality of and among participants. Coherence among participants’ significant others seemed conspicuous and a sense of cultural identity appeared to support the value they experienced and placed on their spirituality (Reflective journal, 4 October 2021).

4.3.2.6.5 Sub-theme 6.5: Exercising optimism

The participating teachers seemingly reframed the challenges that they were facing to support positive and/or realistic perspective-taking during their coping efforts, “such as employing a positive mindset” (Field notes, 30 September 2021). It appeared as if humour and hope formed part of the cognitive strategies that reinforced the optimism and growth mindset of the participants. The participants’ belief in optimism and hope is captured in contributions such as “one realises, it doesn’t help I am now stressed about something ... it is not going to help” (P1.1, Section 188), “to see the positive side ... to focus on the positive circumstances” (P2.3, Section 22), and “positive thoughts” (P4.1, Section 11). In terms of their reliance on humour during the coping process, one of the participants remarked the following: “Staff members ... joke[d] and you tell and make up stories” (P1.3, Section 168).

As such, the participants' apparent ability to reframe a challenging situation and focus on the positive aspects thereof seemed to have supported their coping ability. To this end, a participant noted, "You were also forced to look at the situation in other ways, or, to handle situations differently ... you are forced to acquire a new way of thinking, doing and learning ... you had to think differently" (P5.3, Section 31) during the coping process. Similarly, the participants indicated, "It is not always as bad as you had anticipated it to be" (P3.1, Section 91) and that one should "focus on the truth and the positive side" (P4.3, Section 23). In elaboration, the participants declared the importance of "just choose to see the positive, not to totally dismiss the negative, not to shove the negative aside, but to keep your focus on the positive" (P4.3, Section 23), "to remain positive" (P3.5, Section 109), and being "an eternal optimist, so I always want it to turn out well" (P3.2, Section 105).

In addition to the aforesaid, the participants apparently drew some motivation from a focus on hope during challenging times. In this regard, the participants pointed out, "What keeps us going in a way, is the hope that it can change again and normalise" (P2.3, Section 70). As such, it seemed as if the hope of normality following the COVID-19 pandemic served a motivational purpose for the participants to cope during this trying time. This view is captured in the following contribution of one of the participants: "I think the most important is, even if things become difficult and even if one goes through a difficult time, you have to, as far as possible, try and stay positive ... I enjoy the song very much; Bob Marley's *Three Little Birds*, where he says, 'every little thing, is gonna be alright'" (P1.5, Section 206). In confirmation I reflected as follows:

The participants painted a picture for me that, even though the unprecedented challenges appeared continuous, they endeavoured to find ways on a mindful and cognitive level, and decided to remain optimistic about their perspectives and general outlook on life. It appeared as if participants made conscious decisions to employ cognitive strategies to promote resilience and to flourish, not only as teachers, but as individuals with a positive role to fulfil within the systems that they function in (Reflective journal, 7 October 2021).

4.4 INTEGRATION OF QUANTITATIVE AND QUALITATIVE RESULTS

In Table 4.10 below, I present an overview of my integration of the quantitative results and the themes and related sub-themes derived from the qualitative data (consult Appendix M). More specifically, I present the items related to the scales of the COPE Inventory (associated with the quantitative phase of my study) in the first column of the table and integrate the themes and related sub-themes (associated with the qualitative phase of my study) in the

second column of the table. This overview serves as a background to my discussion of the findings that follow in Chapter 5.

Table 4.10

Overview of integration of quantitative and qualitative results

ITEMS OF THE COPE INVENTORY (Carver, 2013; Carver et al., 1989)	CORRELATING THEMES AND SUB-THEMES
Active coping	Theme 1: Active coping
Item 1: Focused efforts to do something about the problem	Sub-theme 1.1. Keeping busy and doing tasks Sub-theme 1.3. Acquiring new skills
Item 2: Taking additional action to remove the problem	Sub-theme 1.1. Keeping busy and doing tasks Sub-theme 1.2. Adapting to changed circumstances
Item 3: Taking direct action to get around the problem	Sub-theme 1.1. Keeping busy and doing tasks Sub-theme 1.3. Acquiring new skills
Item 4: Do what has to be done, one step at a time	Sub-theme 1.1. Keeping busy and doing tasks Sub-theme 1.2. Adapting to changed circumstances
Planning	Theme 2: Planning
Item 1: Making a plan of action	Sub-theme 2.1. Taking things one step at a time Sub-theme 2.2. Maintaining a routine Sub-theme 2.3. Staying in control of what is possible
Item 2: Trying to come up with a strategy about what to do	Sub-theme 2.1. Taking things one step at a time Sub-theme 2.2. Maintaining a routine
Item 3: Thinking about how to best handle the problem	Sub-theme 2.2. Maintaining a routine Sub-theme 2.3. Staying in control of what is possible
Item 4: Thinking hard about what steps to take	Sub-theme 2.1. Taking things one step at a time Sub-theme 2.3. Staying in control of what is possible
Suppression of competing activities	Theme 3: Suppression of competing activities
Item 1: Keeping oneself from getting distracted by other thoughts or activities	Sub-theme 3.1. Prioritising what is important at the time Sub-theme 3.2. Conscious disengagement
Item 2: Focusing on dealing with the problem, and if necessary, letting other things slide a little	Sub-theme 3.1. Prioritising what is important at the time Sub-theme 3.2. Conscious disengagement
Item 3: Trying hard to prevent other things from interfering with one's efforts to deal with this	Sub-theme 3.1. Prioritising what is important at the time
Item 4: Putting aside other activities to concentrate on this	Sub-theme 3.1. Prioritising what is important at the time Sub-theme 3.2. Conscious disengagement
Restraint coping	Theme 4: Restraint coping
Item 1: Refraining from doing anything too quickly	Sub-theme 4.1. Accepting the situation for the time being Sub-theme 4.2. Remaining calm

ITEMS OF THE COPE INVENTORY (Carver, 2013; Carver et al., 1989)	CORRELATING THEMES AND SUB-THEMES
Item 2: Holding off doing anything about it until the situation permits	Sub-theme 4.1. Accepting the situation for the time being Sub-theme 4.2. Remaining calm
Item 3: Making sure not to make matters worse by acting too soon	Sub-theme 4.1. Accepting the situation for the time being Sub-theme 4.2. Remaining calm
Item 4: Forcing oneself to wait for the right time to do something	Sub-theme 4.1. Accepting the situation for the time being Sub-theme 4.2. Remaining calm
Seeking out instrumental social support	Theme 5: Seeking instrumental social support
Item 1: Trying to get advice from someone about what to do	Sub-theme 5.1. Seeking advice or information
Item 2: Talking to someone to find out more about the situation	Sub-theme 5.1. Seeking advice or information Sub-theme 5.2. Relying on relationships with significant others
Item 3: Talking to someone who could do something about the problem	Sub-theme 5.2. Relying on relationships with significant others
Item 4: Asking people who have had similar experiences what they did	Sub-theme 5.1. Seeking advice or information Sub-theme 5.2. Relying on relationships with significant others
	Theme 6: Nurturing a growth mindset*
	Sub-theme 6.1. Engaging in self-discovery and personal growth Sub-theme 6.2. Drawing on reflective practices Sub-theme 6.3. Maintaining self-care Sub-theme 6.4. Nurturing spirituality Sub-theme 6.5. Exercising optimism

*Inductive theme and related sub-themes

4.5 CONCLUSION

In this chapter I presented the statistical and thematic analysis of the data. I presented the quantitative results graphically and in tables, in support of my explanations of the data captured in these presentations. Throughout, I relied on the scores obtained from the descriptive statistics and the Spearman correlation coefficient test to indicate the correlation between the respective variables (cognitive strategies and resilience). In the next section of the chapter, I presented the qualitative results in terms of the five themes and sub-themes derived from the deductive phase of qualitative data analysis as well as the theme and related sub-themes stemming from the inductive analysis I completed. I concluded the chapter with a brief introduction to my integration of the quantitative and qualitative results I obtained.

In the next chapter I interpret the results of the study by relating them to existing literature after explaining the link between the quantitative and qualitative results in more detail. In my

discussion of the findings, I focus on correlations and contradictions when comparing the results of the current study with existing literature. I also identify silences in the data and foreground new insight that stems from the study.

CHAPTER 5: FINDINGS OF THE STUDY

5.1 INTRODUCTION

In the previous chapter I presented the quantitative and qualitative results of my study. I made use of graphical summaries and tables to supplement the discussion of the quantitative results. Hereafter, I presented the themes and sub-themes that I identified during the thematic analysis of the qualitative data, and included excerpts from the data to enhance my discussion.

In this chapter, I discuss the findings of the study. For this purpose, I commence by integrating the quantitative and qualitative results. In addition to discussing my synthesis of these results, I relate and interpret the findings of my study to the relevant existing literature. As part of my discussion, I highlight correlations and contradictions between the results of my study and those captured in the existing literature. I also identify silences in the data and foreground new insights stemming from the current study.

5.2 INTEGRATED DISCUSSION OF THE FINDINGS

I structure my discussion of the findings in this section according to the framework followed in Chapter 4. I commence each section by discussing the correlation between the results obtained on the COPE Inventory items and the ARM-R (total resilience measure) as indicated by the Spearman correlation coefficient, foregrounding the strength and direction of the correlation and indicating whether the correlation is significant or not. Next, I explain, clarify, interpret, refine and/or expand these results by making use of the qualitative themes and sub-themes I presented in Chapter 4, also indicating how the results of the COPE Inventory and ARM-R correlate with the qualitative results. Throughout, I interpret the results of this study against the background of existing literature and situate the findings within my conceptual framework.

5.2.1 Actively coping with the challenges implied by the COVID-19 pandemic

The Spearman correlation coefficient indicates a positive correlation between active coping and resilience. This correlation tested significant, implying that, as active coping increases or decreases, so does resilience. Similarly, as resilience increases or decreases, so does active coping. To this end, the results of the deductive thematic analysis confirm that the

participants used active coping to manage the challenges they experienced as a result of the COVID-19 pandemic. The participants namely took the following active steps to deal with the challenges they faced: keeping busy and doing tasks, adapting to changed circumstances, and acquiring new skills.

5.2.1.1 *Keeping busy and doing tasks*

The participants initiated direct action in response to the challenges they experienced by staying busy with, for example, household tasks. In this way, they supported their coping by being busy. These findings of actively coping by doing things and keeping busy are supported by the work of authors such as Bonanno and Mancini (2008), Bonanno et al. (2015), Masten (2014), Naidu (2021), PeConga et al. (2020), Theron (2020) as well as Wuest and Subramaniam (2021) who similarly report that resilience, which is implied by coping, is demonstrated through active problem-solving, doing what is necessary, and demonstrating perseverance skills and persistence in the face of adversity.

Similarly, Bonanno (2004), Coetzee et al. (2017), Masten (2001) as well as Ungar and Theron (2020) indicate that resilience can be enhanced by making use of ordinary and everyday resources. Closely aligned, a response analysis of the items on the active coping scale of the COPE Inventory indicates that the participants in my study in general relied on this cognitive strategy by concentrating their efforts on attempts to do something about the challenges they faced during the time of the COVID-19 pandemic, and/or by taking additional and/or direct action to address these challenges. In further support, Theron et al. (2021) found that individuals tended to engage in a range of activities and keep themselves busy during the pandemic to cope with the challenges they experienced. Active steps were therefore taken to alleviate the effect of the challenges associated with the pandemic and, as confirmed by Wuest and Subramaniam (2021) as well as Carver et al. (1989), affect the outcome thereof.

Even though only one of the participants indicated that she actively coped by overeating, this coping strategy is indicated by both Lee et al. (2021) as well as Pappa et al. (2021) as a response that some people relied on to the challenges associated with COVID-19. In this regard, these authors argue that individuals may adopt such potentially harmful behaviour in an effort to cope with the challenges they face. As only one of the participants in the current study indicated that she had relied on this strategy, I regard the lack of repeated references to potentially harmful behaviour as coping strategy in response to the challenges

associated with COVID-19 as a silence in the data I obtained. The participants may perhaps have remained silent about this coping strategy due to the possibility of them being judged by peers or of stigmatisation when mentioning such behaviour in a group setting, such as the focus groups they participated in. On the other hand, the participants may merely have perceived the focus of the online participatory focus groups to be that of strategies that can promote resilience, resulting in the perception that references to seemingly unhealthy coping strategies were not relevant. The pure nature of qualitative data generation (online participatory focus groups) in itself may also have affected the participants' (un)willingness to share the practice of potentially harmful behaviour within a group setting. As these are mere possibilities, further research is required before coming to a conclusion in terms of the reason for the participants in the current study not referring to potentially harmful behaviour as possible coping strategy with sudden change and the associated challenges.

5.2.1.2 *Adapting to changed circumstances*

The findings of the current study indicate that the participants experienced the need to adapt to and cope with the changes and challenges implied by the COVID-19 pandemic as inevitable. As a result they made deliberate choices to deal with the challenges associated with the pandemic. In support of this finding, Brooks et al. (2022), Padmanabhanunni et al. (2022), Ungar and Theron (2020) as well as Yıldırım and Arslan (2020) indicate that teachers had to sustain an equilibrium, adjust and adapt to the changes implied by the COVID-19 pandemic without delay, specifically in terms of managing the uncertainties associated with this challenging time. Closely aligned, Ainsworth and Oldfield (2019), Luceño-Moreno et al. (2020) as well as PeConga et al. (2020) posit that adaptive behaviours in the presence of adversity can be regarded as an indication of resilience.

In elaboration of these findings, the participants demonstrated adaptive coping by regarding their choice to adapt without delay in a positive (optimistic) manner. This finding correlates with the work of Conversano et al. (2010), Mens et al. (2021), Jonker (2021), Robles-Bello et al. (2020) as well as Skinner and Zimmer-Gembeck (2011) who all state that optimism can support adaptive behaviour in challenging times and thereby the ability of people to cope. Various other authors (Bonanno et al., 2015, Gu & Day, 2007; Hamby et al., 2018; Jonker, 2021; Masten, 2014; Masten & Cicchetti, 2016; Skinner & Zimmer-Gembeck, 2011; Tait, 2008) similarly emphasise that the positive adjustment and adaptation of individuals as well as the interaction between adaptive systems can mediate coping in support of resilience.

In addition to taking a positive stance, I found that the participants in the current study remained flexible in adapting to the challenges they experienced as a result of the COVID-19 pandemic. They seemed cognisant of the importance of them revisiting their expectations at times, with this being necessary for them to adapt. This finding correlates with the work of Benight and Bandura (2004), Bonanno et al. (2015), Brooks et al. (2022), Chang and Bonnano (2020), Chen and Bonanno (2020), PeConga et al. (2020), Willers et al. (2013), Wuest and Subramaniam (2021) as well as Yildirim and Arslan (2020) who all indicate that people will rely on healthy adaptive approaches and flexible coping strategies when having to adjust and create better manageable environments to be able to cope and achieve their goals. Similarly, Bonanno (2020), Bonanno and Mancini (2008), Bonanno et al. (2015) as well as Chen and Bonanno (2020) state that people may specifically rely on flexibility in cognitive strategies to adapt in an attempt to ensure the possibility of multiple ways to cope with challenges. As such, it is possible to regard the reliance on various cognitive strategies when coping as adaptive in itself. In addition, the utilisation of multiple methods of coping, as found in the current study, may indicate multiple pathways to resilience, as indicated by Bonanno (2020) as well as Ungar and Theron (2020).

Even though Heppner et al. (2021) propose a link between positive problem-solving appraisal and increased levels of active coping with the aim to modify or prevent stressful situations, the participants in the current study did not make reference to relying on positive problem-solving appraisal in support of active coping for the purpose of modifying or preventing the challenges they had experienced at the time. This silence in the data of the current study may be ascribed to the participants not being able to modify or prevent the challenges from occurring on the one hand, yet on the other hand, the participants aimed to adapt and remain in control of some of the consequences and effects of the COVID-19 pandemic, as discussed in Section 5.2.2, and not of the pandemic itself. Ongoing research in the field of positive problem-solving appraisal by teachers and their increased levels of active coping may provide greater insight into these possibilities.

Various authors, including Bandura (1997), Benight and Cieslak (2011), Brooks et al. (2022), Bonanno et al. (2015), Chen and Bonanno (2020), Robles-Bello et al. (2020) as well as Yildirim and Arslan (2020), emphasise the significant role of the self-efficacy, cognitive flexibility (refer to the discussion on drawing on reflective practices in Section 5.2.6) and self-concept of a person when learning how to cope and successfully adapt to change and the associated challenges. Closely related, Benight and Bandura (2004) as well as Masten

(2014) propose self-regulation – a cognitive skill – as supportive factor for resilience and general wellbeing. Even though the participants in my study were found to have relied on self-regulation to enhance their coping efforts, they did not make explicit reference to the role that self-efficacy, cognitive flexibility or their self-concept played in coping with the challenges implied by the pandemic. This occurrence may be ascribed to the fact that the data generation did not focus on these constructs specifically nor on the role that they may play when adapting to challenges. It is, however, possible that the participants' ability to adapt to the changed circumstances could have been supported by self-efficacy, cognitive flexibility and/or their self-concept despite them not mentioning it, due to these cognitive processes generally playing an important role in the coping process. Ongoing research is required to obtain greater insight into the possible reasons for this apparent silence by the participants before drawing conclusions.

5.2.1.3 *Acquiring new skills*

The findings of my study indicate that the participants actively coped with the challenges they faced by engaging in activities that resulted in the acquisition of new skills. This finding correlates with the work of Ainsworth and Oldfield (2019), Bonanno et al. (2007) as well as Luceño-Moreno et al. (2020) who report that resilient individuals (teachers) will embrace new tasks and experiences, deliver high quality teaching outcomes and create positive learning environments, while ensuring the successful execution of personal responsibilities. Ebersöhn (2020) similarly confirms that adaptive coping could be seen in how teachers started to use online learning platforms to continue teaching during the COVID-19 pandemic.

Skills that were acquired by the teacher-participants of the current study include technological skills and specifically the skill to use online platforms for teaching and learning activities. The participants regarded their acquisition of these skills as beneficial for current as well as future use. In line with these findings, Sokal et al. (2020) report that the attitude of teachers towards the use of technology and remote learning will contribute to the personal resources they rely on when having to cope. Ebersöhn (2020) confirms this by stating that novel digital technologies and accelerated innovation in education have facilitated the adaptation of teachers during the pandemic.

To this end, the participants in the current study thus viewed the acquisition of new skills as a personal accomplishment and beneficial for long-term coping. This finding is confirmed by Beltman (2020), Benight and Cieslak (2011), Bonanno (2004), Brooks et al. (2022), Carver

(2013), Herman et al. (2018), Masten (2014) as well as Theron (2020), who all indicate that the acquisition of new skills, self-enhancement, a belief in future success as well as agency and mastery form part of possible coping strategies and can promote wellbeing. Furthermore, in line with the findings of Howard and Johnson (2004) as well as Maslach and Leiter (2016), personal achievement and resilience are associated with coping and assigning pride to competence and achievements in the working context, while self-efficacy can mobilise and sustain coping efforts and affect actions (Bandura, 1989b; Benight & Bandura, 2004; Benight & Cieslak, 2011; Maheshwari & Jutta, 2020; Weißenfels et al., 2022). In this regard, job efficacy can also play an imperative role in coping (Brooks et al., 2022), which was possible during the acquisition of new skills by the participants in the current study. Consequently, it is possible that the participants' sense of accomplishment and personal achievement during skills acquisition may have contributed to their levels of self-efficacy. Ongoing research may add some additional understanding of the role of a sense of accomplishment and personal achievement during the skills acquisition process of teachers and the subsequent increased levels of self-efficacy that can enhance coping ability.

These findings and views by others correlate with the findings of the current study in terms of the participants' preferred regard for applying their skills, as indicated by the results of the ARM-R. Based on the statistical analysis of the results I obtained, indicating that all the participants had internet access during the time of my study, and the vast majority (97.1%) during the COVID-19 lockdown period, it seems clear that the participants' technological skills acquisition and enablement may have supported their coping efforts. However, due to the lower response rate from teachers at semi-urban schools who may have experienced challenges with internet access, this finding is applicable to teachers in urban school settings only. The question can be raised whether or not increased internet accessibility may support an increased response rate in a similar study involving teachers in non-urban school settings. Furthermore, the question can be raised whether enhanced technological skills will indeed facilitate active coping within such low-resourced school settings. However, these possibilities require ongoing research before drawing final conclusions.

5.2.2 Relying on planning as strategy to cope with the challenges implied by the pandemic

A positive and significant correlation was found to exist between planning and resilience, as per the results of the Spearman correlation coefficient. Based on these statistical results,

better planning as coping strategy will thus result in a higher level of resilience, while limited planning as coping strategy can be associated with a decrease in the level of resilience. The same applies to a change in resilience in correlation with planning, meaning that, as the level of resilience that one demonstrates increases or decreases, so will one's ability to plan respectively increase or decrease.

Based on the deductive part of the thematic analysis I completed, I can deduce that the participants thus came up with strategies and identified suitable steps to take to deal with the challenges they experienced as part of their implementation of planning as cognitive coping strategy. This finding is supported by the results of the COPE Inventory that indicate that the participants in general had been making plans of action for dealing with the challenges they faced during the pandemic. In addition, Beltman (2020), Brooks et al. (2022), Mansfield et al. (2016) as well as Mens et al. (2021) confirm that teacher resilience can be achieved by seeking information about the challenges and then relying on planning and making use of personal resources to deal with these challenges. Similarly, Carver et al. (1989) are of the view that planning implies that people will think about how challenges can be managed and coped with.

From my findings and based on the related literature, planning as coping strategy can be regarded as dependent on the functional problem-solving skills of individuals. In support of this finding, Bonanno et al. (2015), Masten (2019), Heppner et al. (2021) as well as Riopel (2020) emphasise the importance of functional problem-solving skills in the promotion of resilience. Similarly, Brooks et al. (2022) as well as Hewitt et al. (2017) report that resilient teachers are able to demonstrate good planning skills. Even though Mens et al. (2021) suggest similar findings, these authors link planning for the sake of obtaining information associated with challenges, to optimism. Although the findings of my study do not directly link optimism to planning, the findings suggest that positive reframing, associated with being optimistic (refer to Section 5.2.6) supported the resilience of the participants.

The participants in the current study specifically relied on the strategies of taking things one step at a time, maintaining a routine, and staying in control of what is possible as part of planning, and therefore thinking how to cope with challenges. The findings related to these strategies are discussed in the sections that follow.

5.2.2.1 *Taking things one step at a time*

The findings of the current study indicate that the participants planned for a stepwise fashion of dealing with challenges during the COVID-19 pandemic. Results obtained on the COPE Inventory highlight this finding, as the participants declared that they in general carefully considered which steps to take in coping with the challenges they experienced as a result of the COVID-19 pandemic. Bonanno et al. (2015), Luceño-Moreno et al. (2020), PeConga et al. (2020) as well as Thompson (2021) report similar results, indicating that resilience can be demonstrated when relying on chunking and as part of day-by-day coping efforts in response to challenges.

In addition to these findings that rest on the quantitative results I obtained, the qualitative results from the focus groups as well as the findings captured in the existing literature (Bonanno et al., 2015; PeConga et al., 2020) confirm the trend of people taking things day-by-day and one step at a time, in support of their own coping when facing challenging times. This cognitive coping strategy of taking things one step at a time enabled the participants in the current study not to feel overwhelmed by the challenges they experienced. The finding of not feeling overwhelmed as a result of dealing with challenges in a stepwise manner adds some new insight into existing research on cognitive coping strategies, specifically in terms of teachers' way of coping with the COVID-19 pandemic.

5.2.2.2 *Maintaining a routine*

I found that the participants that partook in my study preferred a predictable routine in terms of their activities and relied on effective time management during the process of coping with the pandemic. In support of my findings, Brooks et al. (2022) confirm that teachers will follow a routine during uncertain times in an attempt to manage challenges such as those related to the COVID-19 pandemic. As such, time efficient strategies and practices seemingly enhanced the participants' capacity to cope in support of resilience, as also indicated by Brooks et al. (2022), Mansfield et al. (2016), Thieman et al. (2012) as well as Wosnitza et al. (2014).

I further found that the participants often did not perceive the use of planning as a coping strategy to be applied in isolation. The participants tended to employ this strategy in combination with other coping strategies, for example, by planning to maintain a balance and when and how to spend time with significant others to cope (refer to Section 5.2.5) or how to attend to self-care (Section 5.2.6). It follows that the participants' planning and routine

were influenced by situational circumstances, contextual factors (refer to the following section that elaborates on staying in control of what is possible) and by personal preferences at the time of the pandemic. In this regard, the findings of the current study emphasise that the participants' personal preferences for a planned routine had an influence on their own coping. As such, the level of and manner in which the participants required routine in support of their coping related to their personal preferences. To this end, it seems apparent that multiple pathways to resilience exist, which is indicated as part of the findings of the current study and confirmed by authors such as Bonanno (2004; 2020), Coetzee et al. (2017), Masten (2001) as well as Ungar and Theron (2020).

Based on these findings related to the current study and that are in line with the confirming literature (Brooks et al., 2022), it appears as if maintaining a routine will largely depend on people's sense of control of certain circumstances. These can include situational circumstances and contextual factors, as prevalent during the time of the pandemic. I elaborate on these findings in the next section.

5.2.2.3 *Staying in control of what is possible*

The findings of the current study indicate that the participants made use of structure and the organisation of their physical environment in an attempt to remain in control of what they were able to control during the time of the pandemic. As such, it appeared as if the participants had to organise their environment to such an extent that they could experience a sense of control to cope and demonstrate resilience. This finding aligns with the work of Brooks et al. (2022), Hewit et al. (2017), Luceño-Moreno et al. (2020), Sumer et al. (2005) as well as Thompson (2021) who are of the view that coping will be facilitated by an increased sense of control over a situation and the ability to demonstrate organisational skills. Wuest and Subramaniam (2021) confirm that individuals coped with the COVID-19 pandemic by focusing on what they could control within their presenting realities and remaining aware of what they could not control. To this end, Benight and Cieslak (2011) indicate that coping, as cognitive factor, will, in turn, facilitate a sense of control and affect the personal resources of people that can enhance wellbeing. It is therefore possible that the participants in my study could have experienced their sense of remaining in control to have facilitated their coping, yet this coping process, in turn, may also have added to a perceived sense of control that subsequently could promote resilience.

According to the findings I obtained, instrumental relationships (refer to Section 5.2.5) within the working context served a purpose in terms of the sense of control of the participants. To be more specific, the support from members of the school management team and the protocols that were set in place assisted the participants to cope with the challenges implied by the COVID-19 pandemic. Findings from the studies of Ainsworth and Oldfield (2019), Day and Gu (2010; 2013) as well as Day et al. (2006) confirm this notion that support from school management and leadership teams can serve as a protective factor for teachers regarding their resilience. Dragano et al. (2017) as well as Rugulies et al. (2017) confirm that environments in which high levels of stress are experienced combined with poor levels of managerial support can have a negative effect on people's levels of resilience. In my study, however, stress associated with uncertainties were seemingly alleviated through the provision of external protocols within the supportive environments of the participants that assisted them with a sense of control and supported the coping of the participants during the time of the pandemic.

In addition, the findings that I obtained indicate that the participants were cognisant of the priority they placed on managing what was within their control for their own sake, but also for the sake of others, more specifically the learners in their classes. This finding aligns with the work of Bottiani et al. (2019), Brooks et al. (2022) as well as Thomsons (2021), who posit that teachers will experience meaning and lower levels of stress when they focus on the learners during difficult times, implying that the acceptance of change can consequently be facilitated by finding meaning within a difficult situation, such as during a pandemic. Similarly, Barzilay et al. (2020) found that individuals were more concerned about the health of others than with their own health during the time of the pandemic. In this regard, the attempts of the participants to control what they were able to control were also based on the value that they ascribed to significant others and interpersonal relationships.

As such, a value orientation toward the maintenance of relationships was found to have supported the efforts of the participants to remain in control of what was possible, in an attempt to cope with the challenges implied by the pandemic. In confirmation, Ainsworth and Oldfield (2019) state that the interrelation of teachers and their environments can enable positive adaptation and therefore resilience. The participants in my study did, however, not only attempt to remain in control of what they could at the time; they also relied on meaning-making by maintaining a growth mindset. In Sections 5.2.5 (relying on relationships with significant others) and 5.2.6 (nurturing a growth mindset) I elaborate in terms of similar and

related findings, with specific reference to the participants' focus on relationships with significant others and the value they ascribed to these relationships.

Based on the findings of the current study, the participants thus made use of various strategies to maintain control as far as possible in their effort to cope during the pandemic. This finding is supported by Thompson (2021) as well as Yıldırım and Arslan (2020) who state that individuals might create new avenues for control during a challenging situation. Similarly, Staal et al. (2008) as well as Yıldırım and Arslan (2020) link the ability of individuals to plan alternative routes to coping with challenges to the belief that a situation can be controlled, with this referring to their locus of control. To this end, by increasing the sense of control over situations, individuals will probably be able to facilitate coping, as confirmed by Luceño-Moreno et al. (2020) as well as Thompson (2021).

A closely related silence that I identified in the findings of the current study concerns the self-assurance with which people approach stressors to exercise control over these stressors (Bandura 1989b). In this regard, Benight and Bandura (2004) as well as Carey and Forsyth (2009) state that self-efficacy can be regarded as a mediator during the coping process and entails the self-evaluation of individuals of their ability and level of confidence to exert control over their own functioning, behaviour and motivation. To be more specific, the participants of the current study did not explicitly rely on self-efficacy for the sake of maintaining a sense of control, even though it is viewed as important for the maintenance and enhancement of wellbeing by Benight and Cieslak (2011).

Even though the participants thus approached coping in terms of an increased sense of control over a challenging situation as confirmed by the work of Luceño-Moreno et al. (2020) as well as Thompson (2021), ongoing research may be necessary on perceived self-assurance and the self-efficacy of teachers in terms of their attempts to remain in control of what is possible when having to cope. In my study, the participants may have been engaged in their own processes of continual growth and development within the coping process at the time, which possibly relates to what Bandura (1997), Masten (2001), Willers et al. (2013) as well as Wuest and Subramaniam (2021) refer to when stating that coping strategies and resilience are malleable and can be learnt, strengthened and developed over time. This is, however, a mere hypothesis and requires further research before drawing final conclusions.

5.2.3 Suppressing competing activities to cope with the challenges of the COVID-19 pandemic

The Spearman correlation coefficient indicates a positive correlation between the suppression of competing activities and resilience. This correlation tested significant, implying that an increase or decrease in the one construct will have a respectively similar increasing or decreasing effect on the other. Based on the results of the deductive thematic analysis I conducted, the participants seemingly suppressed activities that may have competed with their coping efforts during the COVID-19 pandemic. In support of this finding, Lin et al. (2020) state that this strategy relates to how people make preparations in advance in an attempt to avoid potentially competing behaviours, and avoid obstacles as well as barriers that pose a threat to derailing planned behaviour, such as coping.

This finding is confirmed by Carver et al. (1989) who indicate that people who rely on this strategy will suppress the involvement of activities or the processing of other channels of information to focus fully on the presenting challenges at the time, as I found in the current study. In further support, I inductively identified that, as part of the suppression of competing activities as cognitive coping strategy, the participants focused on prioritising what was important at the time and relied on conscious disengagement when having to deal with challenges associated with the COVID-19 pandemic, as discussed in the sections that follow.

5.2.3.1 *Prioritising what is important at the time*

According to the findings I obtained, the participants relied on prioritisation as cognitive coping strategy by focusing on what their priorities were during the challenging time of the pandemic. In this regard, the results of the COPE Inventory indicate that, in general, the participants prevented themselves from getting distracted by other activities or thoughts, focused on dealing with the challenges they faced and prevented other things from interfering with their efforts to cope, and concentrated on the challenges they experienced by putting other things aside. The findings of the current study furthermore indicate that prioritisation enabled the participants to attend to important situations before engaging in less important ones. These findings are supported by the work of Masten (2019) as well as Mens et al. (2021) who posit that coping can be facilitated by focusing on prioritised activities. In further confirmation of these findings, Brooks et al. (2022) as well as Wuest and

Subramaniam (2021) indicate that individuals will cope by prioritising that which is important and urgent, and focusing their energy on what they are able to change and manage.

The findings of the current study further indicate that the participants aligned their focus with a positive mindset to be able to cope with the challenges associated with the pandemic. Closely aligned, the participants emphasised that prioritisation as cognitive coping strategy, while maintaining a positive mindset, had value for use in future, as also confirmed by Masten, (2019) as well as Mens et al. (2021). Even though the use of this strategy implies the prioritisation of a maintained focus on what is important at the time, it can thus be aligned with the participants' efforts to exercise optimism as coping strategy, as discussed in Section 5.2.6.

5.2.3.2 *Conscious disengagement*

The participants in the current study consciously chose to disengage from any thought processes and/or activities that could impede their ability to manage the stressors they faced as a result of the COVID-19 pandemic. More specifically, the participants tended to engage in other activities or thought processes, such as avoiding the use of technology where it was possible or engaging in positive discussions with other people, or delegating tasks to others in their attempt to cope. To be more specific, the findings of the current study indicate that the participants filtered what they listened to and avoided debates about the pandemic, thereby shifting their focus away from the opinions of others. This finding is supported by Lin et al. (2020) who found that individuals will avoid competing activities that may interfere with coping when facing a challenge. In relation to this tendency, as reported in existing literature (Lin et al., 2020), the participants in the current study were selective in terms of whom they spent their time with. As my literature review did not yield other reports on the selectivity of individuals in terms of whom to interact with during adverse times, ongoing research is required on this finding that adds some new insight into the existing body of knowledge.

Closely aligned, the participants were similarly selective in terms of the type and amount of media input they engaged with during the COVID-19 pandemic. They, for example, indicated that they avoided news reports on the radio, as well as COVID-19 related conversations that were presented in the media. Bonanno (2020) confirms this finding by stating that one pathway to resilience entails that individuals will not overindulge in the media, even though they can remain informed, and that they can engage in activities or thought processes where

they distract themselves from being affected by media reports. In confirmation of this finding, the importance of staying informed yet avoiding an information overload is proposed as coping strategy by various authors such as Chen and Bonanno (2020), Liang et al. (2020), Robles-Bello et al. (2020) as well as Staal et al. (2008).

In further support of this finding, the results related to the additional scales of the COPE Inventory (mental disengagement and behavioural disengagement) confirm that the participants relied on constructive mental processes as well as supportive behaviour in their attempt to cope with the COVID-19 pandemic. To this end, the Spearman correlation coefficient indicates a negative and significant correlation between mental disengagement and resilience, which implies that an increase in mental disengagement will result in a decrease in the level of resilience, whilst a decrease in mental disengagement will lead to a higher level of resilience. The same effect will occur in terms of changes in the level of resilience in relation to mental disengagement. Similarly, a negative and significant correlation exists between behavioural disengagement and resilience. This implies that an increase in the one will result in a decrease in the other, while a decrease in one of these constructs will result in an increase in the other.

The response analysis of these additional sub-scales indicates that the participants in general did not sleep more than usual to cope, did not admit to themselves that they quit trying to deal with stressors, and did not give up on trying to reach their goals in attempting to address the presenting challenges associated with the pandemic. Therefore, the participants did not mentally nor behaviourally disengage from their attempts to attain their goals of coping, yet they also generally turned to substitute activities to cope (as indicated by the COPE Inventory), which supported the facilitation of resilience. To this end, the findings of the current study indicate that the participants did not deviate from their attempt to deal with the stressors they faced, as indicated in the work of Lin et al. (2020).

More specifically, the findings of the current study indicate that the participants relied on suppressing competing activities and/or thought processes in an attempt to be able to deal with the stressors they faced as a result the pandemic. This finding is supported by the work of Bonanno (2004) as well as Bonanno and Mancini (2008) who similarly found that people who rely on repressive coping tend to avoid unpleasant emotional experiences, emotions as well as thoughts that, in turn, can facilitate their ability to adapt to stressors. To this end, it appears as if the participants consciously disengaged from certain thought processes and

behaviours, while choosing to rather engage in and focus on constructive mental processes and behaviours in an attempt to cope during the pandemic.

In further support of this finding, a response analysis included for the items on the denial scale of the COPE Inventory indicates that the participants generally did not deny the existence of the stressors they faced, did not refuse to believe what was happening, and did not pretend, act or think as if the occurrence did not happen, implying their awareness of the pandemic and its implied stressors. In this regard, the Spearman correlation coefficient indicates a negative and significant correlation between denial and resilience, which implies that an increase in the one construct will result in a decrease in the other, while a decrease in the one will result in an increase in the other. Therefore, the findings of the current study indicate that the participants endeavoured to minimise stressors by not denying the existence of the challenges they faced, but by attempting to manage the challenges to be able to cope during the time of the pandemic.

5.2.4 Relying on restraint coping to cope with the challenges implied by the pandemic

The Spearman correlation coefficient indicates a positive and significant correlation between restraint coping and resilience, implying that an increase in restraint coping will lead to an increase in the level of resilience, while a decrease in restraint coping will result in a decrease in the level of resilience. The same effect will occur in terms of a change in the level of resilience in relation to that of restraint coping.

In support of this indicated correlation, I found that the participants initially held back in dealing with the challenges they experienced, due to some circumstances associated with the pandemic being perceived by them as being out of their control. In this regard, the participants would wait until an opportune time to deal with the challenges they experienced and also until they felt ready to deal with the stressors related to the COVID-19 pandemic. This finding correlates with the work of Bonanno et al. (2015) as well as PeConga et al. (2020) who indicate that the level of resilience of people facing difficulty will be presented in, amongst other factors, their tolerance of uncertainty. The results obtained on the COPE Inventory support this finding, as the participants in general tended to force themselves to wait for the right time to act on challenges during the difficult times associated with the pandemic. As such, they would hold off doing anything about a challenge until the situation permitted them to act. The participants made use of two prominent strategies related to

restraint coping in an attempt to deal with the challenges implied by the pandemic, with these relating to them accepting the situation for the time being, and remaining calm.

5.2.4.1 *Accepting the situation for the time being*

The findings of the current study indicate that the participants coped with the challenges implied by the COVID-19 pandemic by accepting the situation and its implied changes and associated challenges. This finding correlates with the work of Wuest and Subramaniam (2021) who state that individuals may cope by accepting what cannot be changed and realising that change is a constant in life. In the current study, I similarly found that the participants subsequently accommodated the changes brought on by the COVID-19 pandemic. In confirmation, Bonanno et al. (2015), PeConga et al. (2020), Thompson (2021) as well as Yong and Yue (2007) indicate that the act of accepting change(s) and tolerating uncertainties associated with emerging challenges that cannot be controlled during adverse times can assist people to cope.

I furthermore found that the participants experienced a sense of comfort and relief in their acceptance of the situation for the time being. This allowed them to use the additional time they had in other ways than having to immediately deal with the challenges associated with the pandemic, which supported their coping. As existing literature does not foreground findings of this nature, the idea that teachers who experience a sense of comfort and relief as a result of their temporary acceptance of a difficult situation, and the implied increase in flexibility associated with more available time can enhance coping, add new insight to the field of knowledge on teachers' coping behaviour that is supported by allowing additional time as well as the implied flexibility during sudden change and the associated challenges. This proposition, however, requires additional research before coming to final conclusions.

Based on the results of the acceptance scale of the COPE Inventory, the Spearman correlation coefficient indicates a positive and significant relationship between acceptance and resilience. As such, an increase or decrease in one of these constructs will result in an increase or decrease in the other, in the same direction. The response analysis of the acceptance scale on the COPE Inventory furthermore indicates that the participants, in general, got used to the idea that the pandemic had happened, accepted that it had happened and could not be changed, accepted the reality of what had happened and learnt to live with it, when referring to the COVID-19 pandemic. The work of Wuest and Subramaniam (2021) confirms this finding that individuals will accept change in times of

adversity in their attempt to cope. In this regard, the attitude of teachers towards change, as indicated by Sokal et al. (2020), can be regarded as a significant resource that people can rely on, as also found in the current study.

5.2.4.2 Remaining calm

According to the findings I obtained, the participants attempted to remain calm in response to the challenges implied by the pandemic. As part of this coping strategy, the participants did not deny or deflect having to cope, but rather learnt to cope with the challenges of the pandemic while realising the value of remaining calm for coping, also for future use. The act of remaining calm when having to cope indicates an affective response to challenges, such as those related to the pandemic.

I also found that the participants relied on interpersonal factors, including self-regulation, when having to cope with the challenges associated with the pandemic. In alignment with this finding, Bandura (1977; 1986; 1989b), Ebersöhn (2014), Maddux and Kleiman (2021) as well as Skinner and Zimmer-Gembeck (2007) posit that cognitive mediators within the coping process, including primary appraisal and self-regulation, may serve as interactive influences in responding to challenges, and can therefore affect teacher resilience. Similarly, the cognitive flexibility of individuals, including the capability to appraise stressors and the capability to self-regulate, can enable them to regulate their thoughts, behaviour and feelings (Benight & Bandura, 2004), implying that their ability to remain calm within an adverse situation can be ascribed to personal protective factors.

The finding related to participants remaining calm to be able to cope is further supported by Langer and Ngnoumen (2021) as well as Wuest and Subramaniam (2021), as these authors note the value of responding in a peaceful manner by acknowledging thoughts and emotions in a non-judgemental way when facing challenges. Similarly, Guy (2022) states that people may become aware of goodness and grace during such times that can foster mental health and wellbeing. Even though the participants did not make explicit reference to relying on mindfulness, they seemingly engaged in some of the practices associated with this technique. In Section 5.2.6 (maintaining self-care), I elaborate on the possibility of the participants having engaged in related practices that could have supported their self-care during coping.

5.2.5 Seeking out instrumental support to cope with the challenges of the COVID-19 pandemic

The results of the Spearman correlation coefficient indicate a significant and positive correlation between the seeking out of instrumental support and resilience, implying that resilience will increase or decrease as an individual seeks out instrumental support, in the same direction. The same applies for the tendency to seek out instrumental social support, in relation to an increase or decrease in the level of resilience. As part of the participants' attempt to seek out instrumental support, they specifically sought out advice or information and relied on their relationships with significant others for this purpose.

5.2.5.1 Seeking advice or information

In the current study I found that in an effort to cope, the participants engaged with others to seek advice and guidance, and also to sound-board experiences and ideas during the uncertain and difficult time implied by the pandemic. Closely aligned, Juliana et al. (2021) found that the sharing of information promoted engagement among teachers during the COVID-19 pandemic. This finding is supported by the work of Bonanno et al. (2007), Brooks et al. (2022) as well as Wuest and Subramaniam (2021) who indicate that the seeking out of professional guidance and practical help can act as support and a navigation tool within challenging times, and assist people facing challenges to continue with the execution of personal and social responsibilities.

In confirmation of the findings of the current study, the scale on seeking instrumental support of the COPE Inventory indicates that, in general, the participants tried to get advice from others about what could be done during the time of the pandemic. They talked to others to find out more about the situation, and they asked advice from others who had undergone similar experiences, all in the context of the COVID-19 pandemic. These findings correlate with what Brooks et al. (2022) as well as Wuest and Subramaniam (2021) report, namely that intrapersonal resources and interactions such as these provide opportunities for people sharing varying perspectives and insights regarding similar challenges, such as those experienced by teachers within the context of the COVID-19 pandemic. In line with the findings of the current study, Bonanno et al. (2015) found that individuals who receive instrumental support and information to deal with daily tasks can cope better, with Wuest and Subramaniam (2021) adding that social support may have assisted teachers to deal with the challenges they faced during the pandemic.

According to the findings that I obtained, the participants in the current study did not rely on seeking advice or information from institutions such as libraries, hospitals or clinics, all of which provide essential services (Seligman et al., 2009) and where accurate health-related information about the COVID-19 pandemic could have been obtained (Chen & Bonanno, 2020; Mens et al., 2021). Limited referrals were also made to consulting doctors (only one participant), with these findings pointing to a silence in the data I obtained. The silence of the participants in terms of seeking advice or information from informed institutions can probably be ascribed to the strict lockdown regulations at the time of the COVID-19 pandemic, when access to such institutions was restricted. However, I found that the participants relied on other avenues of seeking advice and information, for example, by contacting peers *via* online platforms whenever they required advice or information from others.

As part of their seeking such support and guidance, the participants in the current study tended to rely on planned scheduled meetings with, for example, colleagues and family members, implying the importance of online platforms to ensure such interactions. In this regard, findings by Bonanno et al. (2015) indicate that technology can provide a platform for sharing knowledge and information, which, in turn, can enhance social relationships. In support of this finding, various authors such as Chen and Bonanno (2020) as well as Robles-Bello et al. (2020) indicate that the social support between individuals, in terms of online communication, enabled coping during the time of the COVID-19 pandemic.

However, the participants in my study seemed silent about the role of mentors to obtain practical help or information in support of their coping during the time of the pandemic, as opposed to existing literature (Brooks et al., 2022; Wuest & Subramaniam, 2021) foregrounding this possibility of support when facing difficult times. The participants' silence may be ascribed to their perceiving sufficient assistance from, for example, peers, colleagues, members of the school management team or even family members, as these were the role-players that were foregrounded by them. Ongoing research on teachers' perceptions and/or need for mentors when having to deal with challenges, as during the time of the pandemic, may shed more light on this possibility.

Even though the participants utilised the online focus group opportunities to voice their frustrations, needs and experiences, the results from an additional scale of the COPE Inventory that focuses on the venting of emotions, indicate that overall, the participants did not necessarily vent their emotions to cope, despite the apparent need to do so during the

time of the pandemic as inferred from the discussions during the online focus groups. In this regard, the Spearman correlation coefficient indicates a positive, negligible and non-significant correlation between a focus on and venting of emotions and resilience during the time that the participants completed the online questionnaire. This implies that, even though a positive correlation exists between these two constructs, a change in the one may not effect significant change in the other. In this regard, the provision of specific platforms (such as those provided by the focus groups) to vent emotions amidst the presence of peers may strengthen the level of resilience that teachers can experience (as a positive correlation already exists, even though it tested negligible). Such a provision aligns with the proposition of Da Silva et al. (2020) who advocate that the mental health agenda of people having to cope with challenges, especially in difficult times such as during the pandemic, should be a priority.

5.2.5.2 *Relying on relationships with significant others*

The findings of the current study indicate that the participants relied on their relationships with significant others, including their life partners, family members and colleagues as a source of support on both professional and personal levels, and as source of mental energy and motivation during the time of and following the COVID-19 pandemic. This finding aligns with the work of Beauchamp et al. (2019), Bonanno (2020), Kuo (2013) as well as PeConga et al. (2020) who state that reliance on the support of others and within supportive environments can act as a protective factor for resilience.

In confirmation, the findings of the current study align with the findings of Hamby et al. (2018), Masten (2001), Rosenberg (2020) as well as Ungar and Theron (2020) who state that social support from family, peers, friends, colleagues and the community can act as strengths in promoting resilience during adverse times. Similarly, Wuest and Subramaniam (2021) report that a function associated with social support is to provide help and care, and to act as a buffer against the impact of stress. In line with the findings of the current study, Bonanno (2020), Brooks et al. (2022), Hamby et al. (2018), Howard and Johnson (2004), Padmanabhanunni et al. (2022), Wu et al. (2013) as well as Wuest and Subramaniam (2021) confirm that strong and meaningful interpersonal connections, bonding with other individuals and minimising isolation are associated with resilience.

To this end, the Spearman correlation coefficient obtained in the current study indicates a positive and significant correlation between the use of emotional social support (COPE

Inventory) and resilience (ARM-R). As such, an increase or decrease in one of these constructs will result in an increase or decrease in the other, in the same direction. In support, the response analysis of items on the ARM-R indicates that the majority of the participants viewed their families to have usually supported them through life, that they tended to talk to their families/partners about how they felt, and that their families/partners had been standing by them during difficult times. As such, the findings of the current study indicate that the participants relied on a deepening of family relationships in their coping efforts during the pandemic. This finding correlates with the work of Ebersöhn (2012; 2016; 2019), Brooks et al. (2022), Juliana et al. (2021), Masten (2014), Padmanabhanunni et al. (2022), Theron (2020), Wu et al. (2013) as well as Wuest and Subramanian (2021) who all state that attachment and the meaningful connection with others is a critical aspect to promote and strengthen resilience.

According to the findings I obtained, the participants felt a sense of coherence, trust and unity upon realisation that others shared similar experiences, which supported their coping. In line with this finding, the existing literature indicates that an increased sense of collegiality and team spirit has resulted from managing COVID-19-related challenges, ultimately promoting teacher wellbeing (Dinu et al., 2021), and has contributed to individuals not feeling isolated (Bonanno, 2020; Brooks et al., 2022). Additionally, and even prior to the pandemic, teacher wellbeing was associated with resilience enablers such as social support, an increased affiliation with colleagues and a positive school climate by numerous scholars in the field (Ainsworth & Oldfield, 2019; Bonanno & Mancini, 2008; Bonanno et al., 2007; Bottiani et al., 2019; Cefai & Cavioni, 2014; Ebersöhn, 2014; Mandavia & Bonanno, 2019; Mansfield et al., 2016).

In further support, the findings of the ARM-R indicate that the majority of the participants cooperated with others and felt supported by friends during the difficult time associated with the pandemic. This finding correlates with the work of Bonanno (2020), Brooks et al. (2022) as well as Wuest and Subramaniam (2021) who indicate that individuals may acquire support to steer through difficult times by making use of teamwork and relying on the support of others. Despite the findings of my study indicating the importance of teamwork in the work place, a silence is evident with regard to the possible influence of collectivism on coping and the resilience of individuals within a South African context, with the participants in my study not mentioning this as supportive factor for coping with challenges. In this regard, Höltge et al. (2021) as well as Theron et al. (2021) state that the resources associated with extended families, as common in collectivist cultures, can be regarded as protective factor for

resilience. Similarly, Barzilay et al. (2020) argue that people living in countries that are more used to deal with collective stressors are possibly able to draw on collectivism as protective factor in support of resilience, such as during the time of the COVID-19 pandemic.

To this end, when referring to research on resilience within a South African context, it seems important to consider the values, perspectives, practices and philosophies of collectivist cultures, specifically due to collective coping behaviours being regarded as the result of communal and relational values (Jonker, 2021; Kuo, 2013; Shean, 2015). This apparent silence in the data I obtained may perhaps be ascribed to the participants' focus on the strategies that they employed to cope with the challenges implied by the pandemic, rather than on the possible role of collectivism as protective factor for resilience. Additional research may shed more light on the reason/s for this identified silence.

5.2.6 Nurturing a growth mindset to cope with the challenges implied by the pandemic

The findings of the current study indicate that the participants also relied on a growth mindset to cope with the challenges implied by the pandemic. This finding correlates with the work of Masten (2019), Matos et al. (2021) as well as Wuest and Subramaniam (2021) who all associate a growth mindset with a sense of personal strength that can contribute to and promote resilience.

As this theme was inductively derived in the current study, no statistical tests were implemented that can indicate the correlation between the nurturing of a growth mindset and the level of resilience that the participants demonstrated in response to the challenges they faced as a result of the pandemic. However, some of the scales of the COPE Inventory can support the explanation, clarification and/or interpretation of this finding, namely the scales of positive reinterpretation and growth, religious coping, humour and substance use.

In this regard, the results of the Spearman correlation coefficient indicate a positive and significant correlation between positive interpretation and growth (COPE Inventory) on the one hand, and resilience (ARM-R) on the other. This implies that an increase or decrease in one of these constructs will have a respectively similar increasing or decreasing effect on the other. More specifically, the items included in the positive interpretation and growth scale of the COPE Inventory indicate that, in general, the participants in the current study tried to grow as people as a result of the experiences related to the pandemic and to learn something from this experience. I further found that the participants generally also attempted

to regard the experience in a different light during the time of the pandemic, viewing it in a more positive light and looking for something good in what was happening. This finding is supported by the work of Brooks et al. (2022), Folkman and Moskowitz (2004), Lazarus and Folkman (1984) as well as Peixoto et al. (2018) who similarly found that the manner in which individuals view threatening circumstances and challenges and respond to these can facilitate opportunities for development, growth and gain. Closely aligned, Bonanno (2004), Dweck (2000), Lazarus (2006), Masten (2019) as well as Wuest and Subramaniam (2021) state that resilient individuals with a growth mindset are able to harness strengths to manage challenges effectively, and subsequently grow and learn from challenging experiences.

It follows that a reciprocal and transactional relationship seemingly existed between the participants' cognitive processes (specifically nurturing a growth mindset) and resilience at the time of the pandemic. When considering the results of the Spearman correlation coefficient, the findings of the current study and the existing literature I reviewed, it seems clear that the enhancement of individuals' ability to rely on a positive interpretation and growth mindset to cope will increase their levels of resilience. In the same way, it appears as if increased levels of resilience will have a positive effect on the ability of people to nurture a growth mindset. This finding is supported by the work of Csikszentmihalyi (1990), Luceño-Moreno et al. (2020), Richards et al. (2016), Riopel (2020) as well as Wuest and Subramaniam (2021) who indicate that resilience can imply better cognitive functioning, can be regarded as a protective factor against the adverse effects of stress related to challenges, and can assist people to regain stability, which can predict adjustment.

In the sections that follow I discuss the findings I obtained related to the participants' growth mindset in terms of them engaging in self-discovery and personal growth, drawing on reflective practices, maintaining self-care, nurturing spirituality and exercising optimism. Within the overarching strategy of nurturing a growth mindset, various authors support similar pathways towards resilience, such as self-efficacy, mindfulness, a positive attitude and optimism, self-care and religiousness (consult Bandura, 2004; Banks et al., 2015; Bonanno et al., 2015; Brooks et al., 2022; Collie et al., 2018; Conversano et al., 2010; Herman et al., 2018; Howarth et al., 2019; Jacka & Berk, 2013; Jha et al., 2010; Jha et al., 2017; Johansen et al., 2019; Masten, 2014; Mrazek et al., 2013; Riopel, 2020; Wang et al., 2016; Wu et al., 2013; Wuest & Subramaniam, 2021).

5.2.6.1 Engaging in self-discovery and personal growth

I found that the participants in the current study relied on personal growth and self-discovery to support their coping efforts in response to the challenges implied by the pandemic. The development of various coping skills is implied by this process of personal growth and self-discovery, which could, in turn, strengthen the identities of the participants. In this regard, coping skills such as interpersonal, intrapersonal and professional skills, were, for example, developed during this time. This finding correlates with the work of Masten (2019), Matos et al. (2021) as well as Wuest and Subramaniam (2021) who state that a greater sense of personal strength can be relied on and is associated with coping during a time of adversity, such as during the COVID-19 pandemic. Closely aligned, personal factors serving a protective role in the process of resilience will, however, vary among different individuals (Chen & Bonanno, 2020), and can include personality traits and personal styles (Lazarus, 2006). To this end, Beltman et al. (2011) as well as Bonanno et al. (2015) argue for a positive link between teachers' professional identity growth and positive self-image, as well as that of their coping and level of resilience.

In elaboration, Bonanno et al. (2015) posit that resilience is associated with positive self-esteem, in addition to a positive self-image, as mentioned. Not many of the participants in the current study indicated that their self-image or self-esteem supported their coping, yet they indicated that their coping abilities exceeded their expectations at times, which may imply a positive self-image. This lack of a direct reference to their self-concept or self-esteem may perhaps be ascribed to the participants' emphasis on the strategies they relied on to cope with the challenges implied by the pandemic during the focus groups, rather than on contemplating how their self-esteem and self-image may have supported these coping efforts.

The findings of the current study furthermore indicate that the participants realised the effect of having to cope on the personal growth that can follow. To be more specific, the participants became aware of their own thought processes during a time of personal growth and development, which can be viewed as an aspect of metacognitive processes (Bandura, 1989b). Cognitive processes, such as self-discovery and independent learning can facilitate this process of identity development and personal growth, as found in my study. In addition, I found that the awareness of the participants of their ability to respond cognitively (which may be associated with self-efficacy) to adversities and to cope seemingly facilitated resilience within the COVID-19 pandemic. This finding supports Bonanno's (2004) view of

potential growth following adverse experiences that, in turn, depends on a person's belief thereof, which can be regarded as a pathway to resilience.

Resilient responses in the face of adversity have been well documented (Baum et al., 2018; Bonanno, 2012; Masten, 2011; Stark et al., 2020; Ungar, 2013; Wuest & Subramaniam, 2021). To be more specific, resilient individuals are taken to believe in their ability (self-efficacy) to grow and learn from both positive and negative experiences, which, in turn, can assist them in managing stress and effective decision-making (Bandura 1997; 2001; Benight & Bandura, 2004; Benight & Cieslak, 2011; Bonanno, 2004; Bonanno et al., 2015; Carver, 1998; Gu & Day, 2013; Howard & Johnson, 2004; Masten et al., 1990). As such, the process of awareness and the subsequent development of the participants as a result of these cognitive processes seemingly facilitated higher levels of resilience in the face of the challenges implied by the pandemic, and may have, in turn, increased their levels of perceived self-efficacy.

Even though the participants did not elaborate on their own beliefs about their ability to cope, it is possible that their sharpened self-perception may have resulted in higher levels of self-efficacy, as indicated. In this regard, self-efficacy and a successful outlook can modulate an individual's ability to cope and will in this way have an implied effect on their resilience, as indicated in the existing literature (Bandura, 1989b; Bottiani et al., 2019; Li et al., 2018; Liu et al., 2018; Pathak & Lata, 2019; Robles-Bello et al., 2020; Tan-Kristanto & Kiropoulos, 2015). Additional research may, however, add to this knowledge base in terms of the manner in which identity and the self-perception development of teachers who experience adverse circumstances may potentially result in the enhancement of their self-efficacy, with the possibility of subsequently facilitating better coping ability.

According to the findings I obtained, the participants became aware of the value of their personal growth not only in their own lives, but also for the wellbeing of others in terms of them supporting other people. Furthermore, the participants seemingly also gained clarity and self-knowledge about their purpose in life as a result of having to cope, in support of their own wellbeing and also for the sake of significant others in their lives. In confirmation of this finding, Bottiana et al. (2019), Gu and Day (2013) as well as Mansfield et al. (2016) state that resilient teachers who focus on and are committed to their learners rather than to themselves, will experience lower levels of stress and positive outcomes in terms of quality teaching and wellbeing. This finding is further supported by the work of Masten (2019), Matos et al., (2021) as well as Robles-Bello et al. (2020) who indicate that a greater sense

of personal strength and closer relationships with others are associated with Post-Traumatic Growth that can occur after coping with adversity, as also demonstrated by the participants of my study. It may thus be possible that the participants in the current study experienced personal growth through their attempts to focus on others and support the individuals with whom they interacted.

Closely aligned, their reliance on self-regulation in an attempt to present their best possible selves may have supported the participants' coping and resilience. In support of this finding, Baum et al. (2018) as well as Masten (2019) report that self-regulation is associated with resilience and wellbeing. Benight and Bandura (2004) as well as Masten (2019) similarly confirm that the self-regulation of thought processes can modulate the maintenance of emotional wellbeing, while Bada et al. (2020) indicate that emotional intelligence can, in turn, support resilience. In confirmation, coping self-efficacy, and subsequent cognitive appraisal can assist with the management of emotions, according to Bandura (1997), Benight and Cieslak (2011), Carver (1998) as well as Lazarus and Folkman (1984), while emotional capacity is associated with adaptive responses in coping, following the work of Maslach and Leiter (2016).

Closely aligned, teacher resilience is regarded by Ebersöhn (2014) as well as Skinner and Zimmer-Gembeck (2007) as involving a process of cognitive appraisal (based on self-perception and contextual awareness) and coping in response. In confirmation, Bandura (1997), Benight and Cieslak (2011) as well as Staal et al. (2008) report on the role of cognitive appraisal as protective factor in the process of coping and resilience. To this end, the participants in the current study may have been able to self-regulate on a cognitive, yet also on an emotional level to present their best possible selves to those around them. Ongoing research may be necessary to investigate teachers' ability to rely on cognitive and emotional self-regulation when having to deal with challenges and support others during the coping process.

5.2.6.2 *Drawing on reflective practices*

The findings of my study highlight the trend of the participants to rely on reflective practices to cope with the challenges implied by the COVID-19 pandemic, with them regarding such reflective skills as important to use in future coping processes. This finding correlates with the work of Wuest and Subramaniam (2021) who emphasise the importance of drawing on reflective practices and viewing circumstances from different, more positive perspectives in

the process of promoting wellbeing within the context of challenging times such as the pandemic. Masten (2019) states that constructive thinking can enable a willingness to engage with trauma-related memories and emotions by means of reflection, which may facilitate an alteration of beliefs in support of coping. In confirmation of this view, I found that the participants viewed positive adaptation and reframing by means of drawing on reflective practices as important. To this end, the participants relied on the reframing of the challenges they faced in support of realistic and positive perspective-taking (consult Section 5.2.6.5 on Optimism) of the situation and in support of their role in the teaching context.

Through such reflective practices, the participants in the current study were able to adapt their thinking and behaviour and find alternatives in response to the challenges they faced within a dynamic environment, which can possibly be related to cognitive flexibility. This finding is supported by the work of Buckingham and Richardson (2021), Masten (2019), Mens et al. (2021), Robles-Bello et al. (2020) as well as Wuest and Subramaniam (2021) who argue that reframing as cognitive strategy can assist people to view their circumstances from a different and positive perspective, aiding them to make meaning of the situation and thereby facilitate coping.

Confirming findings as those of the current study is reported by Brooks et al. (2022), following their study on teachers' coping strategies during the COVID-19 pandemic. These authors namely found that the reframing of difficulties experienced during the COVID-19 pandemic represents an effective coping strategy employed by teachers. As part of their study, they found that teachers' levels of confidence increased as they reappraised the situation after reframing it (Brooks et al., 2022). In this regard, Masten (2019) as well as Matos et al. (2021) posit that Post-Traumatic Growth can be facilitated following reappraisal of a situation, which can lead to resilience.

Closely aligned, Genet and Siemer (2011), Benight and Bandura (2004), Chen and Bonanno (2020), Masten (2014; 2019), Neuro-link (2019) as well as Rand and Touza (2021) state that cognitive processes such as flexibility in thinking, thought processes, learning by solving problems and creativity, which all form part of cognitive flexibility and neuro-agility, can support the resilience of individuals who face adverse life events. In the current study, the participants were, however, silent about a reappraisal of the challenges implied by the pandemic after reframing had taken place. Their silence on the reappraisal of challenges following reframing may perhaps be ascribed to the focus of the current study being the

cognitive strategies that were employed to cope, rather than the cognitive processes involved in coping (Lazarus & Folkman, 1984).

Even though the participants in my study deemed reflectiveness that is related to positive adaptation as useful in the coping process, a discussion on the link between cognitive flexibility and reflectiveness was not salient during the focus groups. Ongoing research on teachers' cognitive flexibility and tendency to draw on reflective practices as a cognitive coping strategy in the process of resilience promotion may add to this body of knowledge in terms of how these cognitive processes may facilitate the coping of teachers who experience challenges, such as during the COVID-19 pandemic.

5.2.6.3 *Maintaining self-care*

I found that the participants relied on various self-care strategies in response to the challenges associated with the COVID-19 pandemic. Ainsworth and Oldfield (2019) similarly report that self-care as strategy forms a critical personal protector of the wellbeing of teachers. The participants in the current study, for example, developed several life skills as part of their coping efforts to enhance their wellbeing and resilience during the pandemic. In addition, the participants made definite decisions in support of their self-care at the time. Not only did the participants employ these strategies during the time of the pandemic, they also realised the importance of continuous maintenance thereof within the process of coping and resilience. In line with my findings, Wuest and Subramaniam (2021) claim that self-care can strengthen resilience and should therefore be regarded as priority during coping efforts in times of adversity.

One of the strategies that the participants in the current study implemented towards self-care was that of setting healthy boundaries. This finding correlates with the work of Hong (2012) as well as Wuest and Subramaniam (2021) who state that the wellbeing of individuals can be promoted through healthy boundary setting. In addition, the participants in the current study partook in hobbies and recreational activities, for example, reading, cooking, singing and gardening. Similarly, Guy (2022) as well as Wuest and Subramaniam (2021) indicate that individuals should take time to engage with and practise, for example, hobbies as these activities can assist with the management of stress within the coping process. In support, the mediation of cognitive challenges by means of creative engagement, for example, through hobbies and recreational activities as well as healthy sleeping patterns can contribute to the mobilisation and sustenance of cognitive coping efforts within the

framework of a healthy lifestyle, as indicated by numerous scholars (Banks et al., 2015; Denkova et al., 2020; Howarth et al., 2019; Jha et al., 2010; 2017; Klein & Boals, 2001; Mrazek et al., 2013; Yogo & Fujihara, 2008).

In this regard, I found that the participants implemented healthy lifestyle habits in support of their coping, including exercising and taking supplements. Similar to the findings of the current study, existing research indicates that healthy sleeping and eating habits, stress management techniques as well as physical exercise can promote resilience in times of adversity (Brooks et al., 2022; Jarka & Berk, 2013; Langer & Ngnoumen, 2021; Theron et al., 2021; Wuest & Subramaniam, 2021). Since healthy lifestyle habits are associated with an increase in cognitive functioning and brain performance (Neuro-link, 2019), the implementation and maintenance of such self-care habits, as done by the participants in the current study, can also enhance cognitive functioning and consequently facilitate coping. In this regard, Padmanabhanunni et al. (2022) argue that resilience facilitated a health-sustaining role for teachers during the pandemic and can therefore be regarded as a protective resource within the context of the COVID-19 pandemic.

Although I found that the participants in my study relied on some self-care strategies, the use of progressive relaxation, yoga or mindfulness, as proposed by Brooks et al. (2022), Guy, (2022), Langer and Ngnoumen (2021) as well as Wuest and Subramaniam (2021) was not overtly discussed in my study. In close relation, the participants did, however, rely on remaining calm and experiencing a sense of peace when having to cope with the challenges of the pandemic (consult Section 5.2.4 on remaining calm). Even though the participants thus engaged in activities specifically associated with mindfulness, they did not mention the cognitive coping strategies of progressive relaxation, yoga or mindfulness, probably due to them possibly not holding sufficient knowledge of these techniques and/or strategies, or how formally to implement such strategies at the time of the discussions during the focus groups.

Finally, I found that the participants in the current study augmented their self-care with healthy habits such as taking supplements (as mentioned), but did not refer to substance use in their attempts to cope. In contradiction of this silence, Lee et al. (2021) as well as Pappa et al. (2021) found that people may adopt potentially harmful behaviour, such as increasing alcohol consumption in an attempt to cope with sudden change or challenges. I ascribe the participants' silence about this possibility to their potentially not making use of such harmful behaviour, or to their hesitancy to share the use of substances as coping strategy with peers, based on a fear of possible stigmatisation within an online focus group

setting involving colleagues and peers. In line with my finding, the results of the Spearman correlation coefficient indicate a negative and non-significant correlation between substance use (COPE Inventory) and resilience (ARM-R). Therefore, even though a negative correlation exists, the implication is that a change in the one construct will not result in a significant change in the other. Even though the participants may have been reluctant to declare the use of substances during the online focus groups, they still had the opportunity to do so during their anonymous completion of the online questionnaire. Despite this opportunity and possibility, a response analysis of the items on this scale of the COPE Inventory indicates that the majority of the participants did not report to have used alcohol or drugs to make themselves feel better or to think less about the challenges implied by the pandemic; nor did they use alcohol or drugs to help them get through the challenges they faced, thereby supporting the findings of the study.

5.2.6.4 *Nurturing spirituality*

The findings of the current study indicate that the participants also relied on religious practices as coping strategy during the COVID-19 pandemic. As indicated by the results of the Spearman correlation coefficient, a positive and significant correlation was found to exist between religious coping (COPE Inventory) and resilience (ARM-R). This correlation implies that an increase in religious coping will lead to an increase in resilience, while a decrease in religious coping will result in a decrease in resilience. The same effect is true for a change in resilience in terms of religious coping.

The contributions of the participants during the online participatory focus groups align with the items included in this scale of the COPE Inventory. Overall, the participants namely put their trust in God, they sought God's help, they tried to find comfort in their religion and they prayed more than usual during the time in their efforts to cope with the pandemic. This finding correlates with the work of Guy (2022), Kimhi et al. (2021), Masten (2014; 2019) as well as Wuest and Subramanian (2021) who indicate that faith and spiritual and/or religious practices, such as prayer and participation in a faithful community, and the act of identifying as religious can strengthen individual resilience.

According to the findings I obtained, the participants' value orientation served as a cognitive mediator to facilitate coping. For example, the participants realised the value of gratefulness that can enable coping and resilience. In support of this finding, Lazarus (2006) regards gratefulness as a result of effective coping. Furthermore, the findings of the current study

indicate that the participants regarded the awareness of the value of their families as a supportive factor for their own coping. This finding correlates with the results of the ARM-R, indicating that a sense of belonging within a community in general enhanced the level of resilience of the participants. In confirmation, Masten (2019) and Matos et al. (2021) posit that closer relationships with others will result from the growth that takes place in response to adverse life events, as also evident in the participants' perception that their relationships were strengthened during the time of the pandemic.

In the current study I further found that the participants attributed their ability to demonstrate resilience to their traditional habits and cultural identity. This finding is supported by the results obtained on the ARM-R, indicating that the majority of the participants enjoyed and celebrated their families' cultural and family traditions. The finding is in line with the work of Beltman et al. (2011), Ebersöhn (2019), Masten and Wright (2010) as well as Theron and Theron (2014) who describe resilience as a cultural process, influenced by culturally-related practices and philosophies. In confirmation, Ebersöhn (2017), Masten et al. (2021), Masten and Motti-Stefanidi (2020), Theron et al. (2021), the Resilience Research Centre (2019), Ungar, (2011) as well as Ungar and Theron (2020) state that the sharing of multisystemic resources in a culturally meaningful way can facilitate resilience. The finding of my study adds additional insight into the topic on the perceived value that teachers may hold in terms of their traditional habits and cultural identity as a possible pathway to resilience during challenging times.

The findings of the current study furthermore indicate that the participants' perceived purpose and meaning-making within the coping process contributed to the spiritual dimension of their pathway towards resilience. This finding aligns with the work of Du Plessis (2016) who states that the ability of individuals to make sense of spiritual experiences within their spiritual frameworks can promote resilience and a growth mindset. In this regard, the participants in my study found meaning in the adversities that they faced and regarded it as important to transfer resilience to others, specifically to the learners in school. The participants did not only find meaning in their working contexts, but also in their lives in general, which supported their coping and ultimately their levels of resilience. Closely aligned, Baum et al. (2018), Brunetti (2006), Day and Gu (2010), Gu (2018), Guy (2022), Hamby et al. (2018), Masten (2019), Sammons et al. (2007) as well as Ungar and Theron (2020) report that personal coping resources such as a conviction of purpose, meaning-making and an experience of being significant, relate to the occupational wellbeing and overall resilience of individuals. In confirmation, Masten (2019) associates the belief of

individuals that life has meaning with resilience, as was also demonstrated by the participants of the current study.

5.2.6.5 Exercising optimism

According to the findings of the current study, the participants employed optimism that can be related to a growth mindset as cognitive coping strategy. The participants in my study therefore endeavoured to remain positive during the adverse circumstances they faced as a result of the COVID-19 pandemic. In support of this finding, Ainsworth and Oldfield (2019) as well as Luceño-Moreno et al. (2020) indicate that resilient teachers will positively adjust and stay motivated during challenging times. Similar to the findings of the current study, optimistic and resilient people have been found to typically employ positive thoughts and emotions and focus on meaningful, beneficial and positive aspects of challenging experiences, with the additional effect of experiencing improved physical health while displaying fewer symptoms associated with anxiety and depression (Kimhi et al., 2021; Maheshwari & Jutta, 2020; Masten, 2019; Mens et al., 2021; Seligman, 2003; Seligman & Csikszentmihalyi, 2014; Sumer et al., 2005).

Closely aligned with these findings, various authors (Bonanno, 2020; Chen & Bonanno, 2020; Li et al. 2018; Liang et al., 2020; Pathak & Lata, 2019; Robles-Bello et al. 2020; Staal et al., 2008; Tan-Kristanto & Kiropoulos, 2015; Wuest & Subramaniam, 2021) report that optimism can be regarded as a strategy towards resilience and that the employment of cognitive strategies aimed at nurturing mental health can result in a more positive outlook. This reciprocal relationship between optimism and resilience was seemingly valuable for coping during the pandemic, yet should also be of value in the future for teachers when facing adversity. From a positive psychological perspective, Seligman and Csikszentmihalyi (2014) state that people who embrace optimism can experience happiness and flow in future, as supported by Thompson et al. (2018). To this end, teachers may thus rely on optimism to nurture a growth mindset in support of their coping efforts during challenging times. It follows that health promotion interventions and programmes in schools that are directed at enhancing optimism may therefore result in a growth mindset amidst teachers, which may subsequently facilitate their ability to cope with challenges in future.

The confluence of optimism and self-efficacy in support of coping by means of flexible and adaptive behaviour to facilitate psychological health during the pandemic, as reported by Bonanno et al. (2015), Maheshwari and Jutta (2020), Masten (2019), Robles-Bello et al.

(2020) as well as Sumer et al. (2005), was not salient in the findings of the current study. Even though the participants of the current study relied on optimism to cope, as already discussed, they thus did not make explicit reference to a convergence of optimism and self-efficacy during their coping efforts. This silence in the data of my study may perhaps be ascribed to the focus of the research falling on strategies employed by the participants to cope with the challenges they experienced as a result of the pandemic, and not necessarily on how the interaction of personal protective factors could have facilitated coping. This possibility requires further research before drawing final conclusions.

In the current study I additionally found that the participants relied on humour as an optimistic strategy to support their coping during the pandemic. However, the results of the Spearman correlation coefficient of the humour scale (COPE Inventory) and resilience (ARM-R) indicate a negative and significant correlation between these constructs. Based on these statistical results, an increase in humour will result in a decrease in resilience, while a decrease in humour will result in an increase in resilience. The same is true for a change in resilience in correlation with humour.

At first glance, the quantitative results thus seem to contradict the qualitative findings; yet, based on my analysis of the items of this specific scale, which focus on the participants' tendency to laugh about the COVID-19 situation, make jokes about it, as well as kid around about it or make fun of it, the qualitative findings are supported. To be more specific, the participants namely indicated that they mostly did not laugh, make jokes or kid around about the COVID-19 pandemic, but that they instead seemed to rely on humour and making jokes about general life situations in their efforts to cope with the challenges implied by the pandemic. In support of this finding, Bonanno (2004; 2020) reports that the strategy of finding ways to laugh, have fun and engage in positive emotions can be regarded as a tool to resilience. Other authors (Masten, 2019; Mens et al., 2021) similarly confirm that optimists often rely on humour as cognitive coping strategy.

According to the findings of the current study, the psychological resource of hope was also indicated as a protective factor that supported the participants' nurturance of a growth mindset in support of coping. In line with this finding, Baum et al. (2018), Bonanno et al. (2015), Gundogan (2021), Masten (2019) as well as PeConga et al. (2020) state that psychological resilience can serve a protective function when experiencing challenges, and may present as and be associated with hope and optimism. In this regard, hope can be conceptualised as a cognitive construct, moderating the correlation between challenges and

the psychological adjustment of people. Hope is seen to involve a pattern of thinking that is similar to that of optimism, according to several scholars such as Masten (2019), Morote et al. (2017), Rand and Touza (2021), Satici (2016) as well as Yildirim and Arslan (2020), as also found in the current study.

In addition, when relying on hope, positive outcomes such as adaptive problem-solving behaviour, the improvement of physical health, enhanced quality of social relationships, generating additional coping strategies in response to challenges and increased wellbeing, life satisfaction as well as the psychological health of people can be facilitated and promoted (Conversano et al., 2010; Galatzer-Levy & Bonanno, 2014; Mens et al., 2021; Pathak & Lata, 2019; Rand & Touza, 2021; Robles-Bello et al., 2020; Snyder et al., 2021; Yildirim & Arslan, 2020; Yildirim & Belen, 2019). It is therefore possible that the participants' hopeful and optimistic viewpoints enabled their use of various coping strategies, in addition to optimism, as also implied in the existing literature.

According to the findings of the current study, the participants thus viewed optimism and hope as valuable resources for coping. In this regard they demonstrated a hopeful outlook by remaining positive when having to cope with challenges, such as during the pandemic. In this regard, I found that a future-oriented awareness associated with an optimistic attitude assisted the coping of the participants. In support of this finding, Galatzer-Levy and Bonanno (2014), Masten (2019), Mens et al. (2021) as well as Pathak and Lata (2019) refer to the anticipated favourable outcomes associated with an optimistic outlook. It follows that teachers may thus rely on optimism, not merely for coping with the challenges they experience at a given time, such as during the pandemic, but can also anticipate other favourable outcomes associated with this cognitive coping strategy in response to any challenges they may need to deal with in future.

Based on my discussion of cognitive coping strategies, the tendency of the participants to rather reframe challenges in a positive, realistic and light manner as discussed in the section on reflective practices, their tendency to use humour in response to challenges, as reported by Buckingham and Richardson (2021), Robles-Bello et al. (2020) as well as Wu et al. (2013), and their reliance on hope and maintaining optimism, all refer to the strategies that the participants employed to cope with the pandemic. As similarly mentioned in Section 5.2.3 (prioritising what is important at the time), this reliance on various cognitive coping strategies for current and future use can influence the level of resilience of the participants (and others)

as the one construct (cognitive coping strategies) may enhance the other (resilience) in a reciprocal manner.

5.3 SITUATING MY FINDINGS WITHIN THE CONCEPTUAL FRAMEWORK

Interpreting the findings of this study in terms of the guiding conceptual framework confirms that multiple pathways to resilience exist, as foregrounded by several scholars in the field (Bonanno, 2004; 2020; Coetzee et al. 2017; Ungar & Theron, 2020). These multiple pathways to resilience specifically include cognitive coping strategies, namely active coping, planning, suppression of competing activities, restraint coping, the seeking of instrumental support and nurturing a growth mindset, even though the pathways to resilience are not limited to these strategies.

Next, the findings of the current study demonstrate a transactional relationship between the teachers, the environment as well as their behaviour when responding to the challenges related to the COVID-19 pandemic, which played an important role in their adaptation and the active coping strategies they relied on (consult the work of Benight & Cieslak, 2011; Carver et al., 1989; LaMorte, 2019; Lazarus & Folkman, 1984; Maddux & Kleiman, 2021; Thomas, 2005). This reciprocal relationship demonstrates a sense of ability by the teachers to effect change by making use of cognitive processes and strategies. More specifically, teacher behaviour can be controlled and managed through the use of such cognitive processes in an effort to alter the source of stress, subsequently influencing the environment that teachers function in, when explained from the perspective of the Social Cognitive Theory (Carver, 2013; Carver et al., 1989; Maddux & Kleiman, 2021).

In addition, the findings of the current study indicate that teachers' self-perception was enriched during the coping process, implying the possibility of them believing in their own ability to cope with challenges (self-efficacy). In this regard, this reliance on a growth mindset as cognitive coping strategy was not employed in isolation, but was rather the result of positive adaptation, which could have enhanced the teachers' perceived self-efficacy beliefs. Teachers were also not only able to cope with the challenges during the COVID-19 pandemic, but experienced a perceived benefit in terms of the future value of employing these cognitive strategies. To this end, these strategies might have enhanced the participants' cognitive functioning and personal enablement, in line with a premise of the Social Cognitive Theory, stipulating that the cognitive abilities of individuals can enable

reflective engagement and innovative action strategies, which may ultimately support self-regulation (Maddux & Kleiman, 2021).

It follows that the teachers who participated relied on various cognitive coping strategies in response to their appraisal of the challenges implied by the COVID-19 pandemic. They made use of self-regulation and reflectiveness in reappraisal (secondary appraisal) to adapt their behaviour and thinking flexibly, and/or find alternative responses to cope. Not only did these cognitive mediators probably guide their behaviour and the implementation of cognitive coping strategies during the coping process; they also appeared to provide a means of multiple pathways to resilience (Bonanno, 2004; Lazarus & Folkman, 1984; Ungar & Theron, 2020) within their environments.

To this end, the teachers relied on self-regulation as cognitive process during their process of coping with the challenges implied by the pandemic. They actively coped by not only demonstrating the self-regulation of cognitive processes during the appraisal of stressors, but also in terms of their emotional responses to the challenges they faced in an effort to positively adapt to the changed circumstances, and to remain calm and in control of what they were able to control at the time. This tendency to self-regulate implied a continuous process whereby the teachers constantly obtained feedback from internal cognitive appraisal processes and changes in the environment, subsequently altering their cognition and behaviour (Benight & Cieslak, 2011) by means of reflective practices and metacognitive processes (Bandura, 1989b). In this regard, the teachers' appraisal also appeared to stem from their perceptions of what they could control (Lazarus & Folkman, 1987), with this finding indicating that their sense of control (Luceño-Moreno et al., 2020; Thompson, 2021) facilitated their coping.

I furthermore found that the teachers experienced a sense of competence and control within the context of challenges, which in turn enhanced their ability to adapt and cope (Benight & Cieslak, 2011). To this end, the implied self-efficacy assisted the teachers to appraise the stressors they faced and mobilise promotive and protective factors and processes, which included cognitive processes and strategies to guide their coping behaviour and effect positive change in their environments, with this supporting resilience and positive adaptation. In this regard, it appears as if the teachers became aware of their influence on their environment, specifically in terms of the areas where they could execute organisation and structured control. Thus, it appears as if the teachers' coping was also reliant on their

sense of control and their own competency within adverse circumstances, as also indicated by Benight and Cieslak (2011).

In this regard, the teachers involved in my study effected their own functioning based on the personal enablement (Benight & Bandura, 2004) that they demonstrated. Based on the positive outcome of their coping efforts and the resilience demonstrated by the teachers, it therefore appears as if the teachers' coping was enhanced by cognitive processes that enabled their motivation and strengthened teacher resilience, such as cognitive flexibility, self-regulation and self-efficacy as well as reflective processes and thoughts (Bandura, 1977; 1986a; Benight & Bandura, 2004; Chen & Bonanno, 2020; Masten, 2014; 2019; Ungar & Theron, 2020). As such, the teachers' perceptions influenced their tendency to think in an optimistic way, thereby facilitating their perseverance and actions during their coping efforts (Snowman & McCown, 2013).

It follows that the teachers relied on cognitive capabilities that enabled their ability to utilise multiple pathways to resilience by creating innovative ways of action through reflection (Bonanno, 2004; 2020; Coetzee et al. 2017; Maddux & Kleiman, 2021; Ungar & Theron, 2020). In addition, teachers' coping behaviour included a combination of strategies, such as their tendency to actively cope by keeping busy with tasks and acquiring new skills. They also made use of efficient time management, focused on priorities while setting other things aside for the time being, relied on relationships with others for assistance, maintained meaningful connections with others, and relied on reflective practices and attendance to self-care.

The implementation of self-care as cognitive coping strategy probably resulted in enhanced cognitive functioning and served a health-sustaining role (and *vice versa*) for teachers during the COVID-19 pandemic, which in turn promoted resilience (Padmanabhanunni et al., 2022). Based on the aforesaid, the promotion of resilience through the use of cognitive coping strategies increased the teachers' ability to appraise the stressors they faced and cope in response, which could in turn support their cognitive functioning and enhance resilience (Baum et al., 2018; Dutcher & Creswell, 2018; Genet & Siemer, 2011; Golonka et al., 2017; Michel, 2016).

As such, the teachers utilised problem-focused coping strategies as well as emotion-focused strategies, relating to personal as well as relational capacities to cope, in support of teacher resilience (Brooks et al., 2022; Carver, 2013; Carver et al., 1989). The reliance on emotion-

focused coping (Lazarus & Folkman, 1984) also involved cognitive processes, specifically in terms of self-regulation and metacognitive processes utilised during the coping process. Closely related, the teachers made use of planning and thought about the steps and strategies to employ to handle the challenges they faced, relying on anticipatory cognitive simulations that could allow them to cognitively rehearse solutions to adversities, as also proposed by the Social Cognitive Theory (Bandura, 1989b).

In summary, the findings of my study demonstrate that multiple promotive and protective factors, including cognitive strategies, supported multiple pathways to the positive adaptation and resilience of the teachers who participated (Bonanno 2004; 2020; Coetzee et al., 2017; Masten, 2001; Skinner & Zimmer-Gembeck, 2011; Ungar & Theron, 2020). The findings furthermore confirm the existence of a transactional and reciprocal relationship between the teachers, the environment and their behaviour when responding to the challenges they faced as a result of the COVID-19 pandemic.

5.4 SUMMARY

I structured my discussion in this chapter according to the results that I presented in Chapter 4. I commenced the chapter by integrating the results I obtained during the quantitative and qualitative phases of the study, in relation to the existing literature that I consulted for the purpose of my research. Throughout my discussions, I related the findings of the current study to existing literature in terms of similarities, possible contradictions, silences and new insight. In the last section of the chapter, I situated the findings of my study within the conceptual framework that guided me in undertaking the research.

In the final chapter of this thesis, I summarise Chapters 1 to 5 and then draw conclusions in terms of the formulated research questions and the hypotheses that guided my study. I outline possible contributions of my study and reflect on potential limitations. I conclude with recommendations for training, practice and future research.



CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION AND OVERVIEW OF PRECEDING CHAPTERS

The purpose of my study was to describe how cognitive resilience supported teachers to cope with the challenges implied by the COVID-10 pandemic. To do this, I investigated and described the cognitive strategies that teachers who seemingly demonstrated resilience relied on to cope during this time of adversity. To this end, Chapter 1 provided an overview of the rationale and purpose of the study. I introduced the paradigmatic perspective and methodological choices that guided my study as well as the conceptual framework I compiled. I stipulated my research design, and briefly discussed the sampling procedures as well as the data collection/generation, capturing/documentation and analysis methods I relied on. I referred to the relevant validity, reliability and trustworthiness criteria and concluded the chapter with an indication of the ethical considerations that applied.

In Chapter 2, I discussed the existing literature that I consulted, providing the reader with the necessary context and background on the adversities implied by the COVID-19 pandemic. I specifically focused on the impact of the pandemic on the South African education sector and, ultimately, teachers in the profession. I contemplated the nature and importance of teacher resilience when having to cope with sudden change and the associated challenges. In this regard, I specifically explored how cognitive functioning and cognitive strategies can support coping and resilience.

In Chapter 3, I explained the research process that I followed in my study in more detail. To this end, I comprehensively discussed the paradigmatic perspectives, research design and methodological choices I implemented. Throughout, I related the choices I made to the research questions and purpose of the study. I presented the standards of rigour and the quality criteria for my study, and discussed the ethical considerations I aimed to adhere to.

Chapter 4 included a presentation of the results that I obtained following the quantitative and qualitative data analysis. I commenced by presenting the descriptive results of the online questionnaire, followed by the results obtained for the Spearman correlation coefficient. Hereafter, I discussed the qualitative themes and related sub-themes based on the deductive and inductive thematic analysis I completed. I concluded the chapter by

presenting an overview of my integration of the quantitative and qualitative results, providing background to the discussion of the findings that followed in Chapter 5.

In the preceding chapter I thus presented the findings of my study by interpreting the results I obtained in terms of existing literature, specifically in relation to cognitive coping strategies and resilience. I also nested my findings within the conceptual framework of my study.

In this final chapter of the thesis, I address the research questions and draw conclusions in terms of the hypotheses of my study, as presented in Chapter 1. Next, I reflect on the theoretical, methodological and practical contributions of the study as well as possible limitations and the challenges I experienced in undertaking this research. I conclude with recommendations for training, practice and future research.

6.2 ADDRESSING THE FORMULATED RESEARCH QUESTIONS

In this section, I address the research questions I formulated in Chapter 1. I discuss the secondary research questions first, and then attend to the primary research question that guided my study.

6.2.1 Secondary research question 1: Which cognitive strategies were utilised by teachers in South Africa in response to the challenges implied by the COVID-19 pandemic?

The findings of my study indicate that teachers employed various cognitive coping strategies in response to the adversities implied by the COVID-19 pandemic. The teachers who participated, for example, relied on the strategies of active coping, planning, suppression of competing activities, restraint coping and seeking instrumental social support. For all these cognitive strategies, the results indicate a positive and significant correlation with resilience. As such, I can conclude that the teachers' use of these cognitive strategies supported their resilience, based on their response to the challenges they faced as a result of the pandemic.

In addition to the cognitive coping strategies that promoted resilience as identified during the quantitative phase of my study, I identified some other coping strategies during analysis of the qualitative data that support and supplement the quantitative results I obtained. In this regard, I found that the participating teachers had also relied on coping strategies such as the nurturance of a growth mindset when having to cope with the challenges implied by the pandemic. As part of their fostering of a growth mindset, the teachers relied on coping

strategies related to them engaging in self-discovery and personal growth, drawing on reflective practices, maintaining self-care, nurturing spirituality and exercising optimism.

In terms of the teachers' implementation of active coping as cognitive coping strategy, I found that the participants took active steps in terms of their engagement in tasks to cope with the adversities implied by the pandemic. The participating teachers kept themselves busy by engaging in a range of activities and relied on the strategy of remaining flexible during the coping process. Teachers also positively adapted to the sudden change in circumstances and acquired new skills in the process, in their attempt to alleviate or lessen the effects of the stressor(s) they faced as a result of the COVID-19 pandemic. To this end, the teachers seemingly experienced a sense of accomplishment following the acquisition of new skills while also realising the long-term benefits that these skills might hold. Closely aligned, I found that the teachers perceived coping as being necessary and that circumstances required of them to adapt by, for example, acquiring new skills.

The second cognitive coping strategy that the participants in my study implemented relates to planning, which includes the thought processes that teachers engaged in to come up with action strategies and steps they could take to handle the challenges they faced. The teachers namely engaged in thought processes in a stepwise fashion (taking things one step at a time) to be able to manage the stressor(s) they experienced in relation to the adversities implied by the COVID-19 pandemic. In addition, they attempted to maintain a routine and stay in control of what they were able to control at this time of sudden change and challenges on various levels.

Next, by making use of the cognitive coping strategy of suppression of competing activities, the teachers who participated tried to avoid getting distracted by other activities or thought processes that may have hindered their capacity to deal with the immediate stressor(s) they faced, related to the pandemic. Teachers therefore prioritised what was important at the time in their attempts to cope, thereby focusing on what had to take priority at the time. To be more specific, the teachers consciously disengaged from activities and/or thought processes that might have competed with their efforts to manage the immediate stressors they faced. By disengaging from such thought processes and choosing to rather focus on constructive mental engagements, the teachers' ability to cope with the adversities related to the pandemic could be strengthened.

Fourthly, as part of their utilisation of restraint coping as cognitive strategy, the teachers attempted to deal with the stressor(s) they faced by waiting until the best moment presented to deal with these. Therefore, the teachers accepted the situation for the time being and attempted to remain calm in support of their coping with the challenges implied by the pandemic. It follows that the teachers did not deflect from having to cope, but rather coped by remaining calm, pausing for a while and waiting for the opportune moment to take active steps to deal with the challenges that arose as a result of the pandemic.

Another coping strategy that the participating teachers employed was to seek instrumental social support from others during the time of the pandemic. The teachers namely reached out to significant others, not only for advice, information or instrumental assistance, but also for relational support. Teachers specifically reached out to friends, family members, peers and colleagues. In this regard, their reliance on relationships with significant others seemingly served as a source of mental energy and unity during the challenging time associated with the pandemic.

Next, the teachers who participated relied on a growth mindset to cope with the challenges implied by the COVID-19 pandemic. To this end, the teachers adopted a positive outlook during the challenging time and perceived the difficulties they faced as an opportunity to learn, grow and promote resilience. In addition, various personal coping skills contributed to the personal growth and development of the teachers during the time, which ultimately strengthened their levels of resilience. The teachers furthermore employed reflective practices to support their coping efforts and assist in the reframing of the adverse situation they found themselves in, in a more positive light. They also paid the necessary attention to maintain self-care in the process of acquiring additional life skills, setting healthy boundaries, maintaining a healthy lifestyle and partaking in hobbies and other recreational activities in support of their coping, and ultimately their wellbeing and resilience. The said growth mindset of the teachers included a reliance on spiritual practices, a value orientation and the embracing of traditional habits and the teachers' cultural identity, resulting in them finding meaning in adversity, which, in turn, strengthened teacher resilience. Finally, the teachers who participated remained optimistic by making use of humour, hope and positive reframing as cognitive coping strategies that, in turn, supported their resilience during the time of the pandemic.

In summary, the teachers utilised various cognitive strategies in response to the adversities they faced as a result of the COVID-19 pandemic. As indicated, these strategies included

active coping (keeping busy and doing tasks, adapting to changed circumstances, and acquiring new skills), planning (taking things one step at a time, maintaining a routine, and staying in control of what was possible), the suppression of competing activities (prioritising what was important at the time, and conscious disengagement), restraint coping (accepting the situation for the time being, and remaining calm), seeking instrumental social support (seeking advice or information, and relying on relationships with significant others), and nurturing a growth mindset (engaging in self-discovery and personal growth, drawing on reflective practices, maintaining self-care, nurturing spirituality, and exercising optimism).

Based on the findings indicating that the teachers utilised multiple cognitive strategies to cope with the challenges of the pandemic, I can conclude that their use of the cognitive strategies in itself supported the use of other related strategies, with the culmination of various strategies enhancing the levels of coping as well as their resilience. To be more specific, I posit that cognitive strategies such as exercising optimism, relying on reflection and making positive adaptations can be viewed as interactive and collaborative coping strategies, with a reciprocal link to teacher resilience.

6.2.2 Secondary research question 2: Which cognitive strategies show a correlation with teacher resilience in response to the challenges implied by the COVID-19 pandemic?

All of the problem-focused coping strategies, namely active coping, planning, suppression of competing activities, restraint coping and the seeking of instrumental social support were found to have a positive correlation with resilience. In addition, other scales on the COPE Inventory, namely positive reinterpretation and growth, the use of emotional social support, acceptance, religious coping, and a focus on and venting of emotions also correlated positively with teacher resilience.

These positive correlations imply that, as the use of these strategies by the teachers increased or decreased, so did their levels of resilience. In addition, the findings I obtained indicate that the teachers coped with the challenges that they experienced at the time by relying on the said cognitive coping strategies. Therefore, I can conclude that the teachers that took part in my study relied on the said strategies, and often on a combination of these strategies, not only to cope with the challenges they faced as a result of the pandemic, but also to experience increased levels of resilience as a result of their reliance on the strategies.

In elaboration, the cognitive strategy of relying on emotional social support that showed the strongest correlation with teacher resilience implies that activities such as discussing one's feelings with others, trying to get emotional support from friends or relatives, perceiving sympathy and understanding from someone, or talking to someone about their own feelings and experiences seemed to support the teachers' levels of resilience during the time of the pandemic. In this regard, interpersonal relationships were illuminated on a cognitive level, based on the teachers' awareness of the value of utilising and maintaining good relationships with significant others during adverse times, such as during the COVID-19 pandemic. To this end, I propose that opportunities and platforms that provide emotional social support structures be made available to teachers to facilitate their coping efforts during adverse times, and ultimately promote their levels of resilience.

Even though denial, mental disengagement, humour and behavioural disengagement were found to have a negative correlation with resilience, the response analysis of these scales, as discussed in Chapter 5, indicates supportive coping behaviour during the challenging time implied by the pandemic. In further elaboration, the teachers in general did not deny the reality of the pandemic, did not refuse to believe that it had happened nor pretended or acted as if it was not happening, all of which seemingly supported their coping efforts during the time. In addition, the teachers did not indicate incidents of daydreaming about other things than the pandemic or sleeping more than usual in their attempt to cope with the pandemic. They furthermore did not advise themselves that they could not deal with the pandemic, did not give up trying to reach their goals, nor did they reduce the amount of effort put into solving the problem(s) associated with the pandemic. In addition, the teachers' tendency not to kid around about the pandemic, make fun of the situation, laugh about it or make jokes about it, seemingly supported their coping efforts. Based on these findings, I can conclude that the said strategies supported the coping and resilience of the teachers that took part in my study.

In summary, I posit that various cognitive coping strategies positively correlate with resilience, and that teachers' levels of resilience will be strengthened when they rely on the said strategies. I do not only deduce that by relying on these coping strategies, levels of teacher resilience will be stronger; I also propose that the cognitive coping strategies that positively correlate with resilience can be viewed as multiple pathways to resilience. In this regard, I argue that a reliance on these coping strategies will support the levels of resilience that teachers experience when having to cope with change and the associated challenges. In the same way, I reason that increased levels of resilience can, in turn, increase the ability

of teachers to employ cognitive coping strategies when having to deal with challenges. To this end, I infer that teachers are thus able to change their environments as a result of changing their behaviour (coping strategies) in response to challenges during adverse times. In summary, I view the cognitive coping strategies that positively correlate with resilience as cognitive mediators that can provide a means for multiple pathways to teacher resilience when teachers face challenges.

6.2.3 Secondary research question 3: How effectively did teachers experience these cognitive strategies to be?

The quantitative results of my study confirm that the cognitive strategies employed by the teachers to cope during the COVID-19 pandemic positively correlate with resilience, thereby indicating the participating teachers' reliance on these strategies to bounce back and cope, despite the sudden changes and associated challenges they faced. In support of the statistical correlations indicated by the quantitative results, the teachers' reliance on cognitive strategies in support of their coping is evident in the qualitative findings I obtained. More specifically, the teachers did not only experience the cognitive strategies they relied on as beneficial within the context of coping with the COVID-19 pandemic, they also acknowledged the future value of relying on the said cognitive coping strategies when facing challenges. In this regard, the teachers confirmed and acquired existing and new skills, resulting in them realising the value of strategies, such as remaining calm, making use of reflective practices and prioritising what is important at the time while maintaining a positive mindset, which seemingly supported their repertoire of strategies when having to cope with challenges during the time of the pandemic, yet potentially also in future.

The feedback obtained from the teachers during the member checking phase of my study confirmed their agreement about and perceived value of the cognitive strategies they had been relying on, which supported their coping and ultimately their levels of resilience when having to deal with the challenges implied by the COVID-19 pandemic. Based on these findings, I infer that the teachers realised the immediate and potential future value of using these strategies when having to cope with challenging times.

Closely related, and in line with the conceptual framework of my study, the environment and possible associated stressors are important during any coping process when relying on cognitive coping strategies. In this regard, the participating teachers' perceived beliefs in their own ability to respond effectively to stressors through the implementation of cognitive

strategies seemingly supported their coping self-efficacy beliefs. To this end, I argue that teachers' (or any other individuals') sense of personal enablement and ability to self-regulate can be improved, with this subsequently promoting the ability to cope.

My argument is based on the findings of the current study that imply that the perceived self-efficacy of the teachers increased due to them experiencing success as a result of their coping efforts in the face of the adversity associated with the pandemic. By relying on an implied self-efficacy as well as self-regulation to appraise the risk factors that the environment posed, and by relying on cognitive processes and flexibility, the participating teachers were able to change their behaviour positively, which resulted in their coping. As such, I conclude that the teachers' enhanced sense of personal enablement facilitated reflective engagement and innovative action strategies, enabling them to cope with the challenges they faced, which supported their perceived value on these coping strategies, not only during the time of the pandemic, but also in future.

6.2.4 Secondary research question 4: How can insight into the cognitive strategies employed by teachers in response to the COVID-19 pandemic inform resilience theory?

As captured in the conceptual framework that guided my study, multiple pathways to resilience exist when people are required to cope with challenges. Based on the findings of this study indicating a positive correlation between various cognitive coping strategies and resilience, I posit that the cognitive strategies employed by the teachers in response to the adversities implied by the COVID-19 pandemic can be regarded as such pathways to resilience. These cognitive strategies did, therefore, not only assist the teachers to cope, but also promoted their resilience within the context and during the time of the pandemic. With reference to the specificity of the adversities implied by the COVID-19 pandemic and the context within which my research took place, limited similar studies on cognitive strategies employed by teachers in support of resilience have been documented. To this end, resilience theory is informed by the new insight gained from my study, conducted in a specific context, with the findings potentially being transferrable to similar contexts.

The cognitive resilience of the participating teachers and their perceived self-efficacy seemingly enhanced their personal enablement and self-regulation within adverse circumstances, enabling them to respond and behave in a way that reflected coping.

Therefore, the cognitive strategies that the teachers employed to cope with the challenges implied by the pandemic seemingly affected their behaviour in support of their resilience.

To this end, I propose that resilience theory and the resilience of individuals be depicted as nested within a multidirectional relationship with, among other factors, cognitive strategies and coping processes, involving cognitive mediators, with these being primary appraisal, secondary appraisal and coping. My research confirms that such a reciprocal and transactional relationship exists between resilience and the said cognitive strategies by indicating a positive and significant relationship between resilience and problem-focused coping strategies. This implies that, in addition to the said cognitive strategies strengthening the level of resilience, increased levels of resilience will, in turn, strengthen the ability of teachers to rely on cognitive strategies when responding to challenges. From my findings, it is clear that increased levels of resilience will correspondingly imply increased numbers of pathways that may facilitate coping. As indicated, the use of multiple pathways can, in turn, support the level of resilience that teachers or other people experience during times of adversity, such as during the COVID-19 pandemic.

In line with existing theory on resilience, the teachers in my study furthermore demonstrated positive emotions, kept their spirits high and maintained a good level of mental health. In addition, they sought social support and relied on relationships with significant others, tolerated uncertainty for the time being, actively solved problems, and coped on a daily basis, even creating hope for the future as part of their coping efforts. They were thus able to engage in a process of mobilising protective and promotive factors within the socio-ecological system to sustain and improve their wellbeing, despite the adversities associated with the COVID-19 pandemic being acute and chronic. In this regard, I posit that teachers who exercise optimism during difficult times will be able to demonstrate higher levels of resilience than those who do not rely on this pathway to resilience that may enable them to remain positive, adapt and cope.

Closely related, based on the premise that adaptive and resilient individuals will generally display fewer symptoms of anxiety and depression, with little or no long-term negative psychological effects following adverse experiences, I predict that teachers who demonstrate resilience during a pandemic will be less likely to experience long-term negative psychological effects. The future orientation of teachers relying on cognitive coping strategies in the face of adversity furthermore forecasts an ability to cope and demonstrates resilience during similar adverse times in future. To this end, resilience theory is supported

and may be further informed by the findings of my study, indicating that the teachers did in fact demonstrate resilience, and would probably experience fewer long-term negative psychological effects.

In support of their experienced resilience, the teachers who participated in the current study also relied on the support of members of the school management teams and the protocols that were set in place to assist them to remain in control of what was possible at the time. Existing literature emphasises the importance of the support from school leadership and management teams and the trust that teachers place in structures as contextual factors that can positively influence teacher resilience. In this regard, I propose that a context-focused perspective, aligned with a system-focused perspective, guide and inform the implementation of sustained managerial support structures and protocols that may assist teachers' coping at times when they face adversity, also with a view to promoting teacher resilience by creating a positive school climate that can provide opportunities that may strengthen teacher wellbeing and resilience.

To this end, the findings of my study emphasise both the individual capacity of teachers to demonstrate resilience on a personal level (interpersonal resources), and the important role of intrapersonal resources (for example, families and communities) as enablers of resilience during challenging times. In this regard, the contextual resources and dynamic and collective interaction between the systems wherein the participating teachers function, contributed to the resilience they demonstrated. Closely related, the participants relied on their value orientation, traditional habits and cultural identity to cope, with these aspects contributing to their demonstrated levels of resilience. Based on this argument, I posit that resilience theory can be informed by the traditional habits of people, nested in their cultural identity that may enable them to cope and demonstrate resilience. To this end, I conclude that teacher resilience can be promoted through the creation of opportunities to practise traditional habits during times of adversity, such as during the COVID-19 pandemic. I further argue that teachers in South Africa may mobilise collectivism when having to cope, thereby relying on, for example, extended family resources and connections with others who share the same culture and heritage.

The findings of my study furthermore indicate that the participating teachers relied on faith and hope, on a sense of pride and professional competence, their perceived purpose and their meaning-making by means of reflective practices when coping with the pandemic. In this regard, the teachers' perceptions of their own capacity to manage uncertainties

successfully, the implied formation of their teacher identity and the experienced sense of agency and mastery to fulfil their educational role supported teacher resilience. These findings inform existing theory on teacher resilience in terms of teachers' reflective practices that can facilitate meaning-making in terms of their purpose in life, which may be nested in faith and a positive mindset during times of adversity.

Finally, the capacity of the participating teachers to cope, yet also to develop as a by-product of their coping, points to teacher resilience. Even though the teachers who participated in my study experienced several risk factors, the presence of protective factors predicted positive outcomes. To be more specific, the participants did not merely acquire successful coping strategies during the time of the pandemic; they also gained insight into the value of these strategies for future use to maintain equilibrium and commitment to their profession in spite of the challenges they may face. As such, the existing theory on teacher resilience is supported by the findings of my study in terms of the value of cognitive coping strategies when facing challenges, and how such cognitive-based coping can inform immediate and future levels of resilience.

6.2.5 Primary research question: How did cognitive resilience support teachers to cope with the COVID-19 world pandemic?

Cognitive resilience implies a process of adaptive coping by relying on various cognitive strategies, as was found to have been implemented by the participating teachers to cope with the COVID-19 world pandemic. To be more specific, the teachers relied on cognitive coping strategies in various ways to cope with the challenges they faced, resulting in them demonstrating resilience during the time of the pandemic. They used a combination of these cognitive strategies, implying that the use of the strategies supplemented the positive adaptation outcome(s) of other strategies, providing for increased levels of resilience. Therefore, even though I found that the teachers demonstrated cognitive resilience and that this supported their coping with the pandemic, I do not claim that this was the only strategy relied on by the teachers who participated in my research. Various other strategies and traits could have contributed to the teachers' coping with the pandemic, including the psychosocial strategies that were explored by fellow doctoral student, Stephan Dippenaar.

However, as indicated, the cognitive strategies that the current study foregrounds as valuable for coping include a range of related strategies. These are namely the following: active coping (keeping busy and doing tasks, adapting to changed circumstances, and

acquiring new skills), planning (taking things one step at a time, maintaining a routine, and staying in control of what is possible), the suppression of competing activities (prioritising what is important at the time, and conscious disengagement), restraint coping (accepting the situation for the time being, and remaining calm), seeking instrumental social support (seeking advice or information, and relying on relationships with significant others), and nurturing a growth mindset (engaging in self-discovery and personal growth, drawing on reflective practices, maintaining self-care, nurturing spirituality, and exercising optimism).

It therefore seems clear that the participating teachers relied on multiple pathways to resilience to cope with the challenges implied by the pandemic, of which cognitive resilience is one. The cognitive processes that mediated the teachers' coping can be ascribed to cognitive flexibility and reflective thoughts, as well as to the teachers' perceived self-efficacy and their reliance on self-regulation to appraise and reappraise the stressors associated with the pandemic that could affect behaviour (coping) in the environment, in an attempt to change and/or lessen the consequences of the stressor(s). In this regard, the teachers who participated could continually obtain feedback from internal cognitive appraisal processes as well as changes in the environment, enabling them to alter their cognition and behaviour. To this end, the teachers were able to mobilise promotive and protective factors and processes across multiple systems, with a strong reliance on intrapersonal (cognitive) yet also on intrapersonal promotive and protective factors and processes, including that of seeking support from significant others.

On a cognitive level, the teachers therefore engaged in activities in which they could draw on the relational and emotional support from others in an attempt to cope. In addition, the teachers relied on cognitive processes and abilities to remain calm and self-regulate in order to facilitate cognitive appraisal and maintain their emotional wellbeing. This, in turn, enabled them to execute cognitive coping strategies that supported their coping behaviour and levels of resilience. This argument supports a holistic approach to coping, highlighting the importance of both cognitive resilience and psychosocial coping strategies investigated by fellow PhD student, Stephan Dippenaar.

Based on the findings of my study and the arguments put forward in the previous paragraphs, I maintain that teachers' ability to self-regulate and the probable enrichment of their self-perception and self-efficacy during a coping process are proof of an ongoing process of personal enablement. This process can increase the ability of teachers to engage in reflective practices and rely on innovative action strategies to continually enhance coping

and strengthen resilience. In this regard, I further argue that perceptions of self-efficacy are often nested in a growth mindset during times of adversity. By implication, the teachers in my study were able to adopt a positive outlook and perceived the challenges they faced as opportunities to learn and promote resilience, resulting in a process of meaning-making. To this end, I can conclude that teachers' perceptions of challenges may not only support their ability to cope, but can also contribute to their self-efficacy beliefs, offering the possibility of an ever-broadening spectrum of coping strategies when having to deal with sudden change and the associated challenges. Therefore, I reason that when teachers make use of cognitive coping strategies, their potential to deal with challenges as well as their levels of cognitive resilience can be strengthened, placing them in a better position to effect positive change in their environments during challenging times.

6.3 CONCLUSIONS IN TERMS OF THE FORMULATED HYPOTHESES

In this section, I draw conclusions in terms of the following stated hypotheses:

- ❖ Null Hypothesis (H_0): There is no relationship between the cognitive strategies that teachers utilised in response to the COVID-19 world pandemic and teacher resilience.
- ❖ Alternative Hypothesis (H_a): There is a relationship between the cognitive strategies that teachers utilised in response to the COVID-19 world pandemic and teacher resilience.

In determining the relationship between problem-focused coping (cognitive strategies) and resilience, the results of the Spearman correlation coefficient indicate a correlation value of 0.327 with a p-value of $p = <0.001$. These results confirm a positive and significant correlation between problem-focused coping and resilience.

Based on the results I obtained, I reject the null hypothesis. As such, I conclude that there is a relationship between the cognitive strategies that teachers utilised in response to the COVID-19 world pandemic and teacher resilience.

6.4 CONTRIBUTION OF THE STUDY

In this section I contemplate the contribution of my study, with specific reference to existing theory, methodology and practice. As I deem the findings of my study to be novel within the context of having to deal with and adapt to the challenges implied by the COVID-19 pandemic, the study seemingly adds new insight to this field of knowledge.

6.4.1 Theoretical contribution

Many scholars who contributed to existing literature on resilience theory in the past have focused on affective and protective systemic factors that may promote resilience. My study, however, focused on the cognitive strategies that teachers employed when having to cope with the challenges implied by the COVID-19 pandemic, the correlation of these strategies with resilience, as well as the implications of the evident correlations. Consequently, the findings of my study contribute to existing theory of resilience with specific reference to the cognitive strategies that can promote resilience and that were employed by teachers who had to cope with the adversities associated with a world pandemic. To this end, the findings of my study add to the growing body of knowledge on problem-focused methods that may facilitate mental processes that teachers possibly engaged in to cope with the challenges they faced as a result of the COVID-19 pandemic. To be more specific, the finding that these problem-focused cognitive strategies showed a statistically significant positive correlation with resilience adds insight in terms of the reciprocal positive relationship between the level of resilience and that of relying on problem-focused cognitive strategies. Future coping efforts with similar challenges experienced by teachers may, as a result, be informed by the findings of the current study in support of individuals' levels of resilience during adverse times.

Not only do the findings of my study shed light on the specific cognitive strategies that the participating teachers utilised to cope during the pandemic, they also add to the existing theory on the reciprocal role of such cognitive strategies and resilience within the coping process. To be more specific, the findings of my study add to the conceptual framework that guided my research by conceptualising a range of cognitive strategies that supported resilience within the context of a world pandemic. In this regard, I posit that the identified cognitive strategies can act as mediators within the coping process of appraisal, reappraisal and coping. In turn, teacher behaviour can be guided and informed, which can enable them to reappraise stressors, and ultimately support their coping and levels of resilience.

It appears as if these mediating strategies that can enable teachers to reappraise stressors that could inform behaviour will support teachers to do so in an environment that poses stressors that may be out of their control. To this end, the reliance on cognitive strategies seemingly depends on the ability of teachers to employ cognitive strategies as mediators during a coping process in response to an unruly environment. It follows that the current study's theoretical contribution to the theory of resilience and the theory of coping rests on

the argument that coping can be a result of not having a choice but to adapt, yet that this coping process may still result in increased levels of teacher resilience.

The findings of my study furthermore confirm the global shift towards increasingly relying on technology and maintaining virtual presence in support of people fulfilling their professional and personal responsibilities during times of challenge, contributing to the theory on possible avenues and pathways to resilience, thereby adding to the fields of coping and resilience theory. In this sense, the findings of my study contribute to the theory of teacher resilience with specific reference to how contact *via* online platforms can support coping during a challenging time when in-person contact with significant others and peers may be restricted. This finding thus confirms the importance of contact with significant others during challenging times, if not in person, then through an alternative mode.

Based on the findings of my study, the theory of teacher resilience, within the context of the COVID-19 pandemic, is thus enriched. In this regard, I conceptualise teacher resilience within the context of the COVID-19 pandemic as the product of teachers' use of cognitive strategies during a process of cognitive coping, through positive adaptation of behaviour in response to the appraisal and reappraisal of stressors in the environment, in an attempt to cope, and ultimately to improve the own wellbeing and levels of resilience. To this end, teacher resilience, as a result of the reliance on *inter alia* cognitive coping strategies, could have led to enhanced levels of personal enablement and increased levels of self-efficacy during the time of the pandemic, yet also when employed during adverse times in future. In this way, the findings of my study add to the existing theory on cognitive coping by highlighting the idea that teachers will not only rely on cognitive coping strategies when facing challenges, but will also metacognitively realise the future value of relying on such cognitive strategies to cope with adversity.

6.4.2 Methodological contribution

As I undertook my research during the COVID-19 pandemic, I was not able to conduct data collection/generation through contact sessions with the respondents/participants. All data collection/generation thus had to be done through internet-mediated strategies. Even though internet-mediated research is not a new concept, my study makes a contribution to research methodology in terms of alternative ways of facilitating focus groups. With reference to my description of the process in Chapter 3, scholars undertaking future studies may thus

potentially employ similar processes in instances where online research is mandated, or for other applicable reasons.

To be more specific, my study makes a contribution in terms of the potential use and value of Kumospace® for online data generation through focus groups. By making use of this online platform to conduct the participatory focus groups, I could create an opportunity for teacher-participants to voice their experiences in a virtual meeting room that could be customised to represent a welcoming space for conversation and active participation. Not only were the participants able to make use of video calling, they could virtually move around in the online meeting room, allowing for meaningful (virtual) connections between myself and the teacher-participants as well as amongst themselves. This platform also provided me with the opportunity to record the sessions.

The manner in which I executed my study may, therefore, specifically contribute to the possible use of virtual focus groups and internet-mediated research when involving teachers as participants. It is possible that the fact that the teachers were expected to engage in remote teaching may have prepared them to an extent for the online interaction involved in the data generation sessions; however, their contributions and ease-of-use of this platform add value to and confirm the possible implementation of such methods when conducting research within the field of education. By first involving teachers in the completion of an online questionnaire and then in online focus groups, the methodological contribution associated with my study lies in the way in which an alternative approach can be followed when conducting mixed methods research with teachers without having contact sessions with them, with my findings potentially informing the research design decisions of future researchers who intend to implement similar methodological strategies.

6.4.3 Contribution to practice

The participation of the teachers in my study in itself implies a potential contribution to practice, based on the teachers' engagement in group discussions as well as the feedback they received on the preliminary findings during the member checking phase of my study. To be more specific, as the teachers who participated in the focus groups prominently indicated their appreciation for a platform (even though online) to voice their experiences and receive support from others during trying times, the opportunity created for them to engage with peers and to voice and address their frustrations, concerns, challenges and opinions without the fear of infection during the pandemic, seemed valuable. During these

discussions, the participating teachers may have benefited from the shared experiences and advice of others in support of their own wellbeing.

To be more specific, the teachers' participation in the research process therefore created avenues to share experiences yet also to be supported in terms of others' experiences that could confirm and validate their own experiences, and also inform their professional and psychosocial functioning. In discussion with others, the participants were able to reflect on the cognitive strategies they had employed in response to the challenges implied by the COVID-19 pandemic, as well as on the associated practical value for future of acquiring these strategies, in support of their own resilience.

Furthermore, in discussion with others, the participants may potentially have identified peers who were in need of support, resulting in them following up with others to support them. The conversations with others and an awareness of possible strategies of coping may also have resulted in teachers facilitating more regular contact with their colleagues in support of their own wellbeing. In addition, insight into their own coping by means of, amongst other strategies, cognitive coping strategies, could have better prepared the participants for future coping in times of adversity.

In addition, the findings of my study may potentially provide teachers with guidance on cognitive coping strategies that can be employed during other challenging times that impact their normal educational activities, not necessarily only at times of a pandemic. In elaboration, the cognitive coping strategies related to the findings of my study may also be used by other professionals, not only teachers, during challenging times.

6.5 REFLECTING ON POTENTIAL LIMITATIONS OF THE STUDY

Even though I initially intended to involve teachers from both urban and semi-urban schools, the response rate of the semi-urban school teachers was too low to include the data obtained from them as part of my study. As such, I was able to include only the data obtained from teacher-participants employed at urban schools, which prevented me from making a comparison between the coping strategies and levels of resilience that these teachers may have demonstrated and those employed by teachers in semi-urban school settings. This limitation may have narrowed the scope and depth of the results I subsequently obtained; yet, based on data saturation and the current findings, I am satisfied that the data I obtained was sufficient to address the purpose of my study.

Furthermore, none of the four participants from the semi-urban schools who fully completed the questionnaire availed themselves to form part of the online focus groups, although I had made several attempts to encourage their participation. Despite this limitation, the number of participants from urban schools allowed me to redirect the focus of my study to that of teachers coping with COVID-19-related challenges in the urban school context, for which purpose I obtained sufficient data. The fact that the response rate was so low for teachers working in semi-urban school contexts is in itself an indication that further research is required to explore the reasons for the poor participation rate.

Next, the fact that the vast majority of the respondents (239 out of the 240) were white/Caucasian points to another possible limitation of my study. As the sample thus mainly comprised respondents from one race, which was not my intention when I embarked on this PhD journey, the identified cognitive strategies may perhaps be related to the participants' demographic group, not necessarily representing the experiences of all teachers across the various cultural groups in South Africa. As such, other findings may have been obtained if the sample had been more diverse. In addition, I could not necessarily draw on the advantage of quantitative results that could be generalised to a wider population. This can possibility be explored in follow-up studies, facilitating a comparison between the coping tendencies of various race groups.

The use of an online platform to conduct focus groups implied another challenge, namely that of not being able to carefully observe the participants during the data generation sessions as would have been possible if in-person focus groups could have been facilitated. However, I aimed to address this potential limitation by observing what I could and paying particular attention to the teacher-participants' willingness to interact, to their non-verbal cues, pauses, their use of voice and their facial expressions. In addition, I revisited the audio-recordings after completing the data generation process and paid specific attention to any possible indications of significance. During the focus group sessions, I furthermore made use of the skills I had acquired as an educational psychologist, such as active listening, prompting and probing. To this end, I could facilitate sufficient interaction with and amongst the teacher-participants during the online focus groups to obtain rich data that subsequently enabled me to address the research questions.

Finally, as part of my own reflective process, I became aware of the challenge that I experienced in terms of adapting my own thinking and research planning to accommodate the reality of the COVID-19 pandemic. To be more specific, my own data

collection/generation strategies, and therefore the entire research design, had to be adapted to conform to the reality of assimilating virtual spaces for research within the context of the pandemic. As a researcher focusing on cognitive coping strategies, my own metacognitive processes guided my personal realisation that I myself had to employ strategies in adapting my research strategies to align with the available options related to the COVID-19 pandemic. I regard this necessity to adapt my own research process as an opportunity rather than a limitation, as it enabled me to try out new avenues and methods of conducting research with human beings.

6.6 RECOMMENDATIONS

Based on the findings of my study, I make recommendations for training, practice and future research in this section.

6.6.1 Recommendations for training

The findings of my study can inform continuous professional teacher development (CPTD) programmes. To be more specific, such programmes can focus on resilience promotion amongst teachers by including knowledge and skills related to cognitive coping strategies, with a focus on applying the theory in practice when facing difficult times. Such in-service training opportunities for teacher-practitioners may include topics such as how to plan time and resources to maintain a routine, how prioritisation may facilitate effective coping, how to engage in reflective practices during challenging times, how to maintain self-care and what the importance thereof is in coping and in general wellbeing, and what the value of optimism and positive reframing is when having to cope with challenges. In addition to CPTD programmes covering such aspects, pre-service teacher training programmes may also include content of this nature, for prospective teachers to be better equipped to deal with the challenges they may experience on entering the profession.

In this manner, both in-service and pre-service training programmes for teachers can focus on enhancing the capacity of teachers to actively cope when facing challenges. These coping capabilities of teachers can be promoted by conveying the value of being adaptable and flexible, of relying on thorough planning as cognitive strategy and of making use of chunking (taking things one step at a time), maintaining a routine during uncertain and adverse times and remaining organised while sustaining structured control to teachers. Training may furthermore focus on guiding teachers to be able to prioritise and consciously disengage from competing activities and thought processes that may intervene with their

ability to cope when facing change and challenges. Other cognitive strategies that may be highlighted include the ability to self-regulate, rely on a growth mindset, exercise optimism and remain aware of the value of instrumental social support from significant others.

As evident from the findings of my study, various cognitive coping strategies related to healthy lifestyle choices that can promote resilience are not necessarily implemented by teachers when having to cope with challenges. In this regard, both in-service and pre-service teachers may benefit from training that focuses on cognitive techniques related to mindfulness, progressive relaxation or yoga, and the possible value of such techniques for teacher wellbeing. Therefore, I recommend that teachers be trained in and equipped with the use of these techniques to be able to employ the techniques during adverse times in support of their own wellbeing.

I furthermore recommend ongoing training for teachers on the use of online platforms to perform their educational duties in an effective and ethical manner, due to the use of technological and virtual platforms being prominent in times of crisis such as the lockdown period of the COVID-19 pandemic. In addition, teachers can be guided to utilise such online platforms in support of their own wellbeing by, for example, engaging in online discussions and support group activities with peers. Finally, school leadership teams and School-based Support Teams (SBSTs) can also be trained on how to support the aforesaid training and development of the teachers in their schools, as well as other potential teachers who may join their schools in future.

6.6.2 Recommendations for practice

Based on the findings of my study, it can be concluded that the wellbeing of teachers is imperative, not only for their own healthy functioning, but also for the wellbeing of the learners they teach. To this end, I recommend the development of and implementation of targeted interventions in support of teachers coping with sudden change and adversity outside and within the school context. Such proposed interventions can take on various forms, for example, individual support sessions by professionals, group sessions, school-based intervention programmes or peer group support sessions. Such interventions and programmes that target the enhancement of, for example, cognitive coping strategies amongst teachers can potentially augment teacher resilience.

To be more specific, professionals such as educational psychologists and counsellors can facilitate and promote teacher resilience by facilitating interventions with teachers to

enhance cognitive coping strategies amongst them in support of teachers' resilience and wellbeing. By offering psychological support and guidance to teachers to enable them to implement a growth mindset when having to cope with challenges, or practise optimism, teacher resilience can be enhanced. People in helping professions, as well as the Department of Education can fulfil a role in initiating such supportive interventions for teachers in the profession.

In addition to the supportive role that people in the helping professions and on national level in the education sector may fulfil, I recommend that school management teams and supervisory support structures create platforms for the accommodation and facilitation of targeted support structures for teachers. Such school-based support structures/platforms can provide a means of continuous psychosocial and professional support for teachers, not only in support of coping with challenges in general, but also during times of severe adversity. In addition, the creation and maintenance of peer support structures, for example, by means of WhatsApp groups or online discussion sessions that provide teachers with regular and/or continuous opportunities to engage with others, can be valuable when they have to deal with challenges. An aim of such support initiatives can include the minimisation of the isolation of teachers during challenging times to provide teachers with a sense of belonging and a safe environment where they can seek and obtain assistance and support during adverse times. Anonymous supportive helplines can similarly be made available to teachers where they can seek advice or assistance when necessary.

Another aspect that school management teams can assist teachers with is the provision of structures and protocols that can inform teacher conduct during times that require change and adaptation. In this regard, the school management team can, for example, assist with the efficient use of resources and time by teachers in support of their own coping, wellbeing and ultimately the levels of teacher resilience they maintain. By embracing the various traditional habits and cultural identities of all teachers, schools can create a safe space for teachers to demonstrate resilience in a way that they can identify with during adverse times. To this end, school environments can form a protective factor to teachers who need to cope, in support of their resilience.

Finally, the methodological contribution of my study foregrounds an alternative way of conducting internet-mediated research. To this end, other scholars can rely on similar online research strategies when wanting to conduct internet-mediated research in future, as the

manner in which I implemented the mixed methods research design of my study can inform their research design decisions for associated research practices.

6.6.3 Recommendations for future research

Based on the findings of my study, I propose the following studies for future:

- ❖ Comparative research on the cognitive coping strategies that teachers from various races, cultures, and school contexts other than that representative of the sample of this study have employed in support of resilience during the time of the COVID-19 pandemic.
- ❖ Explanatory research on teachers' reliance (or not) on potentially harmful behaviour when having to cope with adversity, such as during the COVID-19 pandemic.
- ❖ Follow-up case study research on teachers' reliance (or not) on self-efficacy, cognitive flexibility and/or a positive self-concept when having to cope with challenges, such as those implied by the pandemic.
- ❖ Comparative research on the effect of internet access, technological skills and infrastructure when recruiting teachers from different contexts (including semi-urban schools) as participants in research that is conducted in an online manner.
- ❖ Explanatory case study research on the role of teachers' ability to self-regulate on a cognitive and emotional level when having to deal with challenges and support others during a coping process.
- ❖ Explanatory research on the possible reason(s) for teachers not seeking advice or information from institutions such as clinics, hospitals or libraries, as well as mentors, during the time of the COVID-19 pandemic.
- ❖ Explanatory research on the possible influence of collectivism on cognitive coping and the resilience of teachers in the South African context, across various races and ethnic groups.
- ❖ Descriptive research on the role that self-esteem and self-image can play when teachers have to cope with sudden change and the associated challenges.

- ❖ Intervention research on the development, implementation and outcome of programmes and interventions offered within the education sector to support teacher resilience by relying on cognitive coping strategies when dealing with challenges.
- ❖ Comparative research on the cognitive coping strategies that school management teams relied on when having to deal with the challenges implied by the COVID-19 pandemic.
- ❖ Follow-up research on how teachers' utilisation of cognitive coping strategies and psychosocial strategies, explored by fellow student Stephan Dippenaar, contributed to their holistic way of coping and resilience demonstrated during the COVID-19 pandemic.

6.7 CONCLUDING COMMENTS

During the initial stages of my study, the COVID-19 pandemic emerged as an unprecedented threat to the lives and livelihoods of individuals and communities across the globe. The effects of this pandemic influenced every country, city and sector. Not only did nations experience extraordinary levels of collective hardships; they were also left vulnerable as individuals on an unparalleled level.

Despite change and the associated pandemic-related challenges experienced on various levels, many individuals worldwide reacted with grit, perseverance and resilience. Against this background, my study focused on the way in which teachers in South African urban schools in one of the main cities demonstrated resilience during the time of the world pandemic by relying on cognitive coping strategies. Not only did the teachers cope with the adversities related to the pandemic; they also displayed a level of resilience that can be linked to their reliance on cognitive coping strategies.

The teachers who participated in my study namely followed multiple pathways to resilience by making use of various cognitive strategies. To be specific, my research thus firstly demonstrates the potential that lies within cognitive processes, and secondly confirms that by harnessing this potential, resilience can be facilitated during adverse circumstances. Instead of focusing on challenges, the findings of my study suggest that teachers will in general choose to focus on hope for tomorrow when facing challenging times. I conclude with a statement by Nelson Mandela who summarised this value in the following words: *May your choices reflect your hopes, not your fears* (Cape Times, 2018).

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APPENDIX A: COPE INVENTORY

Items of the COPE inventory (Carver, 2013) to be responded to (online) on a four-point Likert scale (1 = I usually don't do this at all; 2 = I usually do this a little bit; 3 = I usually do this a medium amount; 4 = I usually do this a lot)

1. I try to grow as a person as a result of the experience.
2. I turn to work or other substitute activities to take my mind off things.
3. I get upset and let my emotions out.
4. I try to get advice from someone about what to do.
5. I concentrate my efforts on doing something about it.
6. I say to myself "this isn't real."
7. I put my trust in God.
8. I laugh about the situation.
9. I admit to myself that I can't deal with it and quit trying.
10. I restrain myself from doing anything too quickly.
11. I discuss my feelings with someone.
12. I use alcohol or drugs to make myself feel better.
13. I get used to the idea that it happened.
14. I talk to someone to find out more about the situation.
15. I keep myself from getting distracted by other thoughts or activities.
16. I daydream about things other than this.
17. I get upset and am really aware of it.
18. I seek God's help.
19. I make a plan of action.
20. I make jokes about it.
21. I accept that this has happened and that it can't be changed.
22. I hold off doing anything about it until the situation permits.
23. I try to get emotional support from friends or relatives.
24. I just give up trying to reach my goal.
25. I take additional action to try to get rid of the problem.
26. I try to lose myself for a while by drinking alcohol or taking drugs.
27. I refuse to believe that it has happened.
28. I let my feelings out.

29. I try to see it in a different light, to make it seem more positive.
30. I talk to someone who could do something concrete about the problem.
31. I sleep more than usual.
32. I try to come up with a strategy about what to do.
33. I focus on dealing with this problem, and if necessary, let other things slide a little.
34. I get sympathy and understanding from someone.
35. I drink alcohol or take drugs to think about it less.
36. I kid around about it.
37. I give up the attempt to get what I want.
38. I look for something good in what is happening.
39. I think about how I might best handle the problem.
40. I pretend that it hasn't happened.
41. I make sure not to make matters worse by acting too soon.
42. I try hard to prevent other things from interfering with my efforts at dealing with this.
43. I go to movies or watch TV, to think about it less.
44. I accept the reality of the fact that it happened.
45. I ask people who have had similar experiences what they did.
46. I feel much emotional distress, and I find myself expressing those feelings a lot.
47. I take direct action to get around the problem.
48. I try to find comfort in my religion.
49. I force myself to wait for the right time to do something.
50. I make fun of the situation.
51. I reduce the amount of effort I'm putting into solving the problem.
52. I talk to someone about how I feel.
53. I use alcohol or drugs to help me get through it.
54. I learn to live with it.
55. I put aside other activities to concentrate on this.
56. I think hard about what steps to take.
57. I act as though it hasn't even happened.
58. I do what has to be done, one step at a time.
59. I learn something from experience.
60. I pray more than usual.

Scales (sum items listed, with no reversals of coding):

- Positive reinterpretation and growth: 1, 29, 38, 59
- Mental disengagement: 2, 16, 31, 43
- Focus on and venting of emotions: 3, 17, 28, 46
- Use of instrumental social support: 4, 14, 30, 45
- Active coping: 5, 25, 47, 58
- Denial: 6, 27, 40, 57
- Religious coping: 7, 18, 48, 60
- Humour: 8, 20, 36, 50
- Behavioural disengagement: 9, 24, 37, 51
- Restraint: 10, 22, 41, 49
- Use of emotional, social support: 11, 23, 34, 52
- Substance use: 12, 26, 35, 53
- Acceptance: 13, 21, 44, 54
- Suppression of competing activities: 15, 33, 42, 55
- Planning: 19, 32, 39, 56



APPENDIX B: ADULT RESILIENCE MEASURE-REVISED (ARM-R)



Adult Resilience Measure-Revised (ARM-R)

ARM-R						
To what extent do the following statements apply to you? There are no right or wrong answers.						
		Not at all [1]	A little [2]	Somewhat [3]	Quite a bit [4]	A lot [5]
1	I cooperate with people around me	1	2	3	4	5
2	Getting and improving qualifications or skills is important to me	1	2	3	4	5
3	I know how to behave in different social situations	1	2	3	4	5
4	My family have usually supported me through life	1	2	3	4	5
5	My family knows a lot about me	1	2	3	4	5
6	If I am hungry, I can get food to eat	1	2	3	4	5
7	People like to spend time with me	1	2	3	4	5
8	I talk to my family/partner about how I feel	1	2	3	4	5
9	I feel supported by my friends	1	2	3	4	5
10	I feel that I belong in my community	1	2	3	4	5
11	My family/partner stands by me during difficult times	1	2	3	4	5
12	My friends stand by me during difficult times	1	2	3	4	5
13	I am treated fairly in my community	1	2	3	4	5
14	I have opportunities to show others that I can act responsibly	1	2	3	4	5
15	I feel secure when I am with my family/partner	1	2	3	4	5
16	I have opportunities to apply my abilities in life (like skills, a job, caring for others)	1	2	3	4	5
17	I enjoy my family's/partner's cultural and family traditions	1	2	3	4	5

For administration instructions and scoring, please refer to the accompanying manual.

When using the measure, please cite the following:

Resilience Research Centre. (2018). CYRM and ARM user manual. Halifax, NS: Resilience Research Centre, Dalhousie University. Retrieved from <http://www.resilienceresearch.org/>

Jefferies, P., McGarrigle, L., & Ungar, M. (2018). The CYRM-R: a Rasch-validated revision of the Child and Youth Resilience Measure. *Journal of Evidence-Informed Social Work*, 1-24. <https://doi.org/10.1080/23761407.2018.1548403>



APPENDIX C: RESILIENCE RESEARCH CENTRE

AUTHORISATION EMAIL

8/2/2020

Gmail - CYRM/ARM



Elisma Williams <elisma.w@gmail.com>

CYRM/ARM

1 message

RRC <rrc@dal.ca>
Reply-To: rrc@dal.ca
To: elisma.w@gmail.com

Sun, Aug 2, 2020 at 10:03 AM



CYRM/ARM

Hello **Elisma Williams**,

Thank you for your interest in using the CYRM/ARM.

You can now access all versions of the measure and the accompanying manual here:
<https://cym.resilienceresearch.org/measures/>

Regards,
The Resilience Research Centre



APPENDIX D: ONLINE QUESTIONNAIRE

Cognitive and psychosocial strategies teachers use to promote resilience during a world pandemic

Dear Teacher

You are invited to participate in our research project on cognitive and psychosocial strategies that teachers use to promote resilience during a world pandemic. We are postgraduate students in the field of Educational Psychology in the Department of Education, University of Pretoria.

Before you agree, we would like to tell you precisely what is involved. The purpose of the study is to investigate and describe the cognitive and psychosocial strategies employed by teachers who showed resilience in response to the adversities posed by the COVID-19 world pandemic. To this end, we aim to understand in greater depth the results of the quantitative data collected (through an online questionnaire) during the first phase of the research process by explaining, refining and extending these results using the analysis of qualitative data (obtained from online semi-structured interviews) as part of the second phase of the research process.

We would like you to complete an online questionnaire as part of the first phase of the research process. This may take about 20 minutes.

The Research Ethics Committee of Faculty of Education, University of Pretoria has granted written approval for this study with reference number: EDU181/20.

We hereby request your permission to use the data confidentially and anonymously for further research purposes, as the data sets are the intellectual property of the University of Pretoria. Further research may include secondary data analysis and using the data for teaching purposes. The confidentiality and privacy of all applicable to this study will be binding on future research studies.

Your participation in this study is voluntary. You may decline to participate or stop at any time without giving any reason. All the information obtained will be kept confidential. No information regarding any participant or school will be disclosed, and the results will be used

for research and publication purposes only. The implication of submitting the questionnaire is that you have given informed consent.

Please be so kind to complete this questionnaire by keeping the adversities posed by the COVID-19 pandemic in mind, and how you coped with these adversities.

We appreciate your help.

Yours sincerely

Elisma Williams and Stephan Dippenaar

Q1 Please indicate your Gender

- Male (1)
- Female (2)
- Prefer not to say (3)

Q2 Please supply your Age

Q3 Please indicate your Marital Status

- Single (1)
- Married (2)
- In a relationship (3)
- I do not want to say (4)
- Other (please specify) (5) _____

Q4 Please indicate your Ethnicity

- Black/African (1)
- White/Caucasian (2)
- Coloured (3)
- Indian (4)
- Other (5)

Q5 Please indicate your number of children

- None (1)
- 1 Child (2)
- 2 Children (3)
- 3 Children (4)
- 4+ Children (5)

Q6 Are you registered with SACE?

- Yes (1)
- No (2)

Q7 Please indicate the number of years you have been a teacher

- 5 years or less (1)
- Between 6 and 10 years (2)
- Between 11 and 15 years (3)
- Between 16 and 20 years (4)
- Between 21 and 25 years (5)
- More than 25 years (6)

Q8 Which subject/s do you teach?

Q9 Which grade/s do you teach?

- Grade 1 (1)
- Grade 2 (2)
- Grade 3 (3)
- Grade 4 (4)
- Grade 5 (5)
- Grade 6 (6)
- Grade 7 (7)
- Grade 8 (8)
- Grade 9 (9)
- Grade 10 (10)
- Grade 11 (11)
- Grade 12 (12)

Q10 Do you currently have internet access to continue education duties?

- Yes (1)
- No (2)

Q11 If yes, where do you have access to internet?

- The school where I am employed (1)
- Home (2)
- Personal Mobile Dongle (3)
- Friends/Relatives' homes (4)
- Public spaces (for example a restaurant) (5)
- Other (please specify) (6) _____

Q12 Did you have internet access during lockdown to continue education duties?

- Yes (1)
- No (2)

Q13 If yes, was the internet connection sufficient to carry out your education duties?

- Always (1)
- Most of the time (2)
- About half the time (3)
- Sometimes (4)
- Never (5)

Q14 Would you be willing to take part in an online interview which will aim at getting more information about the strategies you used during the COVID19 world pandemic? If yes, please supply your email address. Kindly keep in mind that all information will be kept confidentially.

Cognitive Strategies (Cope Inventory)

The aim of this study is to investigate and describe the cognitive and psychosocial strategies employed by educators in response to adversities posed by the COVID-19 world pandemic. Therefore, when the following section is completed, keep the adversities posed by the COVID-19 pandemic in mind, and how you coped with these adversities. Please respond to the following items by selecting one option per item.

	I usually don't do this at all (1)	I usually do this a little bit (2)	I usually do this a medium amount (3)	I usually do this a lot (4)
I try to grow as a person as a result of the experience.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I turn to work or other substitute activities to take my mind off things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I get upset and let my emotions out.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I try to get advice from someone about what to do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I concentrate my efforts on doing something about it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I say to myself, "This isn't real."	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I put my trust in God.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I laugh about the situation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I admit to myself that I can't deal with it, and quit trying.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I restrain myself from doing anything too quickly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	I usually don't do this at all (1)	I usually do this a little bit (2)	I usually do this a medium amount (3)	I usually do this a lot (4)
I discuss my feelings with someone.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I use alcohol or drugs to make myself feel better.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I get used to the idea that it happened.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I talk to someone to find out more about the situation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I keep myself from getting distracted by other thoughts or activities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I daydream about things other than this.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I get upset, and am really aware of it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I seek God's help.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I make a plan of action.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I make jokes about it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	I usually don't do this at all (1)	I usually do this a little bit (2)	I usually do this a medium amount (3)	I usually do this a lot (4)
I accept that this has happened and that it can't be changed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I hold off doing anything about it until the situation permits.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I try to get emotional support from friends or relatives.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I just give up trying to reach my goal.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I take additional action to try to get rid of the problem.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I try to lose myself for a while by drinking alcohol or taking drugs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I refuse to believe that it has happened.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I let my feelings out.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I try to see it in a different light, to make it seem more positive.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I talk to someone who could do something concrete about the problem.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	I usually don't do this at all (1)	I usually do this a little bit (2)	I usually do this a medium amount (3)	I usually do this a lot (4)
I sleep more than usual.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I try to come up with a strategy about what to do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I focus on dealing with this problem, and if necessary let other things slide a little.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I get sympathy and understanding from someone.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I drink alcohol or take drugs, in order to think about it less.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I kid around about it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I give up the attempt to get what I want.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I look for something good in what is happening.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think about how I might best handle the problem.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I pretend that it hasn't really happened.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	I usually don't do this at all (1)	I usually do this a little bit (2)	I usually do this a medium amount (3)	I usually do this a lot (4)
I make sure not to make matters worse by acting too soon.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I try hard to prevent other things from interfering with my efforts at dealing with this.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I go to movies or watch TV, to think about it less.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I accept the reality of the fact that it happened.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I ask people who have had similar experiences what they did.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel a lot of emotional distress and I find myself expressing those feelings a lot.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I take direct action to get around the problem.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I try to find comfort in my religion.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I force myself to wait for the right time to do something.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I make fun of the situation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	I usually don't do this at all (1)	I usually do this a little bit (2)	I usually do this a medium amount (3)	I usually do this a lot (4)
I reduce the amount of effort I'm putting into solving the problem.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I talk to someone about how I feel.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I use alcohol or drugs to help me get through it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I learn to live with it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I put aside other activities in order to concentrate on this.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think hard about what steps to take.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I act as though it hasn't even happened.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do what has to be done, one step at a time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I learn something from the experience.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I pray more than usual.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Adult Resilience Measure

To what extent do the following statements apply to you? There are no right and wrong answers.

	Not at all (1)	A little (2)	Somewhat (3)	Quite a bit (4)	A lot (5)
I cooperate with people around me.					
Getting and improving qualifications or skills is important to me.					
I know how to behave in different social situations.					
My family have usually supported me through life.					
My family knows a lot about me.					
If I am hungry, I can get food to eat.					
People like to spend time with me.					
I talk to my family/partner about how I feel.					
I feel supported by my friends.					
I feel that I belong in my community.					
My family/partner stands by me					

during difficult times.					
My friends stand by me during difficult times.					
I am treated fairly in my community.					
I have opportunities to show others that I can act responsibly.					
I feel secure when I am with my family/partner.					
I have opportunities to apply my abilities in life (like skills, a job, caring for others).					
I enjoy my family's/partner's cultural and family traditions.					

Thank you for your participation.



APPENDIX E: PRELIMINARY INTERVIEW GUIDE



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education

Department of Educational Psychology

As part of the second phase of my research (qualitative data collection), online participatory focus groups will be conducted in order to explain, refine and expand the results of the quantitative data. Preliminary questions that may form part of the second phase of my research follow.

PRELIMINARY INTERVIEW GUIDE

Thank you for further participation in the study and previously responding to the online questionnaire. I wish to invite you to participate in an online interview to understand your previous responses in greater depth. Your responses during this interview will be used for this research only. Neither your identity nor the school that you are employed at, will be disclosed and anonymity will be maintained.

The purpose of this interview is to explain, refine and expand the results obtained from the questionnaire completed during Phase 1 of the research process. When considering the purpose of the study, the research aims to describe the profile of teacher resilience in response to the adversities posed by COVID-19, with the specific focus on psychosocial and cognitive strategies that were employed. Further investigation into how you perceived the effectiveness of applying relevant strategies in response to the adversities related to the COVID-19 pandemic will be examined.

Questions should be answered as truthfully as possible. This online participatory focus group should take a maximum of 40 minutes.

Preliminary questions (as part of investigating the effectiveness of the cognitive strategies employed):

- How do/did you experience the challenges/stress related to COVID-19?
- Which adversity/adversities did you experience the most challenging to cope with?
- Which of the following strategies, if any, did you find most useful in dealing with adversities related to COVID-19? Please explain.

- Self-efficacy (belief in your capacity/confidence to perform behaviours that is necessary to handle the adversities).
- Movement and exercise
- Sleeping
- A positive attitude
- Healthy nutritional diet
- Mindfulness
- Active coping (took steps to circumvent the stressor/amend its effects)
- Planning (thought how to cope with the stressor and how to handle the stressor best)
- Suppression of competing activities (putting other projects aside to deal with the stressor)
- Restraint coping (waiting to act until an opportunity presented itself)
- Seeking of instrumental support (seeking advice, the assistance of information)
- Did you make use of any other cognitive strategies to cope with the challenges posed by COVID-19? If any, which? Please elaborate.

Thank you for your participation.



APPENDIX F: ETHICAL CLEARANCE FROM THE UNIVERSITY OF PRETORIA



Faculty of Education

Ethics Committee

23 October 2020

Mrs E Williams

Dear Mrs E Williams

REFERENCE: EDU181/20

We received proof that you have met the conditions outlined. Your application is thus **approved**, and you may start with your fieldwork. The decision covers the entire research process, until completion of the study report, and not only the days that data will be collected. The approval is valid for two years for a Masters and three for Doctorate.

The approval by the Ethics Committee is subject to the following conditions being met:

1. The research will be conducted as stipulated on the application form submitted to the Ethics Committee with the supporting documents.
2. Proof of how you adhered to the Department of Basic Education (DBE) policy for research must be submitted where relevant.
3. In the event that the research protocol changed for whatever reason the Ethics Committee must be notified thereof by submitting an amendment to the application (Section E), together with all the supporting documentation that will be used for data collection namely; questionnaires, interview schedules and observation schedules, for further approval before data can be collected. Non-compliance implies that the Committee's approval is null and void. The changes may include the following but are not limited to:
 - Change of investigator,
 - Research methods any other aspect therefore and,
 - Participants.

The Ethics Committee of the Faculty of Education does not accept any liability for research misconduct, of whatsoever nature, committed by the researcher(s) in the implementation of the approved protocol.

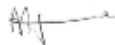
Upon completion of your research you will need to submit the following documentations to the Ethics Committee for your

Clearance Certificate:

- Integrated Declaration Form (Form D08),
- Initial Ethics Approval letter and,
- Approval of Title.

Please quote the reference number EDU181/20 in any communication with the Ethics Committee.

Best wishes



Prof Funke Omidire
Chair: Ethics Committee
Faculty of Education

Room 3-63, Level 3, Aldoos Building
University of Pretoria, Private Bag X20
Hatfield 0028, South Africa
Tel +27 (0)12 420 5656
Email edu.ethicsadmin@up.ac.za
www.up.ac.za

Faculty of Education
Fakulteit Opvoedkunde
Lefapha la Thuto



APPENDIX G: ETHICAL CLEARANCE FROM THE GAUTENG DEPARTMENT OF EDUCATION



GAUTENG PROVINCE
Department: Education
REPUBLIC OF SOUTH AFRICA

8/4/4/1/2

GDE RESEARCH APPROVAL LETTER

Date:	26 November 2020
Validity of Research Approval:	08 February 2021– 30 September 2021 2019/697
Name of Researcher:	Williams E
Address of Researcher:	Vineyard Village Boardwalk Meander Olympus
Telephone Number:	082 852 4809
Email address:	Elisma.w@gamil.com
Research Topic:	Cognitive strategies educators use to promote resilience during a world pandemic
Type of qualification	PhD (Educational Psychology)
Number and type of schools:	8 Primary Schools and 8 Secondary Schools
District/s/HO	Gauteng North and Tshwane South

Re: Approval in Respect of Request to Conduct Research

This letter serves to indicate that approval is hereby granted to the above-mentioned researcher to proceed with research in respect of the study indicated above. The onus rests with the researcher to negotiate appropriate and relevant time schedules with the school/s and/or offices involved to conduct the research. A separate copy of this letter must be presented to both the School (both Principal and SGB) and the District/Head Office Senior Manager confirming that permission has been granted for the research to be conducted.

The following conditions apply to GDE research. The researcher may proceed with the above study subject to the conditions listed below being met. Approval may be withdrawn should any of the conditions listed below be flouted:

1. Letter that would indicate that the said researcher/s has/have been granted permission from the Gauteng Department of Education to conduct the research study.

1

Making education a societal priority

Office of the Director: Education Research and Knowledge Management
7th Floor, 17 Simmonds Street, Johannesburg, 2001
Tel: (011) 355 0488
Email: Faith.Tshabalala@gauteng.gov.za
Website: www.education.gpg.gov.za

2. The District/Head Office Senior Manager/s must be approached separately, and in writing, for permission to involve District/Head Office Officials in the project.
3. **Because of COVID 19 pandemic researchers can ONLY collect data online, telephonically or may make arrangements for Zoom with the school Principal. Requests for such arrangements should be submitted to the GDE Education Research and Knowledge Management directorate. The approval letter will then indicate the type of arrangements that have been made with the school.**
4. **The Researchers are advised to make arrangements with the schools via Fax, email or telephonically with the Principal.**
5. A copy of this letter must be forwarded to the school principal and the chairperson of the School Governing Body (SGB) that would indicate that the researcher/s have been granted permission from the Gauteng Department of Education to conduct the research study.
6. A letter / document that outline the purpose of the research and the anticipated outcomes of such research must be made available to the principals, SGBs and District/Head Office Senior Managers of the schools and districts/offices concerned, respectively.
7. The Researcher will make every effort obtain the goodwill and co-operation of all the GDE officials, principals, and chairpersons of the SGBs, teachers and learners involved. Persons who offer their co-operation will not receive additional remuneration from the Department while those that opt not to participate will not be penalised in any way.
8. Research may only be conducted after school hours so that the normal school programme is not interrupted. The Principal (if at a school) and/or Director (if at a district/head office) must be consulted about an appropriate time when the researcher/s may carry out their research at the sites that they manage.
9. Research may only commence from the second week of February and must be concluded before the beginning of the last quarter of the academic year. If incomplete, an amended Research Approval letter may be requested to conduct research in the following year.
10. Items 6 and 7 will not apply to any research effort being undertaken on behalf of the GDE. Such research will have been commissioned and be paid for by the Gauteng Department of Education.
11. It is the researcher's responsibility to obtain written parental consent of all learners that are expected to participate in the study.
12. The researcher is responsible for supplying and utilising his/her own research resources, such as stationery, photocopies, transport, faxes and telephones and should not depend on the goodwill of the institutions and/or the offices visited for supplying such resources.
13. The names of the GDE officials, schools, principals, parents, teachers and learners that participate in the study may not appear in the research report without the written consent of each of these individuals and/or organisations.
14. On completion of the study the researcher/s must supply the Director: Knowledge Management & Research with one Hard Cover bound and an electronic copy of the research.
15. The researcher may be expected to provide short presentations on the purpose, findings and recommendations of his/her research to both GDE officials and the schools concerned.
16. Should the researcher have been involved with research at a school and/or a district/head office level, the Director concerned must also be supplied with a brief summary of the purpose, findings and recommendations of the research study.

The Gauteng Department of Education wishes you well in this important undertaking and looks forward to examining the findings of your research study.

Kind regards



Mr. Gumani Mukatuni
Acting CES: Education Research and Knowledge Management

DATE: 10/12/2020



APPENDIX H: LETTER TO PRINCIPALS



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Dear Sir/madam

RE: REQUEST FOR PERMISSION TO DO RESEARCH IN YOUR SCHOOL

We hereby wish to apply for permission to conduct research in your school. The research project will involve the educators of the school. My (Elisma Williams) research topic is *Cognitive strategies educators use to promote resilience during a world pandemic*. My co-researcher (Stephan Dippenaar) will focus on the psychosocial strategies that educators employed in response to adversities related to the COVID-19 pandemic.

This study will involve completing an online questionnaire as well as doing an online semi-structured interview with the educators of the school. The questionnaire will include an inventory investigating cognitive and psychosocial strategies (coping strategies) that educators used in response to adversities related to the COVID-19 pandemic. Additionally, the questionnaire will include questions on their resilience. The online semi-structured interviews will be conducted in the second phase of the research and will include questions that will further investigate the constructs explained above.

The information obtained will be treated with the strictest confidentiality and will be used solely for the research project. The anonymity of participants and the schools will be maintained. Participants may also withdraw from participation at any time of the research process.

We also would like to request your permission to use the data confidentially and anonymously, for further research purposes, as the data sets are the intellectual property of the University of Pretoria. Further research may include secondary data analysis and using the data for teaching purposes. The confidentiality and privacy of all applicable to this study will be binding on future research studies.

This study may contribute to the field of resilience theory, specifically in response to a world pandemic and improve future responses to similar challenges experienced by educators. Future research and interventions that inform resilience promotion through cognitive and psychosocial strategies of educators may be conducted based on the findings of this study.

Yours sincerely

Elisma Williams and Stephan Dippenaar

By signing this document, I as principal, provide permission to do research, as explained above, in my school.

Signature _____
Name of principal _____

Date _____



APPENDIX I: REPORT 1 (DESCRIPTIVE RESULTS FOR URBAN SCHOOLS)

T20092 Report 1: Descriptive study (Urban)

Descriptive Results - Questionnaire completion

Only individuals who fully completed the questionnaire can be retained in the study.

	Questionnaires (N = 347)
Completed	
No	107 (30.8%)
Yes	240 (69.2%)

Descriptive Results – Participant information

We first offer the following table summarising all observations for this section.

	Overall (N = 240)
Gender	
Female	175 (72.9%)
Male	65 (27.1%)
Age	
Mean (sd)	41.33 (12.18)
Min	20
Max	67
Marital status	
I do not want to say	2 (0.8%)
In a relationship	23 (9.6%)
Married	166 (69.2%)
Other (please specify)	4 (1.7%)
Single	45 (18.8%)
Ethnicity	
Indian	1 (0.4%)
White/Caucasian	239 (99.6%)
Number of children	

	Overall (N = 240)
1 Child	33 (13.8%)
2 Children	82 (34.2%)
3 Children	26 (10.8%)
4+ Children	7 (2.9%)
None	92 (38.3%)

Descriptive Results – Participant teaching details

We first offer the following tables summarising all observations for this section.

	Overall (N = 240)
SACE registration	
No	9 (3.8%)
Yes	231 (96.2%)
Numbers of years teaching	
5 years or less	43 (17.9%)
Between 11 and 15 years	43 (17.9%)
Between 6 and 10 years	41 (17.1%)
Between 16 and 20 years	24 (10.0%)
Between 21 and 25 years	24 (10.0%)
More than 25 years	65 (27.1%)

Please note that participants could select more than one option as their answer.

	Count (N = 549)
Grade	
Grade 1	28 (11.7%)
Grade 2	15 (6.3%)
Grade 3	10 (4.2%)
Grade 4	16 (6.7%)
Grade 5	22 (9.2%)
Grade 6	26 (10.8%)
Grade 7	23 (9.6%)
Grade 8	78 (32.5%)
Grade 9	84 (35.0%)

	Count (N = 549)
Grade 10	82 (34.2%)
Grade 11	75 (31.3%)
Grade 12	90 (37.5%)

	Count
Life sciences	37
Natural Sciences	8
Mathematics	61
Geography	9
Tourism	5
Accounting	8
English	48
Art	11
Afrikaans	48
History	9
EGD	3
Technology	13
Physical sciences	9

Important to note that *Subjects taught* was an open-ended question so we tried to clean it up as much as possible. Below is a list of all the responses:

	Count (N = 240)
Subjects	
Afrikaans, English, LV, Maths	1 (0.4%)
accounting	1 (0.4%)
Accounting	3 (1.2%)
Afr.	1 (0.4%)
Afrikaans	5 (2.1%)
AFRIKAANS	1 (0.4%)
AFRIKAANS, LIFE ORIENTATION	1 (0.4%)
Afrikaans / English	1 (0.4%)
Afrikaans and English	1 (0.4%)

	Count (N = 240)
Afrikaans and Life Orientation	1 (0.4%)
Afrikaans FAL	2 (0.8%)
Afrikaans HL	1 (0.4%)
Afrikaans Home Language	3 (1.2%)
AFRIKAANS HOME LANGUAGE	1 (0.4%)
Afrikaans Home Language, Mathematics. Life Skills	1 (0.4%)
Afrikaans HT	1 (0.4%)
Afrikaans Huistaal	6 (2.5%)
AFRIKAANS HUISTAAL	1 (0.4%)
Afrikaans, Business studies and Accounting	1 (0.4%)
Afrikaans, English, Mathematics, Life orientation	1 (0.4%)
Afrikaans, English, Maths, Life Skills	1 (0.4%)
Afrikaans, History	1 (0.4%)
Afrikaans, Wiskunde, Engels, Lewensvaardighede	1 (0.4%)
Afrikaans, Engels, Wiskunde en Lewensvaardighede	1 (0.4%)
Afrikaans, English	1 (0.4%)
Afrikaans, History	1 (0.4%)
All	1 (0.4%)
All Junior phase subjects	1 (0.4%)
All subjects	1 (0.4%)
all subjects in foundation phase	1 (0.4%)
All subjects	1 (0.4%)
Art and Drama	1 (0.4%)
Besigheidstudies	1 (0.4%)
Biology and business studies	1 (0.4%)
Business Economics, Economics	1 (0.4%)
Business Studies	1 (0.4%)
Business studies, EMS, Accounting	1 (0.4%)
CAT & IT	1 (0.4%)
Computer science and Sepedi IIAL	1 (0.4%)
Creative arts	1 (0.4%)
Currently Librarian, previously Afrikaans	1 (0.4%)

	Count (N = 240)
ECD	1 (0.4%)
Economics and Accounting	1 (0.4%)
Economics and accounting	1 (0.4%)
Economics and Business Studies	1 (0.4%)
Economics and Management Sciences	1 (0.4%)
Economics, Business Studies, Life Orientation, Accounting	1 (0.4%)
EGD, MATHS, TECHNOLOGY	1 (0.4%)
EGD, Technology	1 (0.4%)
EMS	1 (0.4%)
EMS and Business Studies	1 (0.4%)
EMS business studies	1 (0.4%)
EMS, Technology, SS	1 (0.4%)
Engineering Graphics and Design	1 (0.4%)
Engineering Graphics and Design, Technology	1 (0.4%)
English	16 (6.7%)
ENGLISH	1 (0.4%)
English Afrikaans Mathematics Life Skills	1 (0.4%)
English and Art	1 (0.4%)
English and Life Orientation	1 (0.4%)
English and Social Studies	1 (0.4%)
English FAL	1 (0.4%)
English FAL	6 (2.5%)
English FAL and English HL	1 (0.4%)
English First Additional and Home Language	1 (0.4%)
English First Additional Language	3 (1.2%)
English HL and FAL, Life Orientation	1 (0.4%)
English	1 (0.4%)
Foundation Phase	1 (0.4%)
Foundation Phase	1 (0.4%)
Foundation Phase - Gr R	1 (0.4%)
Foundation Phase (Grade 2): Afrikaans Home Language, English First Additional Language, Mathematics, Life Skills	1 (0.4%)

	Count (N = 240)
Foundation Phase, all subjects.	1 (0.4%)
Foundation Phase, Afrikaans, Maths, English and Life Skills	1 (0.4%)
Foundation Phase, Gr 1	1 (0.4%)
geography	1 (0.4%)
Geography	3 (1.2%)
Geography and Tourism	1 (0.4%)
Geography, History	1 (0.4%)
Gr R: Afrikaans, Wiskunde en Lewensvaardighede	1 (0.4%)
Graad 1	1 (0.4%)
Grade 1	1 (0.4%)
Grade 4 Maths (till 2019) Now, computer science	1 (0.4%)
grade R	1 (0.4%)
Grade R	3 (1.2%)
Grade R - Afrikaans Huistaal, Wiskunde en Lewensvaardigheid	1 (0.4%)
Grade R - Afrikaans; Mathematics and Life skills	1 (0.4%)
Grade R (previously) and RR (currently)	1 (0.4%)
Grade R Mathematics, Life skills and Language	1 (0.4%)
History	1 (0.4%)
History and Geography	1 (0.4%)
History and life orientation	1 (0.4%)
History, Geography, Business Studies	1 (0.4%)
History/Life orientation	1 (0.4%)
Hospitality Studies	1 (0.4%)
IGO	1 (0.4%)
Information Technology and Computer Application Technology	1 (0.4%)
IT & CAT	1 (0.4%)
IT, CAT, Math	1 (0.4%)
Languages	1 (0.4%)
Life orientation	1 (0.4%)
Life Orientation	3 (1.2%)
Life orientation, Creative arts	1 (0.4%)
Life Orientation and History	1 (0.4%)

	Count (N = 240)
Life Orientation, Music	1 (0.4%)
life science	1 (0.4%)
Life science and Physical science	1 (0.4%)
Life Sciences	3 (1.2%)
Life Sciences, Natural Sciences, Math Lit	1 (0.4%)
Life orientation	1 (0.4%)
LO Physical	1 (0.4%)
LO, Business studies	1 (0.4%)
Math	1 (0.4%)
Mathematical Literacy	2 (0.8%)
Mathematics	20 (8.3%)
Mathematics and Alpha Mathematics	1 (0.4%)
Mathematics and Mathematical Literacy	1 (0.4%)
Mathematics and Natural Science/Technology	1 (0.4%)
Mathematics, Advanced Mathematics, Mathematical Literacy	1 (0.4%)
Mathematics, Afrikaans Home language, English First additional language and Life skills	1 (0.4%)
Mathematics, Afrikaans, Life Skills	1 (0.4%)
Mathematics, English, Afrikaans and Life skills	1 (0.4%)
Mathematics, English FAL, Afrikaans HL, Life Orientation	1 (0.4%)
Mathematics	1 (0.4%)
Maths	8 (3.3%)
Maths, Afrikaans, English and Life Orientation	1 (0.4%)
Maths, Afrikaans, English and Life skills	1 (0.4%)
Maths, Natural Science	1 (0.4%)
MECHANICAL ENGINEERING and DRAWING	1 (0.4%)
Music	5 (2.1%)
Music and Art	1 (0.4%)
Music and Drama	1 (0.4%)
Music and Visual Arts	1 (0.4%)
MUSIC AS A SUBJECT	1 (0.4%)
Music, art and drama	1 (0.4%)

	Count (N = 240)
Natural science	1 (0.4%)
Natural Science	1 (0.4%)
Natural Science, Life Science	1 (0.4%)
Natural Sciences and Life Sciences	1 (0.4%)
Physical Education, Creative Arts	1 (0.4%)
Physical Science	2 (0.8%)
Physical Science, Mathematics	1 (0.4%)
Physical Sciences	2 (0.8%)
Physical Sciences	1 (0.4%)
Pre grade R (Grade RR – 5-year-olds)	1 (0.4%)
PSW AND LSKILLS	1 (0.4%)
Science and Technology, Robotics	1 (0.4%)
Siviele Tegnologie	1 (0.4%)
social science	1 (0.4%)
Social Sciences and Natural Sciences	1 (0.4%)
Sport science	1 (0.4%)
Technical	1 (0.4%)
Technology	1 (0.4%)
Technology and IT	1 (0.4%)
Technology, Tourism, LEO, Business Studies.	1 (0.4%)
Technology/ EGD	1 (0.4%)
Tourism	1 (0.4%)
TOURISM	1 (0.4%)
Tourism, Geography, Social Sciences	1 (0.4%)
Visual Art	1 (0.4%)
Visual Arts, Creative Arts and Technology	1 (0.4%)
Wiskunde	1 (0.4%)
Wiskunde, Afrikaans, Engels en Lewensvaardigheid	1 (0.4%)

Descriptive Results – Internet access

	Overall (N = 240)
Internet access	
No	0 (0.0%)
Yes	240 (100.0%)
Internet during lockdown	
No	7 (2.9%)
Yes	233 (97.1%)
Sufficient internet	
About half the time	8 (3.4%)
Always	108 (46.4%)
Most of the time	114 (48.9%)
Sometimes	3 (1.3%)
Unknown/Missing	7 (2.9%)

Location of internet allowed multiple answers (They could choose more than once answer):

	Count (N = 539)
Location	
Friends/Relatives homes	23 (9.6%)
Home	220 (91.7%)
Other (please specify)	1 (0.4%)
Personal Mobile Dongle	50 (20.8%)
Public spaces (for example a restaurant)	9 (3.8%)
The school where I am employed	236 (98.3%)

The Other option:

Var1	Freq
Phone	1

Descriptive Results – COPE inventory

We now summarise the results obtained for the COPE inventory part of the questionnaire. Participants were asked to rate how much they agreed on particular coping strategies in light of the COVID-19 pandemic.

	Count (N = 240)
I try to grow as a person as a result of the experience.	
I usually don't do this at all	3 (1.2%)
I usually do this a little bit	14 (5.8%)
I usually do this a medium amount	76 (31.7%)
I usually do this a lot	147 (61.2%)
I turn to work or other substitute activities to take my mind off things.	
I usually don't do this at all	21 (8.8%)
I usually do this a little bit	53 (22.1%)
I usually do this a medium amount	90 (37.5%)
I usually do this a lot	76 (31.7%)
I get upset and let my emotions out.	
I usually don't do this at all	63 (26.2%)
I usually do this a little bit	114 (47.5%)
I usually do this a medium amount	45 (18.8%)
I usually do this a lot	18 (7.5%)
I try to get advice from someone about what to do.	
I usually don't do this at all	13 (5.4%)
I usually do this a little bit	67 (27.9%)
I usually do this a medium amount	103 (42.9%)
I usually do this a lot	57 (23.8%)
I concentrate my efforts on doing something about it.	
I usually don't do this at all	2 (0.8%)
I usually do this a little bit	30 (12.5%)
I usually do this a medium amount	103 (42.9%)
I usually do this a lot	105 (43.8%)
I say to myself, "This isn't real."	
I usually don't do this at all	150 (62.5%)

	Count (N = 240)
I usually do this a little bit	52 (21.7%)
I usually do this a medium amount	25 (10.4%)
I usually do this a lot	13 (5.4%)
I put my trust in God.	
I usually don't do this at all	14 (5.8%)
I usually do this a little bit	16 (6.7%)
I usually do this a medium amount	50 (20.8%)
I usually do this a lot	160 (66.7%)
I laugh about the situation.	
I usually don't do this at all	46 (19.2%)
I usually do this a little bit	92 (38.3%)
I usually do this a medium amount	67 (27.9%)
I usually do this a lot	35 (14.6%)
I admit to myself that I can't deal with it, and quit trying.	
I usually don't do this at all	179 (74.6%)
I usually do this a little bit	38 (15.8%)
I usually do this a medium amount	17 (7.1%)
I usually do this a lot	6 (2.5%)
I restrain myself from doing anything too quickly.	
I usually don't do this at all	27 (11.2%)
I usually do this a little bit	104 (43.3%)
I usually do this a medium amount	81 (33.8%)
I usually do this a lot	28 (11.7%)
I discuss my feelings with someone.	
I usually don't do this at all	28 (11.7%)
I usually do this a little bit	66 (27.5%)
I usually do this a medium amount	74 (30.8%)
I usually do this a lot	72 (30.0%)
I use alcohol or drugs to make myself feel better.	
I usually don't do this at all	182 (75.8%)
I usually do this a little bit	44 (18.3%)
I usually do this a medium amount	8 (3.3%)

	Count (N = 240)
I usually do this a lot	6 (2.5%)
I get used to the idea that it happened.	
I usually don't do this at all	14 (5.8%)
I usually do this a little bit	58 (24.2%)
I usually do this a medium amount	109 (45.4%)
I usually do this a lot	59 (24.6%)
I talk to someone to find out more about the situation.	
I usually don't do this at all	14 (5.8%)
I usually do this a little bit	40 (16.7%)
I usually do this a medium amount	123 (51.2%)
I usually do this a lot	63 (26.2%)
I keep myself from getting distracted by other thoughts or activities.	
I usually don't do this at all	13 (5.4%)
I usually do this a little bit	69 (28.8%)
I usually do this a medium amount	111 (46.2%)
I usually do this a lot	47 (19.6%)
I daydream about things other than this.	
I usually don't do this at all	89 (37.1%)
I usually do this a little bit	94 (39.2%)
I usually do this a medium amount	33 (13.8%)
I usually do this a lot	24 (10.0%)
I get upset, and am really aware of it.	
I usually don't do this at all	68 (28.3%)
I usually do this a little bit	102 (42.5%)
I usually do this a medium amount	51 (21.2%)
I usually do this a lot	19 (7.9%)
I seek God's help.	
I usually don't do this at all	18 (7.5%)
I usually do this a little bit	20 (8.3%)
I usually do this a medium amount	62 (25.8%)
I usually do this a lot	140 (58.3%)

	Count (N = 240)
I make a plan of action.	
I usually don't do this at all	1 (0.4%)
I usually do this a little bit	13 (5.4%)
I usually do this a medium amount	92 (38.3%)
I usually do this a lot	134 (55.8%)
I make jokes about it.	
I usually don't do this at all	66 (27.5%)
I usually do this a little bit	87 (36.2%)
I usually do this a medium amount	59 (24.6%)
I usually do this a lot	28 (11.7%)
I accept that this has happened and that it can't be changed.	
I usually don't do this at all	6 (2.5%)
I usually do this a little bit	38 (15.8%)
I usually do this a medium amount	84 (35.0%)
I usually do this a lot	112 (46.7%)
I hold off doing anything about it until the situation permits.	
I usually don't do this at all	40 (16.7%)
I usually do this a little bit	110 (45.8%)
I usually do this a medium amount	69 (28.8%)
I usually do this a lot	21 (8.8%)
I try to get emotional support from friends or relatives.	
I usually don't do this at all	26 (10.8%)
I usually do this a little bit	73 (30.4%)
I usually do this a medium amount	76 (31.7%)
I usually do this a lot	65 (27.1%)
I just give up trying to reach my goal.	
I usually don't do this at all	178 (74.2%)
I usually do this a little bit	43 (17.9%)
I usually do this a medium amount	10 (4.2%)
I usually do this a lot	9 (3.8%)
I take additional action to try to get rid of the problem.	
I usually don't do this at all	16 (6.7%)

	Count (N = 240)
I usually do this a little bit	49 (20.4%)
I usually do this a medium amount	114 (47.5%)
I usually do this a lot	61 (25.4%)
I try to lose myself for a while by drinking alcohol or taking drugs.	
I usually don't do this at all	204 (85.0%)
I usually do this a little bit	21 (8.8%)
I usually do this a medium amount	10 (4.2%)
I usually do this a lot	5 (2.1%)
I refuse to believe that it has happened.	
I usually don't do this at all	187 (77.9%)
I usually do this a little bit	37 (15.4%)
I usually do this a medium amount	10 (4.2%)
I usually do this a lot	6 (2.5%)
I let my feelings out.	
I usually don't do this at all	26 (10.8%)
I usually do this a little bit	105 (43.8%)
I usually do this a medium amount	81 (33.8%)
I usually do this a lot	28 (11.7%)
I try to see it in a different light, to make it seem more positive.	
I usually don't do this at all	3 (1.2%)
I usually do this a little bit	35 (14.6%)
I usually do this a medium amount	120 (50.0%)
I usually do this a lot	82 (34.2%)
I talk to someone who could do something concrete about the problem.	
I usually don't do this at all	23 (9.6%)
I usually do this a little bit	61 (25.4%)
I usually do this a medium amount	105 (43.8%)
I usually do this a lot	51 (21.2%)
I sleep more than usual.	
I usually don't do this at all	112 (46.7%)

	Count (N = 240)
I usually do this a little bit	76 (31.7%)
I usually do this a medium amount	36 (15.0%)
I usually do this a lot	16 (6.7%)
I try to come up with a strategy about what to do.	
I usually don't do this at all	5 (2.1%)
I usually do this a little bit	37 (15.4%)
I usually do this a medium amount	110 (45.8%)
I usually do this a lot	88 (36.7%)
I focus on dealing with this problem, and if necessary let other things slide a little.	
I usually don't do this at all	19 (7.9%)
I usually do this a little bit	68 (28.3%)
I usually do this a medium amount	119 (49.6%)
I usually do this a lot	34 (14.2%)
I get sympathy and understanding from someone.	
I usually don't do this at all	35 (14.6%)
I usually do this a little bit	95 (39.6%)
I usually do this a medium amount	79 (32.9%)
I usually do this a lot	31 (12.9%)
I drink alcohol or take drugs, in order to think about it less.	
I usually don't do this at all	206 (85.8%)
I usually do this a little bit	23 (9.6%)
I usually do this a medium amount	6 (2.5%)
I usually do this a lot	5 (2.1%)
I kid around about it.	
I usually don't do this at all	103 (42.9%)
I usually do this a little bit	93 (38.8%)
I usually do this a medium amount	34 (14.2%)
I usually do this a lot	10 (4.2%)
I give up the attempt to get what I want.	
I usually don't do this at all	151 (62.9%)
I usually do this a little bit	61 (25.4%)

	Count (N = 240)
I usually do this a medium amount	19 (7.9%)
I usually do this a lot	9 (3.8%)
I look for something good in what is happening.	
I usually don't do this at all	6 (2.5%)
I usually do this a little bit	21 (8.8%)
I usually do this a medium amount	106 (44.2%)
I usually do this a lot	107 (44.6%)
I think about how I might best handle the problem.	
I usually don't do this at all	4 (1.7%)
I usually do this a little bit	13 (5.4%)
I usually do this a medium amount	108 (45.0%)
I usually do this a lot	115 (47.9%)
I pretend that it hasn't really happened.	
I usually don't do this at all	182 (75.8%)
I usually do this a little bit	43 (17.9%)
I usually do this a medium amount	11 (4.6%)
I usually do this a lot	4 (1.7%)
I make sure not to make matters worse by acting too soon.	
I usually don't do this at all	22 (9.2%)
I usually do this a little bit	74 (30.8%)
I usually do this a medium amount	93 (38.8%)
I usually do this a lot	51 (21.2%)
I try hard to prevent other things from interfering with my efforts at dealing with this.	
I usually don't do this at all	22 (9.2%)
I usually do this a little bit	72 (30.0%)
I usually do this a medium amount	110 (45.8%)
I usually do this a lot	36 (15.0%)
I go to movies or watch TV, to think about it less.	
I usually don't do this at all	60 (25.0%)
I usually do this a little bit	87 (36.2%)
I usually do this a medium amount	60 (25.0%)

	Count (N = 240)
I usually do this a lot	33 (13.8%)
I accept the reality of the fact that it happened.	
I usually don't do this at all	5 (2.1%)
I usually do this a little bit	27 (11.2%)
I usually do this a medium amount	80 (33.3%)
I usually do this a lot	128 (53.3%)
I ask people who have had similar experiences what they did.	
I usually don't do this at all	17 (7.1%)
I usually do this a little bit	48 (20.0%)
I usually do this a medium amount	97 (40.4%)
I usually do this a lot	78 (32.5%)
I feel a lot of emotional distress and I find myself expressing those feelings a lot.	
I usually don't do this at all	67 (27.9%)
I usually do this a little bit	96 (40.0%)
I usually do this a medium amount	61 (25.4%)
I usually do this a lot	16 (6.7%)
I take direct action to get around the problem.	
I usually don't do this at all	7 (2.9%)
I usually do this a little bit	45 (18.8%)
I usually do this a medium amount	116 (48.3%)
I usually do this a lot	72 (30.0%)
I try to find comfort in my religion.	
I usually don't do this at all	22 (9.2%)
I usually do this a little bit	28 (11.7%)
I usually do this a medium amount	59 (24.6%)
I usually do this a lot	131 (54.6%)
I force myself to wait for the right time to do something.	
I usually don't do this at all	18 (7.5%)
I usually do this a little bit	63 (26.2%)
I usually do this a medium amount	115 (47.9%)
I usually do this a lot	44 (18.3%)

	Count (N = 240)
I make fun of the situation.	
I usually don't do this at all	108 (45.0%)
I usually do this a little bit	85 (35.4%)
I usually do this a medium amount	35 (14.6%)
I usually do this a lot	12 (5.0%)
I reduce the amount of effort I'm putting into solving the problem.	
I usually don't do this at all	111 (46.2%)
I usually do this a little bit	85 (35.4%)
I usually do this a medium amount	34 (14.2%)
I usually do this a lot	10 (4.2%)
I talk to someone about how I feel.	
I usually don't do this at all	24 (10.0%)
I usually do this a little bit	76 (31.7%)
I usually do this a medium amount	88 (36.7%)
I usually do this a lot	52 (21.7%)
I use alcohol or drugs to help me get through it.	
I usually don't do this at all	206 (85.8%)
I usually do this a little bit	24 (10.0%)
I usually do this a medium amount	4 (1.7%)
I usually do this a lot	6 (2.5%)
I learn to live with it.	
I usually don't do this at all	4 (1.7%)
I usually do this a little bit	37 (15.4%)
I usually do this a medium amount	113 (47.1%)
I usually do this a lot	86 (35.8%)
I put aside other activities in order to concentrate on this.	
I usually don't do this at all	48 (20.0%)
I usually do this a little bit	92 (38.3%)
I usually do this a medium amount	78 (32.5%)
I usually do this a lot	22 (9.2%)
I think hard about what steps to take.	
I usually don't do this at all	10 (4.2%)

	Count (N = 240)
I usually do this a little bit	56 (23.3%)
I usually do this a medium amount	108 (45.0%)
I usually do this a lot	66 (27.5%)
I act as though it hasn't even happened.	
I usually don't do this at all	159 (66.2%)
I usually do this a little bit	64 (26.7%)
I usually do this a medium amount	14 (5.8%)
I usually do this a lot	3 (1.2%)
I do what has to be done, one step at a time.	
I usually don't do this at all	4 (1.7%)
I usually do this a little bit	21 (8.8%)
I usually do this a medium amount	106 (44.2%)
I usually do this a lot	109 (45.4%)
I learn something from the experience.	
I usually don't do this at all	4 (1.7%)
I usually do this a little bit	13 (5.4%)
I usually do this a medium amount	104 (43.3%)
I usually do this a lot	119 (49.6%)
I pray more than usual.	
I usually don't do this at all	24 (10.0%)
I usually do this a little bit	34 (14.2%)
I usually do this a medium amount	70 (29.2%)
I usually do this a lot	112 (46.7%)

Descriptive Results - ARM-R

We now summarise the results obtained for the ARM-R part of the questionnaire. The participants were asked to rate how much they agreed with each statement with regards to themselves.

	Count (N = 240)
I cooperate with people around me	
Not at all	0 (0.0%)
A little	6 (2.5%)
Somewhat	16 (6.7%)

	Count (N = 240)
Quite a bit	85 (35.4%)
A lot	133 (55.4%)
Getting and improving qualifications or skills is important to me	
Not at all	4 (1.7%)
A little	7 (2.9%)
Somewhat	38 (15.8%)
Quite a bit	77 (32.1%)
A lot	114 (47.5%)
I know how to behave in different social situations	
Not at all	0 (0.0%)
A little	2 (0.8%)
Somewhat	25 (10.4%)
Quite a bit	81 (33.8%)
A lot	132 (55.0%)
My family have usually supported me through life	
Not at all	5 (2.1%)
A little	7 (2.9%)
Somewhat	17 (7.1%)
Quite a bit	46 (19.2%)
A lot	165 (68.8%)
My family knows a lot about me	
Not at all	6 (2.5%)
A little	10 (4.2%)
Somewhat	24 (10.0%)
Quite a bit	56 (23.3%)
A lot	144 (60.0%)
If I am hungry, I can get food to eat	
Not at all	6 (2.5%)
A little	4 (1.7%)
Somewhat	8 (3.3%)
Quite a bit	33 (13.8%)
A lot	189 (78.8%)

	Count (N = 240)
People like to spend time with me	
Not at all	0 (0.0%)
A little	7 (2.9%)
Somewhat	50 (20.8%)
Quite a bit	93 (38.8%)
A lot	90 (37.5%)
I talk to my family/partner about how I feel	
Not at all	8 (3.3%)
A little	15 (6.2%)
Somewhat	29 (12.1%)
Quite a bit	52 (21.7%)
A lot	136 (56.7%)
I feel supported by my friends	
Not at all	2 (0.8%)
A little	7 (2.9%)
Somewhat	34 (14.2%)
Quite a bit	75 (31.2%)
A lot	122 (50.8%)
I feel that I belong in my community	
Not at all	4 (1.7%)
A little	8 (3.3%)
Somewhat	37 (15.4%)
Quite a bit	76 (31.7%)
A lot	115 (47.9%)
My family/partner stands by me during difficult times	
Not at all	2 (0.8%)
A little	10 (4.2%)
Somewhat	11 (4.6%)
Quite a bit	30 (12.5%)
A lot	187 (77.9%)
My friends stand by me during difficult times	
Not at all	3 (1.2%)

	Count (N = 240)
A little	4 (1.7%)
Somewhat	33 (13.8%)
Quite a bit	62 (25.8%)
A lot	138 (57.5%)
I am treated fairly in my community	
Not at all	4 (1.7%)
A little	2 (0.8%)
Somewhat	33 (13.8%)
Quite a bit	86 (35.8%)
A lot	115 (47.9%)
I have opportunities to show others that I can act responsibly	
Not at all	0 (0.0%)
A little	3 (1.2%)
Somewhat	11 (4.6%)
Quite a bit	68 (28.3%)
A lot	158 (65.8%)
I feel secure when I am with my family/partner	
Not at all	3 (1.2%)
A little	3 (1.2%)
Somewhat	15 (6.2%)
Quite a bit	33 (13.8%)
A lot	186 (77.5%)
I have opportunities to apply my abilities in life (like skills, a job, caring for others)	
Not at all	0 (0.0%)
A little	4 (1.7%)
Somewhat	13 (5.4%)
Quite a bit	57 (23.8%)
A lot	166 (69.2%)
I enjoy my family's/partner's cultural and family traditions	
Not at all	1 (0.4%)
A little	9 (3.8%)

	Count (N = 240)
Somewhat	17 (7.1%)
Quite a bit	43 (17.9%)
A lot	170 (70.8%)



APPENDIX J: REPORT 1 (DESCRIPTIVE RESULTS FOR SEMI-URBAN SCHOOLS)

T20092 Report 1: Descriptive study (Semi-urban)

Descriptive Results - Questionnaire completion

Only individuals who fully completed the questionnaire can be retained in the study.

	Questionnaires (N = 11)
Completed	
No	7 (63.6%)
Yes	4 (36.4%)

Descriptive results - participant information

We first offer the following table summarising all observations for this section.

	Overall (N = 4)
Gender	
Female	1 (25.0%)
Male	3 (75.0%)
Age	
Mean (sd)	39.75 (16.52)
Min	25
Max	59
Marital status	
In a relationship	1 (25.0%)
Married	2 (50.0%)
Single	1 (25.0%)
Ethnicity	
Black/African	4 (100.0%)
Number of children	
2 Children	2 (50.0%)
4+ Children	1 (25.0%)
None	1 (25.0%)

Descriptive Results - Participant teaching details

We first offer the following tables summarising all observations for this section.

	Overall (N = 4)
SACE registration	
Yes	4 (100.0%)
Numbers of years teaching	
5 years or less	2 (50.0%)
Between 21 and 25 years	1 (25.0%)
More than 25 years	1 (25.0%)

Please note that participants could select more than one option as their answer.

	Count (N = 6)
Life sciences	2
Natural sciences	1
Mathematics	2
Technology	1

	Count (N = 7)
Grade	
Grade 4	2 (28.6%)
Grade 6	3 (42.9%)
Grade 7	2 (28.6%)

Important to note that Subjects taught was an open ended question so we tried to clean it up as much as possible. Below is a list of all the responses:

	Count (N = 4)
Subjects	
EMS and LO	1 (25.0%)
Mathematics and Life Skills	1 (25.0%)
Mathematics, Life skills	1 (25.0%)
NATURAL SCIENCES AND TECHNOLOGY	1 (25.0%)

Descriptive Results - Internet access

	Overall (N = 4)
Internet access	
No	0 (0.0%)
Yes	4 (100.0%)
Internet during lockdown	
No	1 (25.0%)
Yes	3 (75.0%)
Sufficient internet	
Always	1 (33.3%)
Most of the time	1 (33.3%)
Sometimes	1 (33.3%)
Unknown/Missing	1 (25.00%)

Location of internet allowed multiple answers:

	Count (N = 6)
Location	
Home	2 (33.3%)
Personal Mobile Dongle	2 (33.3%)
The school where I am employed	2 (33.3%)

Descriptive Results - COPE inventory

We now summarise the results obtained for the COPE inventory part of the questionnaire. Participants were asked to rate how much they agree with particular coping strategies in light of the COVID-19 pandemic.

	Count (N = 4)
I try to grow as a person as a result of the experience.	
I usually don't do this at all	0 (0.0%)
I usually do this a little bit	1 (25.0%)
I usually do this a medium amount	1 (25.0%)
I usually do this a lot	2 (50.0%)
I turn to work or other substitute activities to take my mind off things.	

	Count (N = 4)
I usually don't do this at all	1 (25.0%)
I usually do this a little bit	0 (0.0%)
I usually do this a medium amount	1 (25.0%)
I usually do this a lot	2 (50.0%)
I get upset and let my emotions out.	
I usually don't do this at all	1 (25.0%)
I usually do this a little bit	0 (0.0%)
I usually do this a medium amount	2 (50.0%)
I usually do this a lot	1 (25.0%)
I try to get advice from someone about what to do.	
I usually don't do this at all	0 (0.0%)
I usually do this a little bit	2 (50.0%)
I usually do this a medium amount	1 (25.0%)
I usually do this a lot	1 (25.0%)
I concentrate my efforts on doing something about it.	
I usually don't do this at all	0 (0.0%)
I usually do this a little bit	1 (25.0%)
I usually do this a medium amount	1 (25.0%)
I usually do this a lot	2 (50.0%)
I say to myself "this isn't real."	
I usually don't do this at all	2 (50.0%)
I usually do this a little bit	1 (25.0%)
I usually do this a medium amount	0 (0.0%)
I usually do this a lot	1 (25.0%)
I put my trust in God.	
I usually don't do this at all	0 (0.0%)
I usually do this a little bit	0 (0.0%)
I usually do this a medium amount	0 (0.0%)
I usually do this a lot	4 (100.0%)
I laugh about the situation.	
I usually don't do this at all	0 (0.0%)
I usually do this a little bit	1 (25.0%)

	Count (N = 4)
I usually do this a medium amount	2 (50.0%)
I usually do this a lot	1 (25.0%)
I admit to myself that I can't deal with it and quit trying.	
I usually don't do this at all	3 (75.0%)
I usually do this a little bit	0 (0.0%)
I usually do this a medium amount	1 (25.0%)
I usually do this a lot	0 (0.0%)
I restrain myself from doing anything too quickly.	
I usually don't do this at all	1 (25.0%)
I usually do this a little bit	0 (0.0%)
I usually do this a medium amount	1 (25.0%)
I usually do this a lot	2 (50.0%)
I discuss my feelings with someone.	
I usually don't do this at all	0 (0.0%)
I usually do this a little bit	2 (50.0%)
I usually do this a medium amount	0 (0.0%)
I usually do this a lot	2 (50.0%)
I use alcohol or drugs to make myself feel better.	
I usually don't do this at all	4 (100.0%)
I usually do this a little bit	0 (0.0%)
I usually do this a medium amount	0 (0.0%)
I usually do this a lot	0 (0.0%)
I get used to the idea that it happened.	
I usually don't do this at all	0 (0.0%)
I usually do this a little bit	1 (25.0%)
I usually do this a medium amount	2 (50.0%)
I usually do this a lot	1 (25.0%)
I talk to someone to find out more about the situation.	
I usually don't do this at all	0 (0.0%)
I usually do this a little bit	1 (25.0%)
I usually do this a medium amount	2 (50.0%)
I usually do this a lot	1 (25.0%)

	Count (N = 4)
I keep myself from getting distracted by other thoughts or activities.	
I usually don't do this at all	0 (0.0%)
I usually do this a little bit	2 (50.0%)
I usually do this a medium amount	1 (25.0%)
I usually do this a lot	1 (25.0%)
I daydream about things other than this.	
I usually don't do this at all	3 (75.0%)
I usually do this a little bit	1 (25.0%)
I usually do this a medium amount	0 (0.0%)
I usually do this a lot	0 (0.0%)
I get upset and am really aware of it.	
I usually don't do this at all	2 (50.0%)
I usually do this a little bit	1 (25.0%)
I usually do this a medium amount	1 (25.0%)
I usually do this a lot	0 (0.0%)
I seek God's help.	
I usually don't do this at all	0 (0.0%)
I usually do this a little bit	1 (25.0%)
I usually do this a medium amount	0 (0.0%)
I usually do this a lot	3 (75.0%)
I make a plan of action.	
I usually don't do this at all	1 (25.0%)
I usually do this a little bit	0 (0.0%)
I usually do this a medium amount	1 (25.0%)
I usually do this a lot	2 (50.0%)
I make jokes about it.	
I usually don't do this at all	2 (50.0%)
I usually do this a little bit	0 (0.0%)
I usually do this a medium amount	1 (25.0%)
I usually do this a lot	1 (25.0%)
I accept that this has happened and that it can't be changed.	

	Count (N = 4)
I usually don't do this at all	1 (25.0%)
I usually do this a little bit	0 (0.0%)
I usually do this a medium amount	1 (25.0%)
I usually do this a lot	2 (50.0%)
I hold off doing anything about it until the situation permits.	
I usually don't do this at all	0 (0.0%)
I usually do this a little bit	1 (25.0%)
I usually do this a medium amount	2 (50.0%)
I usually do this a lot	1 (25.0%)
I try to get emotional support from friends or relatives.	
I usually don't do this at all	0 (0.0%)
I usually do this a little bit	2 (50.0%)
I usually do this a medium amount	1 (25.0%)
I usually do this a lot	1 (25.0%)
I just give up trying to reach my goal.	
I usually don't do this at all	3 (75.0%)
I usually do this a little bit	1 (25.0%)
I usually do this a medium amount	0 (0.0%)
I usually do this a lot	0 (0.0%)
I take additional action to try to get rid of the problem.	
I usually don't do this at all	0 (0.0%)
I usually do this a little bit	1 (25.0%)
I usually do this a medium amount	1 (25.0%)
I usually do this a lot	2 (50.0%)
I try to lose myself for a while by drinking alcohol or taking drugs.	
I usually don't do this at all	4 (100.0%)
I usually do this a little bit	0 (0.0%)
I usually do this a medium amount	0 (0.0%)
I usually do this a lot	0 (0.0%)
I refuse to believe that it has happened.	
I usually don't do this at all	3 (75.0%)

	Count (N = 4)
I usually do this a little bit	1 (25.0%)
I usually do this a medium amount	0 (0.0%)
I usually do this a lot	0 (0.0%)
I let my feelings out.	
I usually don't do this at all	0 (0.0%)
I usually do this a little bit	1 (25.0%)
I usually do this a medium amount	0 (0.0%)
I usually do this a lot	3 (75.0%)
I try to see it in a different light, to make it seem more positive.	
I usually don't do this at all	1 (25.0%)
I usually do this a little bit	3 (75.0%)
I usually do this a medium amount	0 (0.0%)
I usually do this a lot	0 (0.0%)
I talk to someone who could do something concrete about the problem.	
I usually don't do this at all	0 (0.0%)
I usually do this a little bit	2 (50.0%)
I usually do this a medium amount	1 (25.0%)
I usually do this a lot	1 (25.0%)
I sleep more than usual.	
I usually don't do this at all	2 (50.0%)
I usually do this a little bit	0 (0.0%)
I usually do this a medium amount	1 (25.0%)
I usually do this a lot	1 (25.0%)
I try to come up with a strategy about what to do.	
I usually don't do this at all	0 (0.0%)
I usually do this a little bit	0 (0.0%)
I usually do this a medium amount	1 (25.0%)
I usually do this a lot	3 (75.0%)
I focus on dealing with this problem, and if necessary, let other things slide a little.	
I usually don't do this at all	1 (25.0%)

	Count (N = 4)
I usually do this a little bit	1 (25.0%)
I usually do this a medium amount	1 (25.0%)
I usually do this a lot	1 (25.0%)
I get sympathy and understanding from someone.	
I usually don't do this at all	0 (0.0%)
I usually do this a little bit	2 (50.0%)
I usually do this a medium amount	2 (50.0%)
I usually do this a lot	0 (0.0%)
I drink alcohol or take drugs, in order to think about it less.	
I usually don't do this at all	4 (100.0%)
I usually do this a little bit	0 (0.0%)
I usually do this a medium amount	0 (0.0%)
I usually do this a lot	0 (0.0%)
I kid around about it.	
I usually don't do this at all	3 (75.0%)
I usually do this a little bit	1 (25.0%)
I usually do this a medium amount	0 (0.0%)
I usually do this a lot	0 (0.0%)
I give up the attempt to get what I want.	
I usually don't do this at all	3 (75.0%)
I usually do this a little bit	1 (25.0%)
I usually do this a medium amount	0 (0.0%)
I usually do this a lot	0 (0.0%)
I look for something good in what is happening.	
I usually don't do this at all	0 (0.0%)
I usually do this a little bit	1 (25.0%)
I usually do this a medium amount	1 (25.0%)
I usually do this a lot	2 (50.0%)
I think about how I might best handle the problem.	
I usually don't do this at all	0 (0.0%)
I usually do this a little bit	0 (0.0%)
I usually do this a medium amount	1 (25.0%)

	Count (N = 4)
I usually do this a lot	3 (75.0%)
I pretend that it hasn't really happened.	
I usually don't do this at all	3 (75.0%)
I usually do this a little bit	0 (0.0%)
I usually do this a medium amount	1 (25.0%)
I usually do this a lot	0 (0.0%)
I make sure not to make matters worse by acting too soon.	
I usually don't do this at all	0 (0.0%)
I usually do this a little bit	0 (0.0%)
I usually do this a medium amount	2 (50.0%)
I usually do this a lot	2 (50.0%)
I try hard to prevent other things from interfering with my efforts at dealing with this.	
I usually don't do this at all	0 (0.0%)
I usually do this a little bit	1 (25.0%)
I usually do this a medium amount	1 (25.0%)
I usually do this a lot	2 (50.0%)
I go to movies or watch TV, to think about it less.	
I usually don't do this at all	1 (25.0%)
I usually do this a little bit	1 (25.0%)
I usually do this a medium amount	2 (50.0%)
I usually do this a lot	0 (0.0%)
I accept the reality of the fact that it happened.	
I usually don't do this at all	0 (0.0%)
I usually do this a little bit	1 (25.0%)
I usually do this a medium amount	2 (50.0%)
I usually do this a lot	1 (25.0%)
I ask people who have had similar experiences what they did.	
I usually don't do this at all	0 (0.0%)
I usually do this a little bit	1 (25.0%)
I usually do this a medium amount	1 (25.0%)
I usually do this a lot	2 (50.0%)

	Count (N = 4)
I feel a lot of emotional distress and I find myself expressing those feelings a lot.	
I usually don't do this at all	2 (50.0%)
I usually do this a little bit	1 (25.0%)
I usually do this a medium amount	0 (0.0%)
I usually do this a lot	1 (25.0%)
I take direct action to get around the problem.	
I usually don't do this at all	0 (0.0%)
I usually do this a little bit	1 (25.0%)
I usually do this a medium amount	1 (25.0%)
I usually do this a lot	2 (50.0%)
I try to find comfort in my religion.	
I usually don't do this at all	1 (25.0%)
I usually do this a little bit	0 (0.0%)
I usually do this a medium amount	2 (50.0%)
I usually do this a lot	1 (25.0%)
I force myself to wait for the right time to do something.	
I usually don't do this at all	0 (0.0%)
I usually do this a little bit	1 (25.0%)
I usually do this a medium amount	1 (25.0%)
I usually do this a lot	2 (50.0%)
I make fun of the situation.	
I usually don't do this at all	2 (50.0%)
I usually do this a little bit	0 (0.0%)
I usually do this a medium amount	1 (25.0%)
I usually do this a lot	1 (25.0%)
I reduce the amount of effort I'm putting into solving the problem.	
I usually don't do this at all	1 (25.0%)
I usually do this a little bit	1 (25.0%)
I usually do this a medium amount	2 (50.0%)
I usually do this a lot	0 (0.0%)

	Count (N = 4)
I talk to someone about how I feel.	
I usually don't do this at all	0 (0.0%)
I usually do this a little bit	1 (25.0%)
I usually do this a medium amount	1 (25.0%)
I usually do this a lot	2 (50.0%)
I use alcohol or drugs to help me get through it.	
I usually don't do this at all	4 (100.0%)
I usually do this a little bit	0 (0.0%)
I usually do this a medium amount	0 (0.0%)
I usually do this a lot	0 (0.0%)
I learn to live with it.	
I usually don't do this at all	1 (25.0%)
I usually do this a little bit	0 (0.0%)
I usually do this a medium amount	1 (25.0%)
I usually do this a lot	2 (50.0%)
I put aside other activities in order to concentrate on this.	
I usually don't do this at all	2 (50.0%)
I usually do this a little bit	1 (25.0%)
I usually do this a medium amount	1 (25.0%)
I usually do this a lot	0 (0.0%)
I think hard about what steps to take.	
I usually don't do this at all	0 (0.0%)
I usually do this a little bit	0 (0.0%)
I usually do this a medium amount	2 (50.0%)
I usually do this a lot	2 (50.0%)
I act as though it hasn't even happened.	
I usually don't do this at all	3 (75.0%)
I usually do this a little bit	1 (25.0%)
I usually do this a medium amount	0 (0.0%)
I usually do this a lot	0 (0.0%)
I do what has to be done, one step at a time.	
I usually don't do this at all	0 (0.0%)

	Count (N = 4)
I usually do this a little bit	0 (0.0%)
I usually do this a medium amount	1 (25.0%)
I usually do this a lot	3 (75.0%)
I learn something from the experience.	
I usually don't do this at all	0 (0.0%)
I usually do this a little bit	0 (0.0%)
I usually do this a medium amount	0 (0.0%)
I usually do this a lot	4 (100.0%)
I pray more than usual.	
I usually don't do this at all	0 (0.0%)
I usually do this a little bit	3 (75.0%)
I usually do this a medium amount	1 (25.0%)
I usually do this a lot	0 (0.0%)

Descriptive results – ARM-R

We now summarise the results obtained for the ARM-R part of the questionnaire. The participants were asked to rate how much they agreed with each statement with regards to themselves.

	Count (N = 4)
I cooperate with people around me	
Not at all	0 (0.0%)
A little	0 (0.0%)
Somewhat	0 (0.0%)
Quite a bit	1 (25.0%)
A lot	3 (75.0%)
Getting and improving qualifications or skills is important to me	
Not at all	0 (0.0%)
A little	0 (0.0%)
Somewhat	0 (0.0%)
Quite a bit	1 (25.0%)
A lot	3 (75.0%)
I know how to behave in different social situations	
Not at all	0 (0.0%)

	Count (N = 4)
A little	0 (0.0%)
Somewhat	0 (0.0%)
Quite a bit	1 (25.0%)
A lot	3 (75.0%)
My family have usually supported me through life	
Not at all	0 (0.0%)
A little	0 (0.0%)
Somewhat	1 (25.0%)
Quite a bit	1 (25.0%)
A lot	2 (50.0%)
My family knows a lot about me	
Not at all	0 (0.0%)
A little	0 (0.0%)
Somewhat	2 (50.0%)
Quite a bit	0 (0.0%)
A lot	2 (50.0%)
If I am hungry, I can get food to eat	
Not at all	0 (0.0%)
A little	0 (0.0%)
Somewhat	1 (25.0%)
Quite a bit	0 (0.0%)
A lot	3 (75.0%)
People like to spend time with me	
Not at all	0 (0.0%)
A little	1 (25.0%)
Somewhat	0 (0.0%)
Quite a bit	1 (25.0%)
A lot	2 (50.0%)
I talk to my family/partner about how I feel	
Not at all	0 (0.0%)
A little	0 (0.0%)
Somewhat	1 (25.0%)

	Count (N = 4)
Quite a bit	1 (25.0%)
A lot	2 (50.0%)
I feel supported by my friends	
Not at all	0 (0.0%)
A little	1 (25.0%)
Somewhat	1 (25.0%)
Quite a bit	0 (0.0%)
A lot	2 (50.0%)
I feel that I belong in my community	
Not at all	0 (0.0%)
A little	0 (0.0%)
Somewhat	0 (0.0%)
Quite a bit	1 (25.0%)
A lot	3 (75.0%)
My family/partner stands by me during difficult times	
Not at all	0 (0.0%)
A little	0 (0.0%)
Somewhat	0 (0.0%)
Quite a bit	2 (50.0%)
A lot	2 (50.0%)
My friends stand by me during difficult times	
Not at all	0 (0.0%)
A little	0 (0.0%)
Somewhat	2 (50.0%)
Quite a bit	0 (0.0%)
A lot	2 (50.0%)
I am treated fairly in my community	
Not at all	0 (0.0%)
A little	0 (0.0%)
Somewhat	1 (25.0%)
Quite a bit	1 (25.0%)
A lot	2 (50.0%)

	Count (N = 4)
I have opportunities to show others that I can act responsibly	
Not at all	0 (0.0%)
A little	0 (0.0%)
Somewhat	1 (25.0%)
Quite a bit	2 (50.0%)
A lot	1 (25.0%)
I feel secure when I am with my family/partner	
Not at all	0 (0.0%)
A little	0 (0.0%)
Somewhat	0 (0.0%)
Quite a bit	1 (25.0%)
A lot	3 (75.0%)
I have opportunities to apply my abilities in life (like skills, a job, caring for others)	
Not at all	0 (0.0%)
A little	0 (0.0%)
Somewhat	0 (0.0%)
Quite a bit	2 (50.0%)
A lot	2 (50.0%)
I enjoy my family's/partner's cultural and family traditions	
Not at all	0 (0.0%)
A little	0 (0.0%)
Somewhat	0 (0.0%)
Quite a bit	1 (25.0%)
A lot	3 (75.0%)



APPENDIX K: REPORT 2 (RESPONSE ANALYSIS FOR URBAN SCHOOLS)

T20092 Report 2: Response analysis (Urban)

Introduction

This report offers a brief analysis of the scores obtained by the subjects who took part in the study. This is achieved by calculating certain measures of interest as laid out in the various documents explaining the questionnaire surveys (specifically, COPE Inventory and ARM-R). The analysis is currently limited to summary statistics and visual representations. Further analysis will be conducted once more data has been collected and a research goal has been specified by the researcher.

We ask that the researcher please confirm what type of analysis they would ideally like us to perform.

Response analysis - COPE inventory

The COPE inventory consists of 60 questions in total. For each question there are 4 potential responses, each of which can be assigned a numeric value as follows:

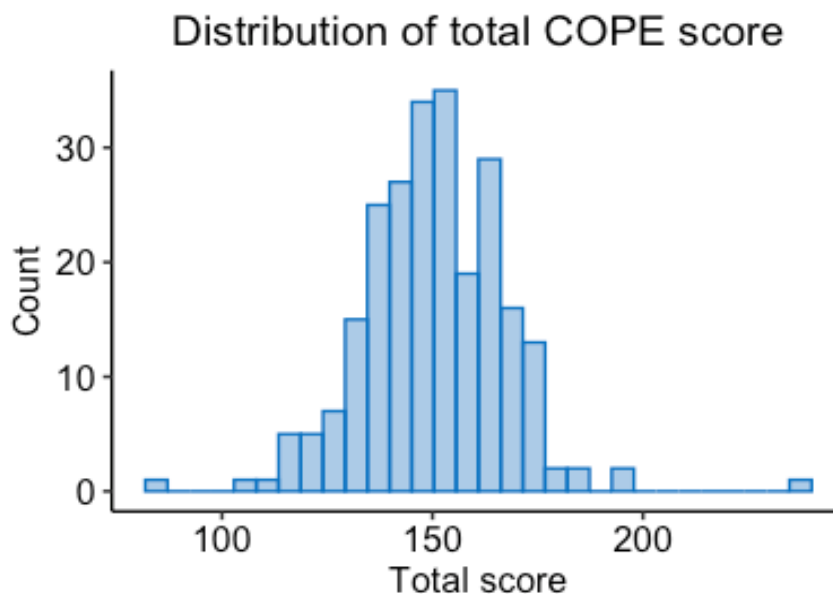
- 1 = I usually don't do this at all.
- 2 = I usually do this a little bit.
- 3 = I usually do this a medium amount.
- 4 = I usually do this a lot.

We can also sum the values for specific answers to derive certain scales for measures such as Denial, Humour, Acceptance, etc. All these details are laid out in the COPE inventory as initially provided by the researcher.

We now calculate the total scores for each participant and study the distribution of these values.

NA_count	Min	Max	Median	Mean	stdev	IQR
0	87	240	150	150.5	16.72	21.5

Please note. Due to the large number of potential scores a frequency table will not be included for these values.



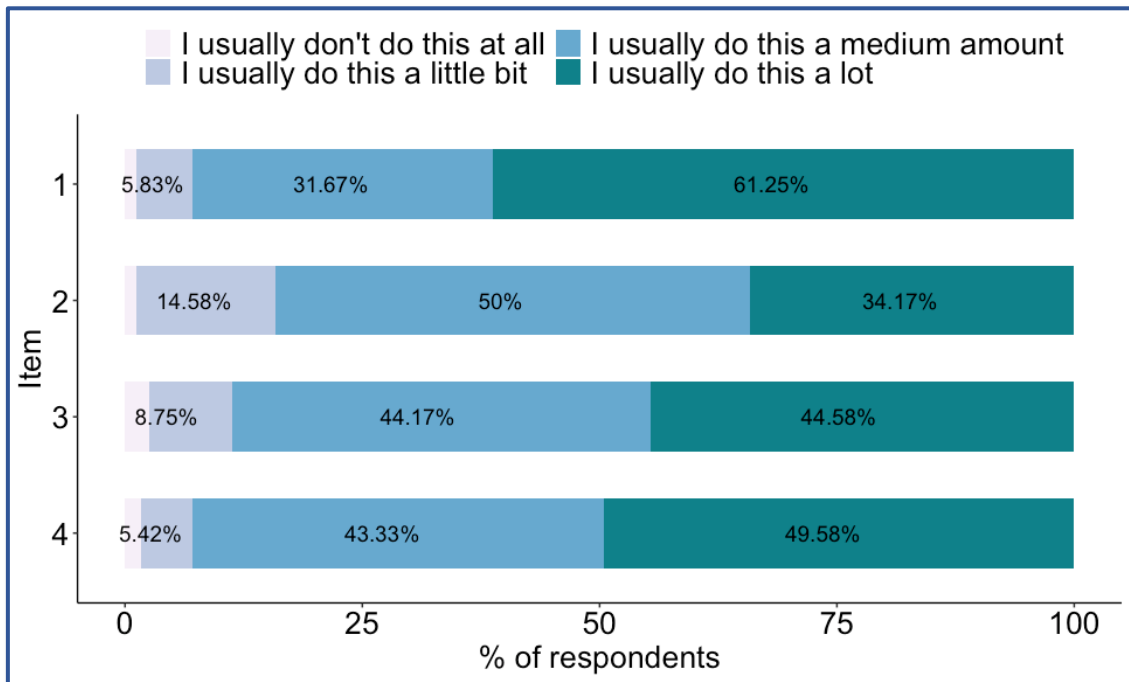
We now proceed to determine each participant's score for each of the various scale values and study their distribution. We start by providing a measure known as Cronbach's alpha for each COPE inventory item. Cronbach's alpha measures the internal consistency of the answers received for each scale. The alpha values as well as their interpretation is given in the following table.

Scale	Cronbach's alpha	Internal consistency
Positive reinterpretation and growth	0.948	Excellent
Mental disengagement	0.986	Excellent
Focus on and venting of emotions	0.949	Excellent
Use of instrumental social support	0.845	Good
Active coping	0.96	Excellent
Denial	0.921	Excellent
Religious coping	0.963	Excellent
Humour	0.984	Excellent
Behavioural disengagement	0.943	Excellent
Restraint coping	0.953	Excellent
Use of emotional social support	0.942	Excellent
Substance use	0.864	Good
Acceptance	0.965	Excellent
Suppression of competing activities	0.952	Excellent
Planning	0.982	Excellent

Positive reinterpretation and growth

The answers that were summed for this scale are those relating to the following questions:

- 1-I try to grow as a person as a result of the experience.
- 2-I try to see it in a different light, to make it seem more positive.
- 3-I look for something good in what is happening.
- 4-I learn something from the experience.



Mental disengagement

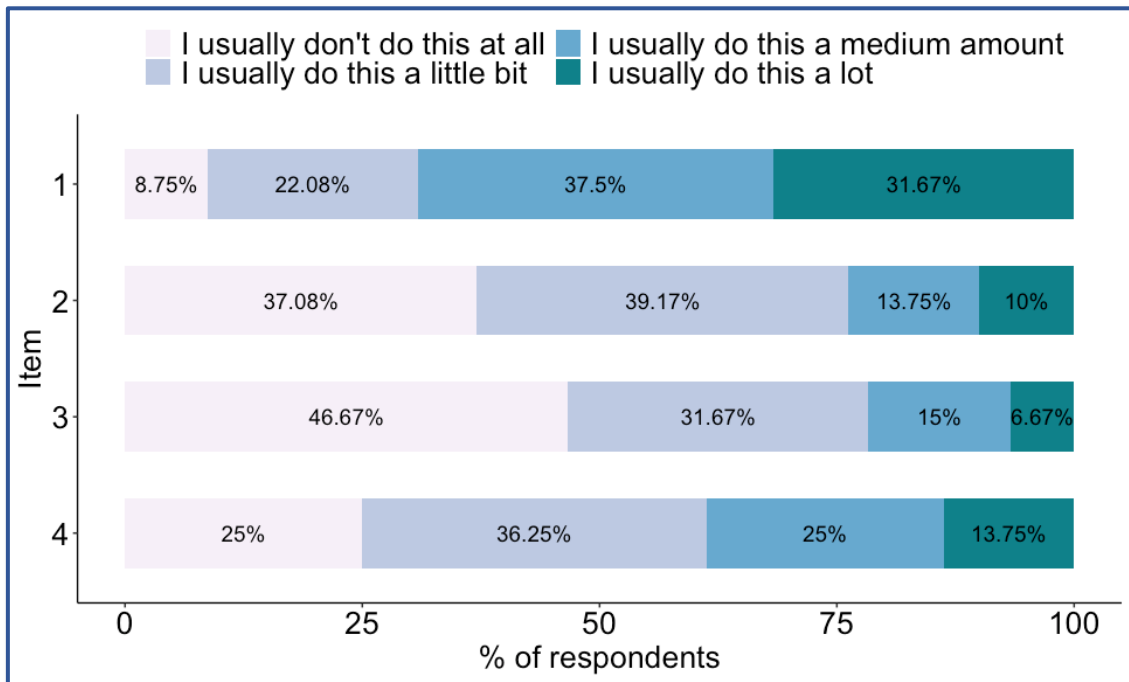
The answers that were summed for this scale are those relating to the following questions:

1-I turn to work or other substitute activities to take my mind off things.

2-I daydream about things other than this.

3-I sleep more than usual.

4-I go to movies or watch TV, to think about it less.



Focus on and venting of emotions

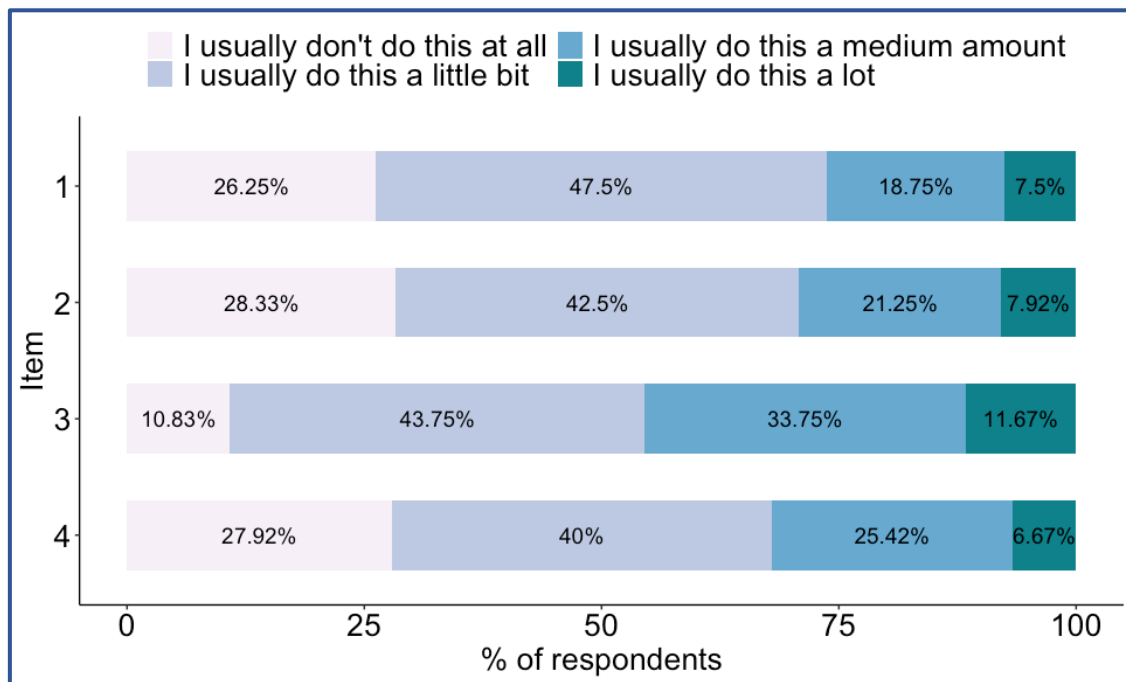
The answers that were summed for this scale are those relating to the following questions:

1-I get upset and let my emotions out.

2-I get upset, and am really aware of it.

3-I let my feelings out.

4-I feel a lot of emotional distress and I find myself expressing those feelings a lot.



Use of instrumental social support

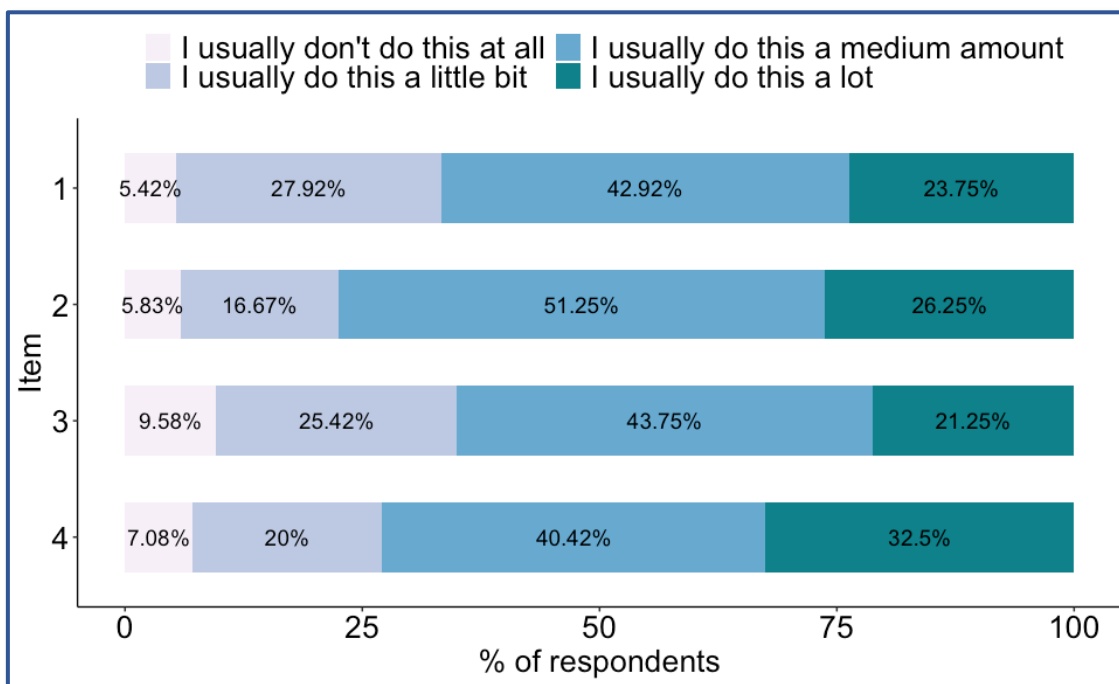
The answers that were summed for this scale are those relating to the following questions:

1-I try to get advice from someone about what to do.

2-I talk to someone to find out more about the situation.

3-I talk to someone who could do something concrete about the problem.

4-I ask people who have had similar experiences what they did.



Active coping

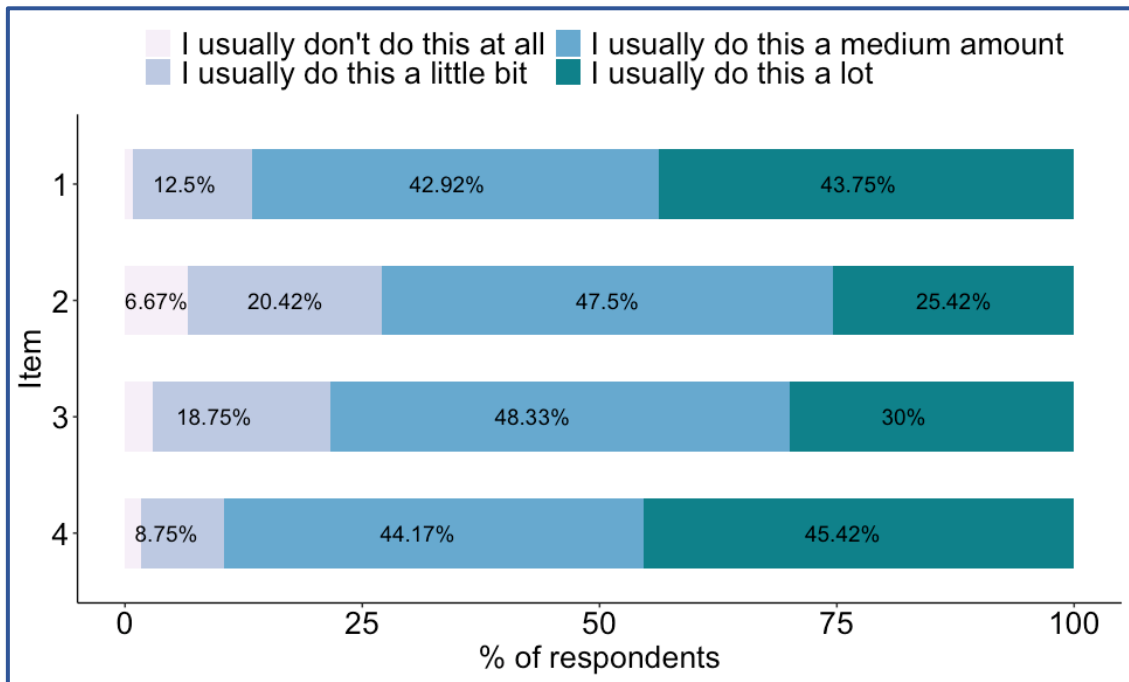
The answers that were summed for this scale are those relating to the following questions:

1-I concentrate my efforts on doing something about it.

2-I take additional action to try to get rid of the problem.

3-I take direct action to get around the problem.

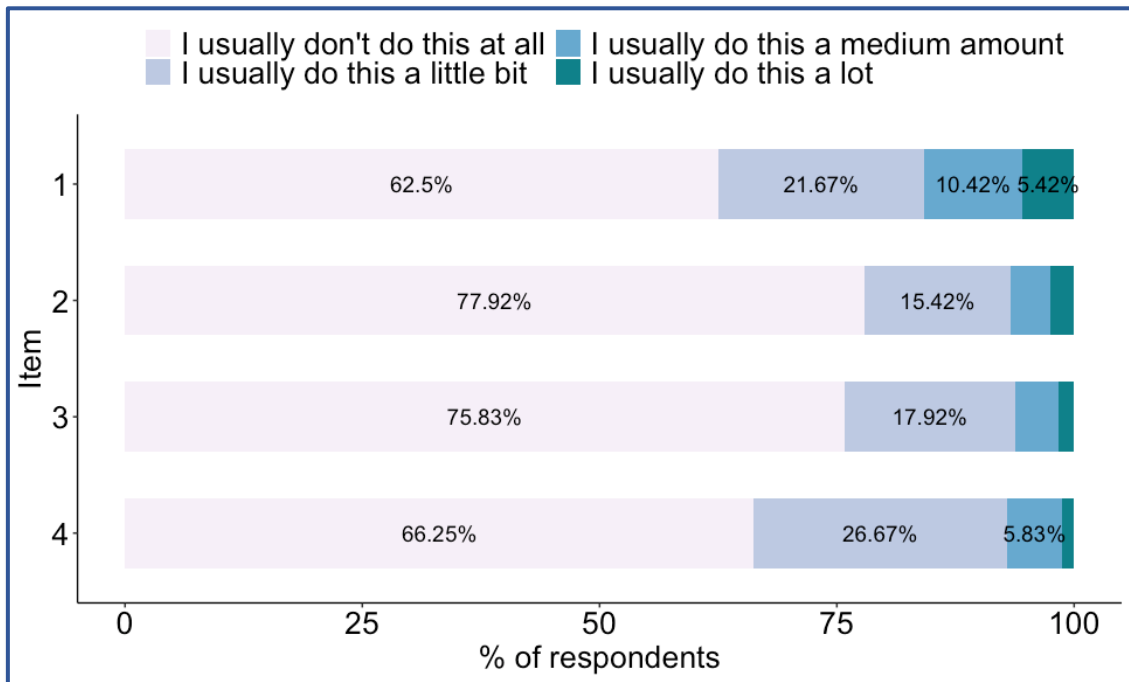
4-I do what has to be done, one step at a time.



Denial

The answers that were summed for this scale are those relating to the following questions:

- 1-I say to myself "this isn't real."
- 2-I refuse to believe that it has happened.
- 3-I pretend that it hasn't really happened.
- 4-I act as though it hasn't even happened.



Religious coping

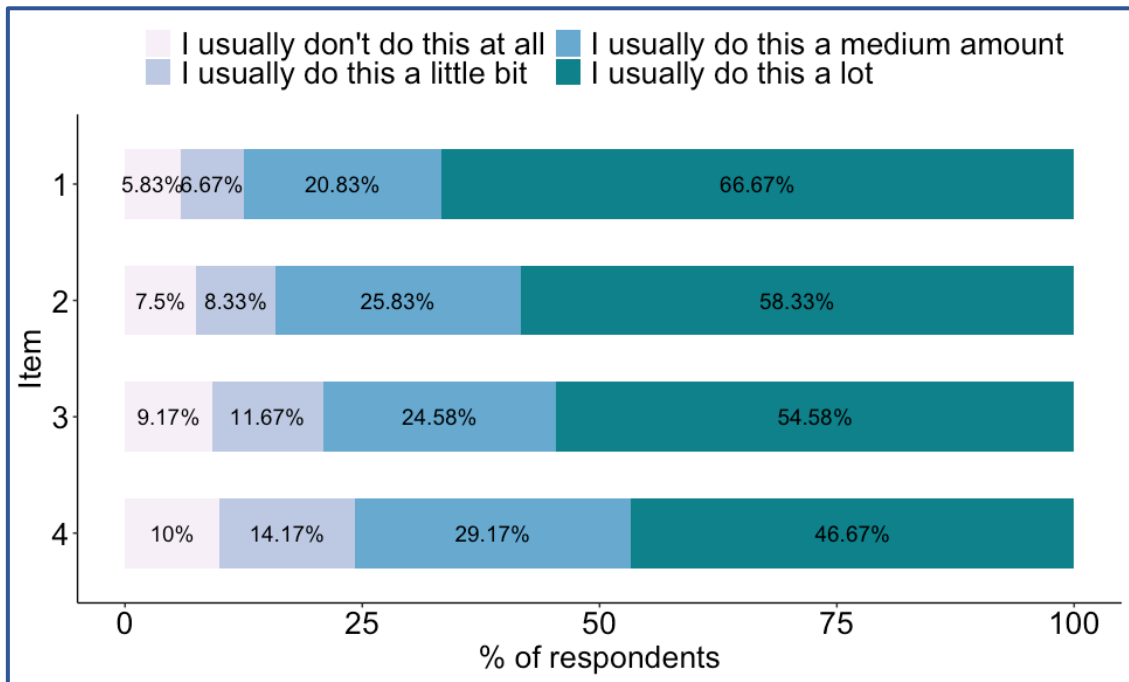
The answers that were summed for this scale are those relating to the following questions:

1-I put my trust in God.

2-I seek God's help.

3-I try to find comfort in my religion.

4-I pray more than usual.



Humour

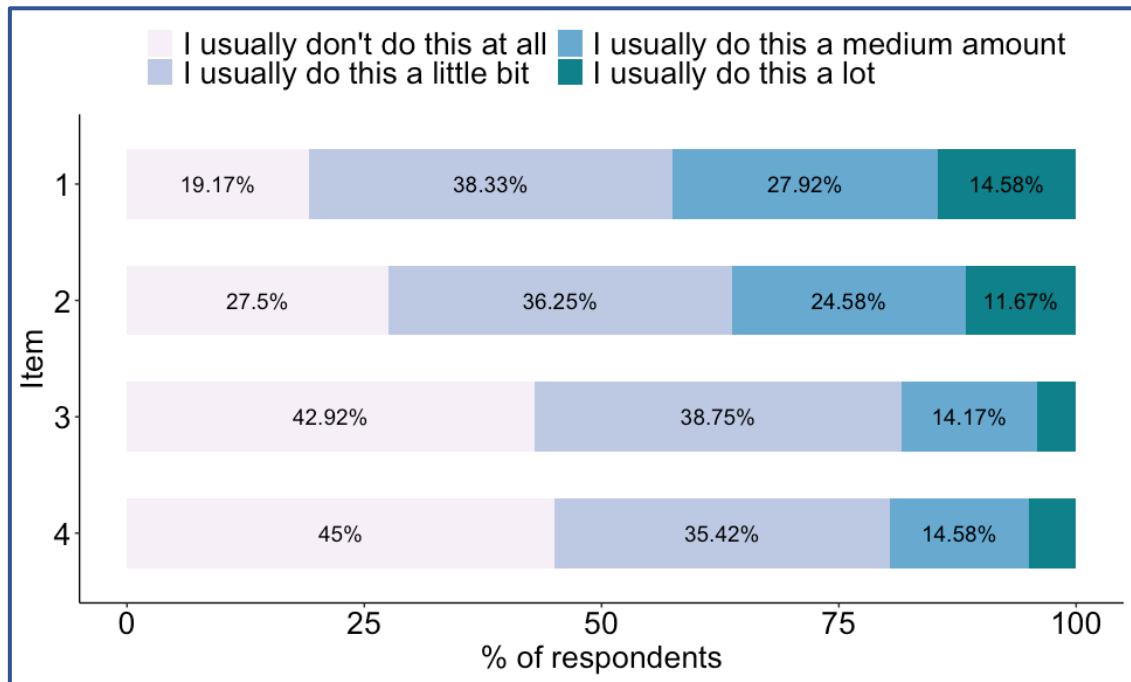
The answers that were summed for this scale are those relating to the following questions:

1-I laugh about the situation.

2-I make jokes about it.

3-I kid around about it.

4-I make fun of the situation.



Behavioural disengagement

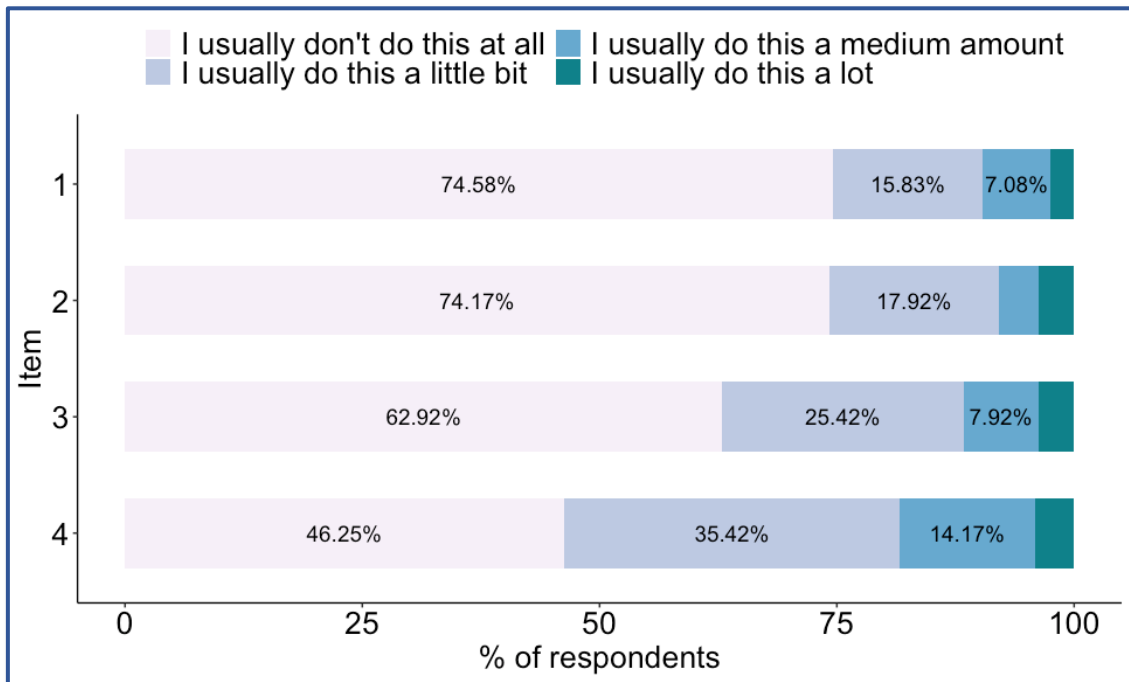
The answers that were summed for this scale are those relating to the following questions:

1-I admit to myself that I can't deal with it, and quit trying.

2-I just give up trying to reach my goal.

3-I give up the attempt to get what I want.

4-I reduce the amount of effort I'm putting into solving the problem.



Restraint coping

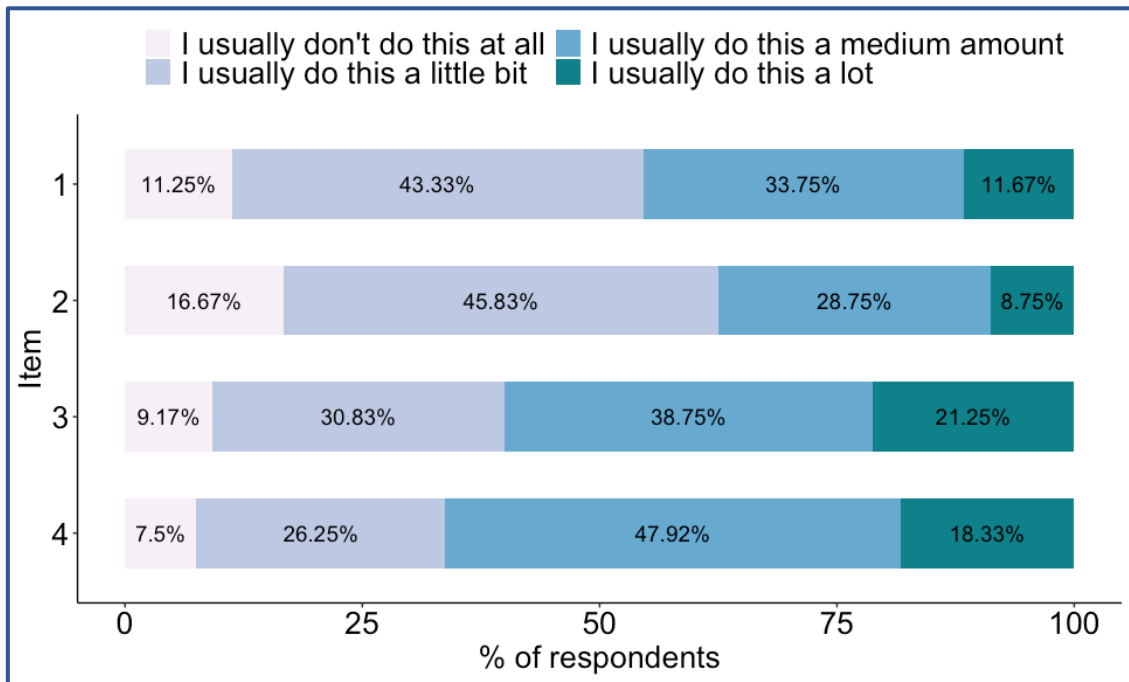
The answers that were summed for this scale are those relating to the following questions:

1-I restrain myself from doing anything too quickly.

2-I hold off doing anything about it until the situation permits.

3-I make sure not to make matters worse by acting too soon.

4-I force myself to wait for the right time to do something.



Use of emotional social support

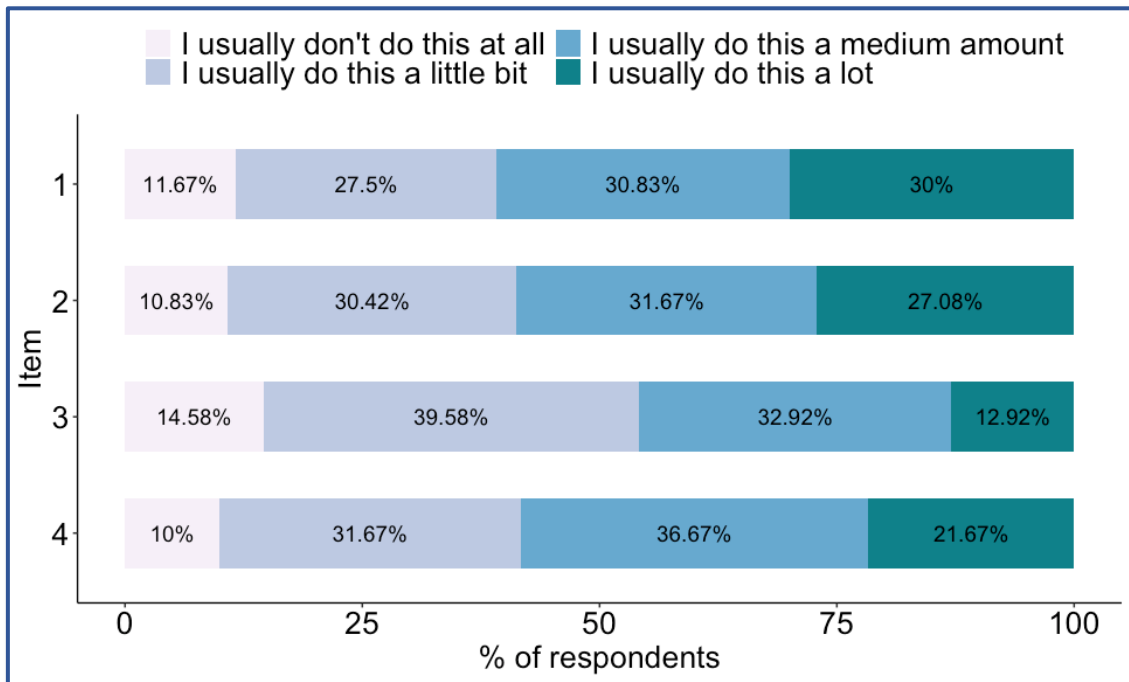
The answers that were summed for this scale are those relating to the following questions:

1-I discuss my feelings with someone.

2-I try to get emotional support from friends or relatives.

3-I get sympathy and understanding from someone.

4-I talk to someone about how I feel.



Substance use

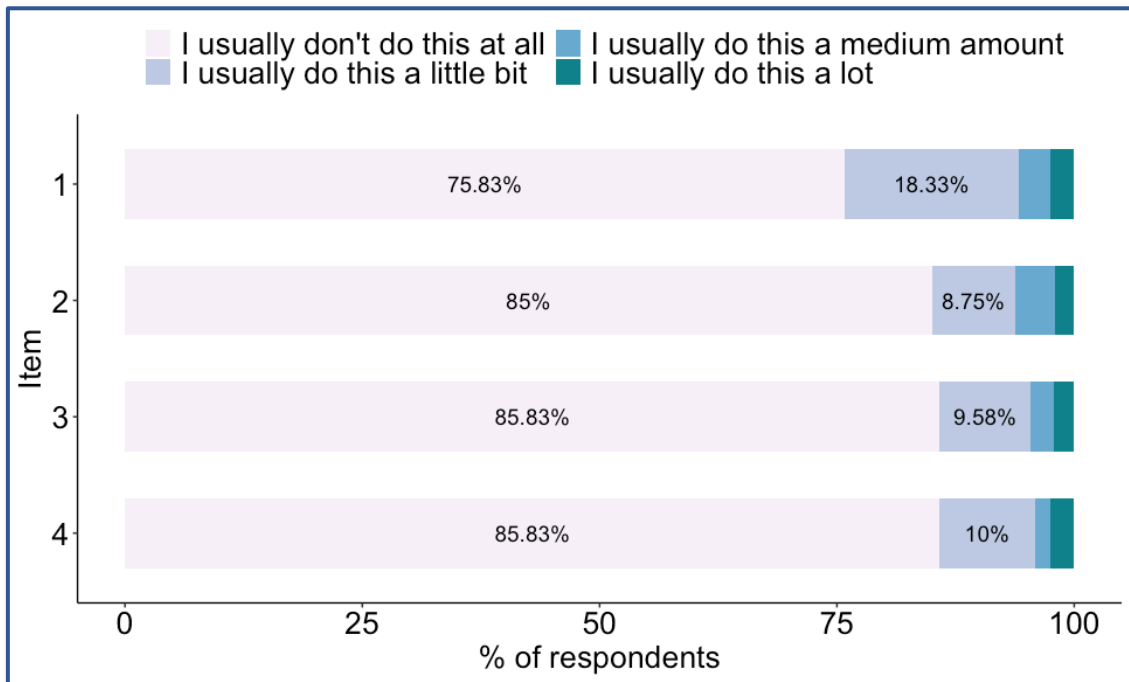
The answers that were summed for this scale are those relating to the following questions:

1-I use alcohol or drugs to make myself feel better.

2-I try to lose myself for a while by drinking alcohol or taking drugs.

3-I drink alcohol or take drugs, in order to think about it less.

4-I use alcohol or drugs to help me get through it.



Acceptance

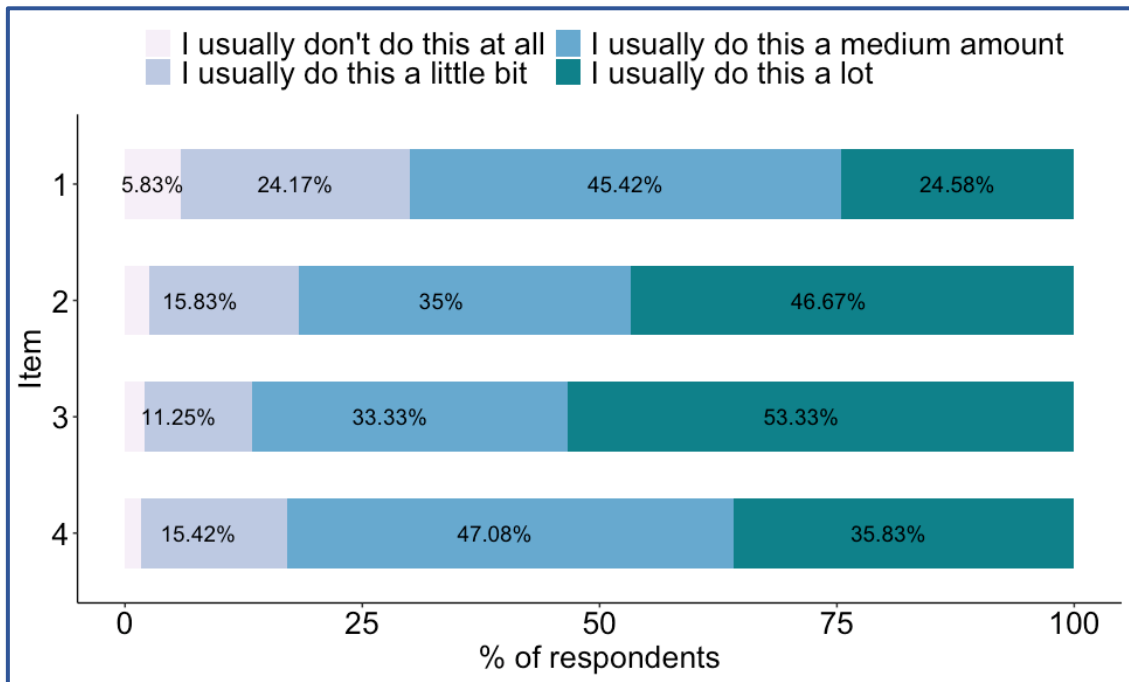
The answers that were summed for this scale are those relating to the following questions:

1-I get used to the idea that it happened.

2-I accept that this has happened and that it can't be changed.

3-I accept the reality of the fact that it happened.

4-I learn to live with it.



Suppression of competing activities

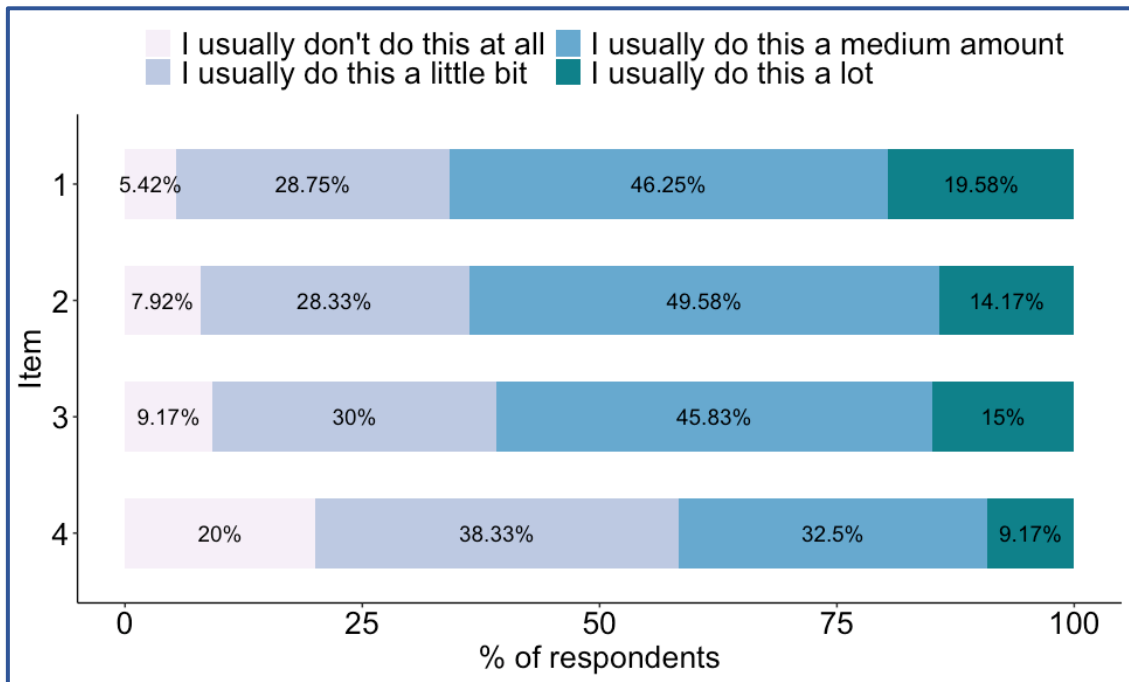
The answers that were summed for this scale are those relating to the following questions:

1-I keep myself from getting distracted by other thoughts or activities.

2-I focus on dealing with this problem, and if necessary let other things slide a little.

3-I try hard to prevent other things from interfering with my efforts at dealing with this.

4-I put aside other activities in order to concentrate on this.



Planning

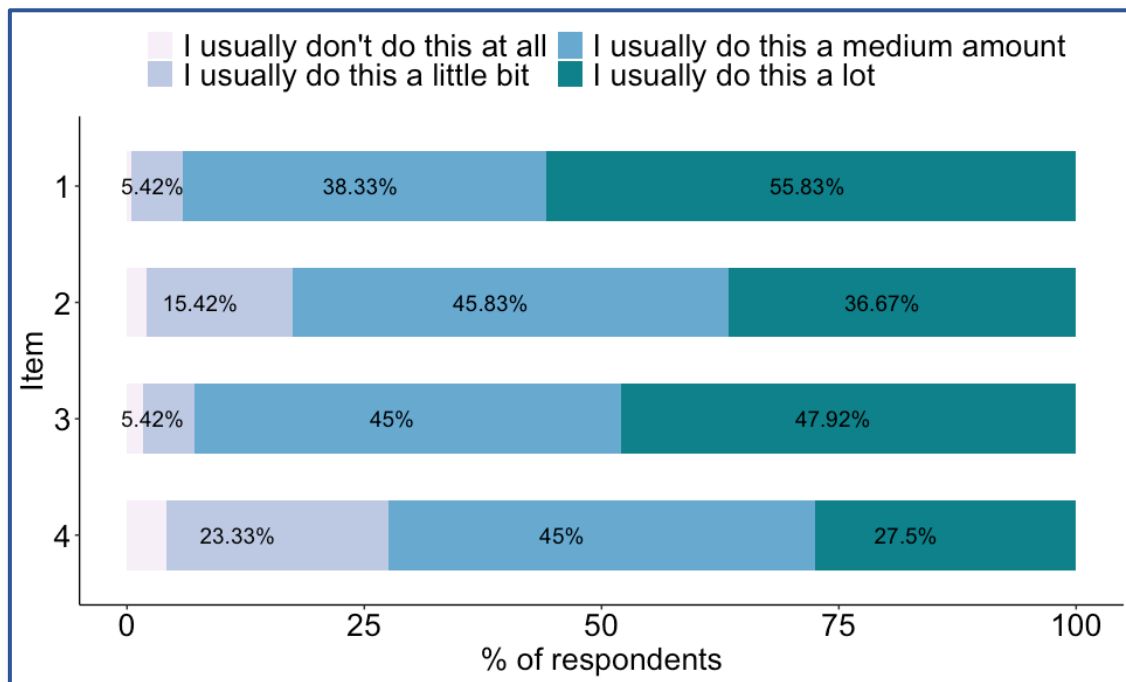
The answers that were summed for this scale are those relating to the following questions:

1-I make a plan of action.

2-I try to come up with a strategy about what to do.

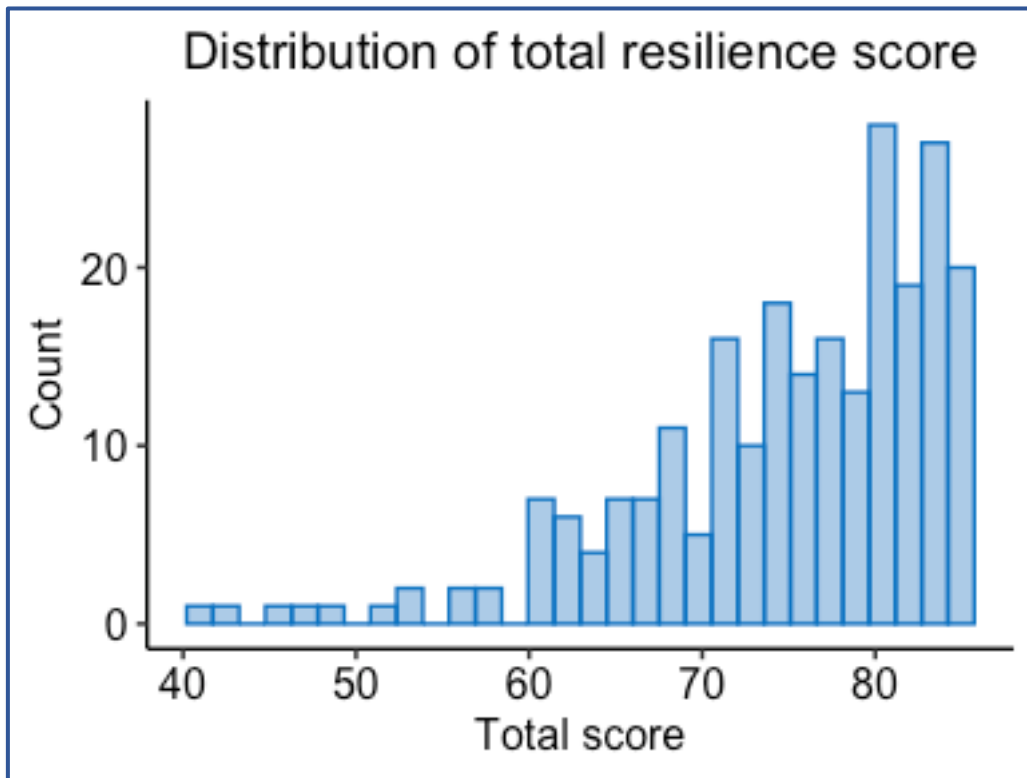
3-I think about how I might best handle the problem.

4-I think hard about what steps to take.



Response analysis – ARM-R

We now calculate each participant's final score for the ARM-R survey. The survey consists of 17 questions using an unmodified 5-point scale, thus the minimum score is 17 and the maximum score is 85.



According to the ARM-R manual, using this 5 point scale we can also derive two more measures for each subject:

- Personal resilience (questions: 1, 2, 3, 7, 9, 10, 12, 13, 14, 16), with a minimum score of 10 and a maximum score of 50.
- Relational resilience (questions: 4, 5, 6, 8, 11, 15, 17), with a minimum score of 7 and a maximum score of 35.

We derive these measures for each subject and study their distribution. We start by providing a measure known as Cronbach's alpha for each ARM-R item. Cronbach's alpha measures the internal consistency of the answers received for each scale. The alpha values as well as their interpretation is given in the following table.

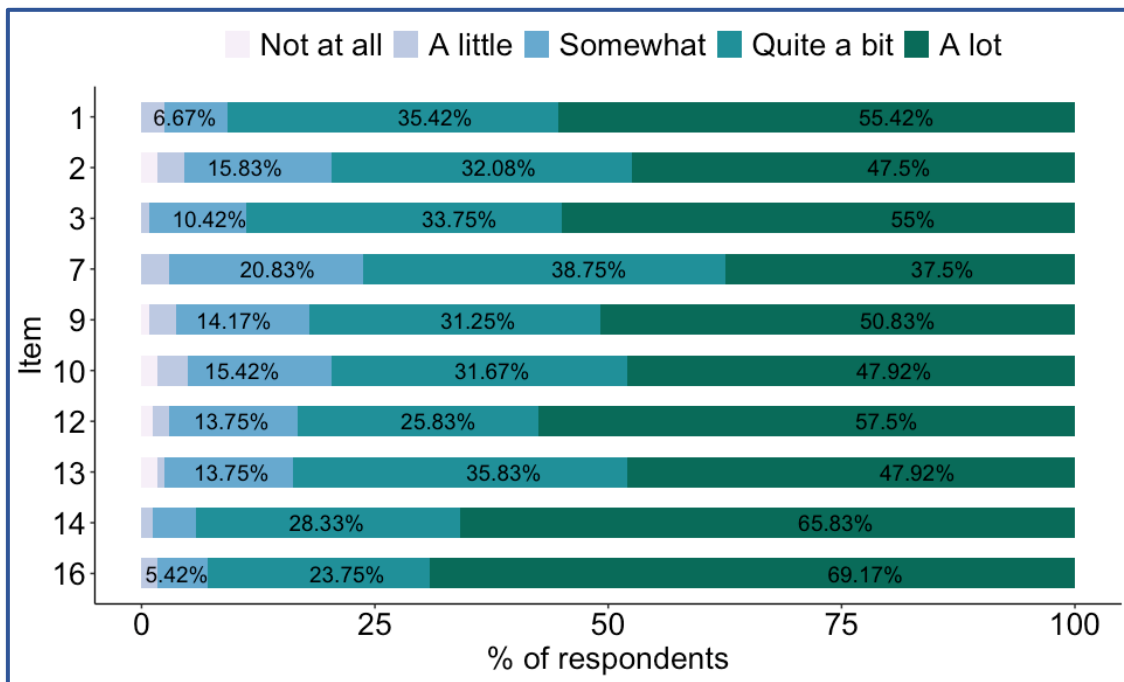
For Personal resilience the Cronbach alpha is: 0.8458874 thus internal consistency is: **Excellent**

For Relational resilience the Cronbach alpha is: 0.8349798 thus internal consistency is: **Excellent**

Personal resilience

The answers that were summed for this scale are those relating to the following questions:

- 1-I cooperate with people around me
- 2-Getting and improving qualifications or skills is important to me
- 3-I know how to behave in different social situations
- 7-People like to spend time with me
- 9-I feel supported by my friends
- 10-I feel that I belong in my community
- 12-My friends stand by me during difficult times
- 13-I am treated fairly in my community
- 14-I have opportunities to show others that I can act responsibly
- 16-I have opportunities to apply my abilities in life (like skills, a job, caring for others)



Relational resilience

The answers that were summed for this scale are those relating to the following questions:

4-My family have usually supported me through life

5-My family knows a lot about me

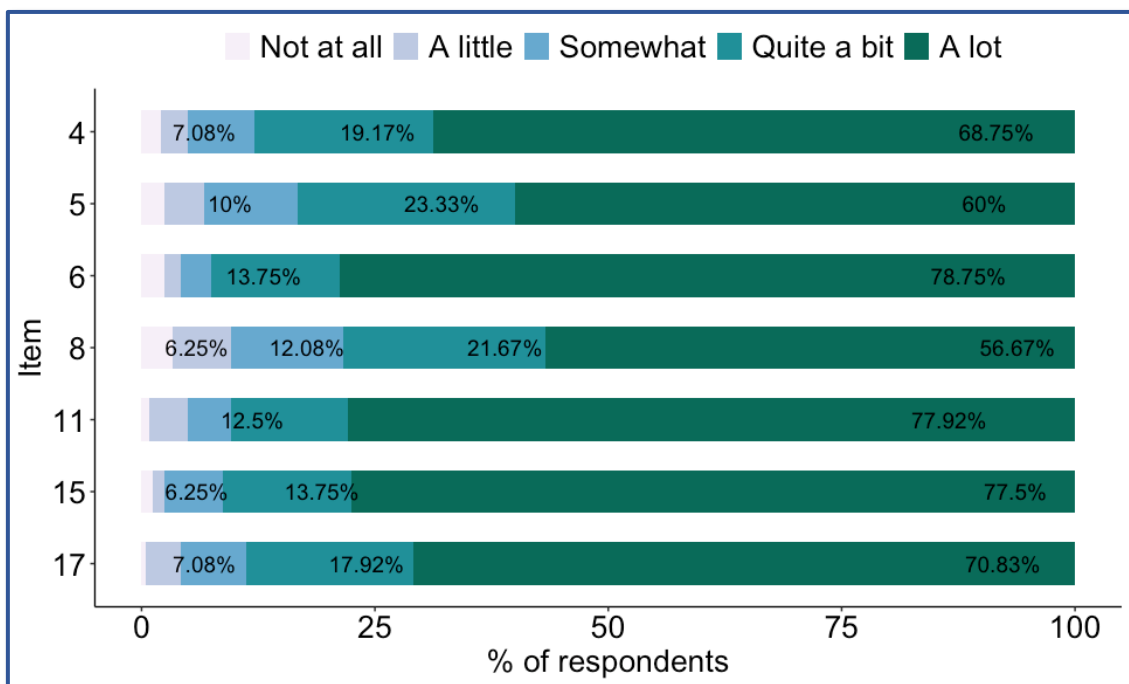
6-If I am hungry, I can get food to eat

8-I talk to my family/partner about how I feel

11-My family/partner stands by me during difficult times

15-I feel secure when I am with my family/partner

17-I enjoy my family's/partner's cultural and family traditions



COPE AND RESILIENCE CORRELATION ANALYSIS

We now calculate the correlation between the various COPE inventory measures as well as the resilience measures.

All COPE inventory items

We first determine the correlation of each COPE inventory item individually with the resilience measures using various correlation coefficients. We supplied two different correlation measures. In all instances the scores were not normally distributed hence the best suited correlation measure to use would be the Spearman's correlation.

Note that the null hypothesis for such tests is that the correlation estimate is not significantly from zero (i.e. is equal to zero) and thus rejecting the null hypothesis indicates that an estimated correlation is statistically significant.

Correlation between COPE inventory items and level of resilience measure (Pearson)

Scale	Value	Test statistic	p-value	Reject?	Conclusion
Positive reinterpretation and growth	0.35	5.755	<0.001	Reject	Statistically significant
Mental disengagement	-0.193	-3.027	0.003	Reject	Statistically significant
Focus on and venting of emotions	0.109	1.697	0.091	Do not reject	Not statistically significant
Use of instrumental social support	0.398	6.702	<0.001	Reject	Statistically significant
Active coping	0.279	4.481	<0.001	Reject	Statistically significant
Denial	-0.155	-2.422	0.016	Reject	Statistically significant
Religious coping	0.238	3.774	<0.001	Reject	Statistically significant
Humour	-0.149	-2.33	0.021	Reject	Statistically significant
Behavioural disengagement	-0.201	-3.161	0.002	Reject	Statistically significant
Restraint coping	0.113	1.756	0.08	Do not reject	Not statistically significant
Use of emotional social support	0.483	8.504	<0.001	Reject	Statistically significant
Substance use	-0.177	-2.778	0.006	Reject	Statistically significant
Acceptance	0.171	2.674	0.008	Reject	Statistically significant
Suppression of competing activities	0.126	1.952	0.052	Do not reject	Not statistically significant
Planning	0.299	4.829	<0.001	Reject	Statistically significant

Correlation between COPE inventory items and level resilience measure (Spearman)

Scale	Value	Test statistic	p-value	Reject?	Conclusion
Positive reinterpretation and growth	0.393	1397549.776	<0.001	Reject	Statistically significant
Mental disengagement	-0.233	2841221.017	<0.001	Reject	Statistically significant
Focus on and venting of emotions	0.056	2175137.717	0.388	Do not reject	Not statistically significant
Use of instrumental social support	0.355	1486473.043	<0.001	Reject	Statistically significant
Active coping	0.291	1634613.802	<0.001	Reject	Statistically significant
Denial	-0.19	2741122.531	0.003	Reject	Statistically significant
Religious coping	0.254	1718841.543	<0.001	Reject	Statistically significant
Humour	-0.141	2629820.14	0.028	Reject	Statistically significant
Behavioural disengagement	-0.227	2826901.948	<0.001	Reject	Statistically significant
Restraint coping	0.13	2004501.567	0.044	Reject	Statistically significant
Use of emotional social support	0.461	1242189.371	<0.001	Reject	Statistically significant
Substance use	-0.095	2522672.421	0.143	Do not reject	Not statistically significant
Acceptance	0.212	1816561.671	0.001	Reject	Statistically significant
Suppression of competing activities	0.128	2009276.628	0.048	Reject	Statistically significant
Planning	0.313	1582412.836	<0.001	Reject	Statistically significant

Positive reinterpretation and growth

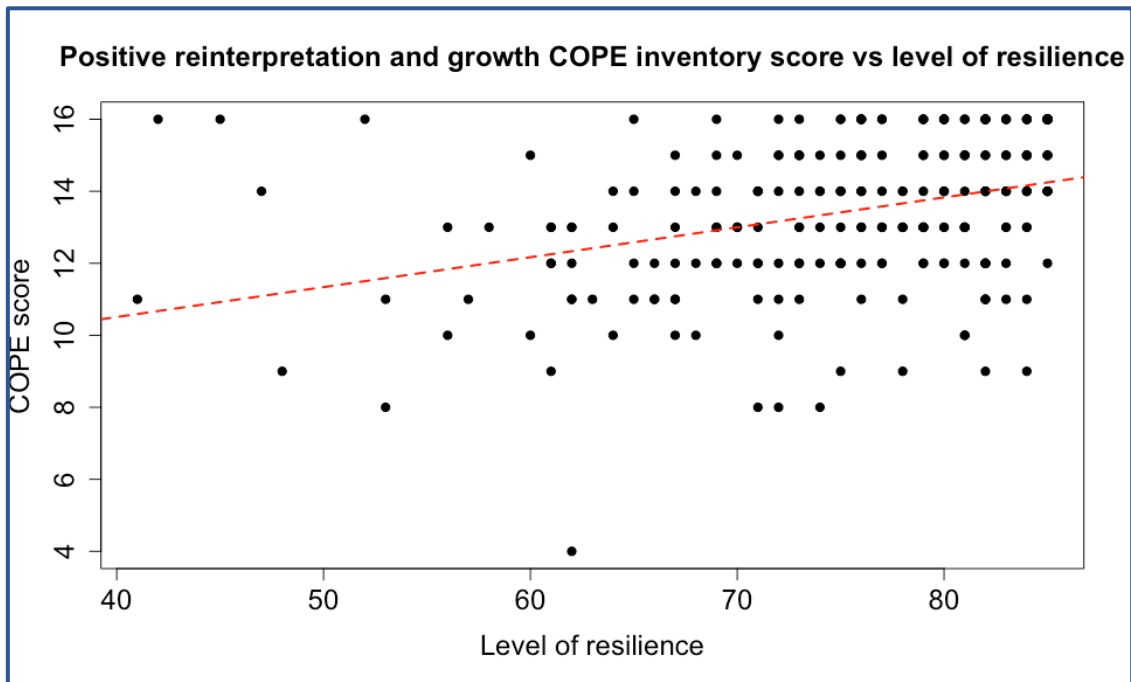
The answers that were summed for this scale are those relating to the following questions:

1-I try to grow as a person as a result of the experience.

29-I try to see it in a different light, to make it seem more positive.

38-I look for something good in what is happening.

59-I learn something from the experience.



Method	Value	p-value	Reject?	Conclusion
Pearson	0.35	<0.001	Reject	Statistically significant
Spearman	0.39	0.003	Reject	Statistically significant

Mental disengagement

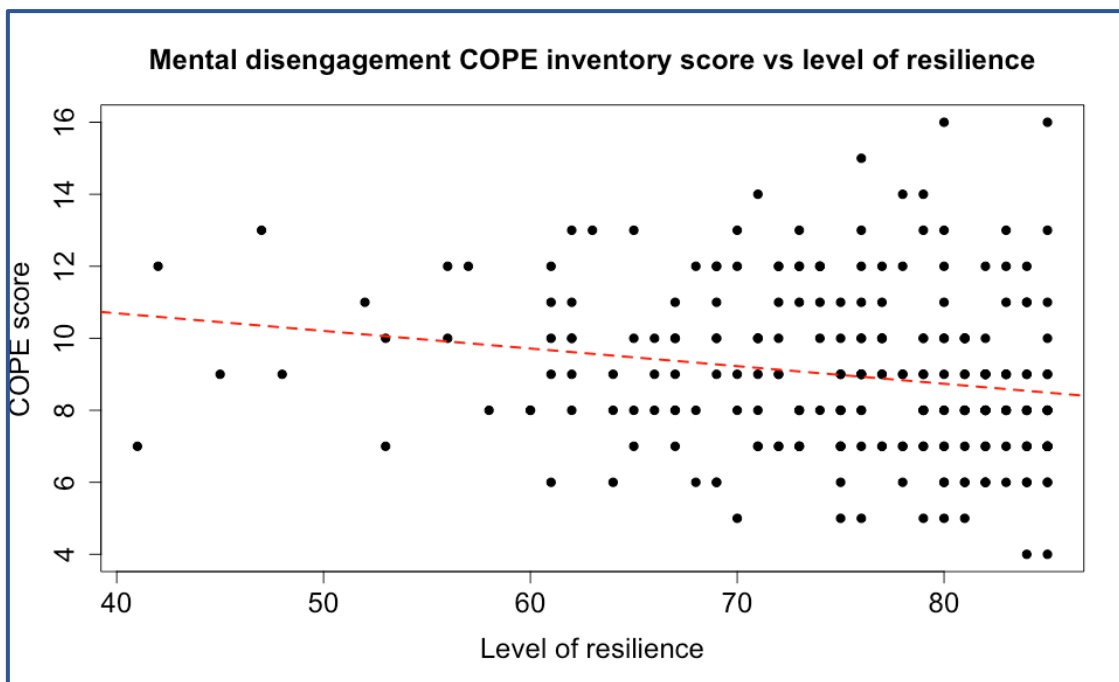
The answers that were summed for this scale are those relating to the following questions:

2-I turn to work or other substitute activities to take my mind off things.

16-I daydream about things other than this.

31-I sleep more than usual.

43-I go to movies or watch TV, to think about it less.



Method	Value	p-value	Reject?	Conclusion
Pearson	-0.19	0.003	Reject	Statistically significant
Spearman	-0.233	<0.001	Reject	Statistically significant

Focus on and venting of emotions

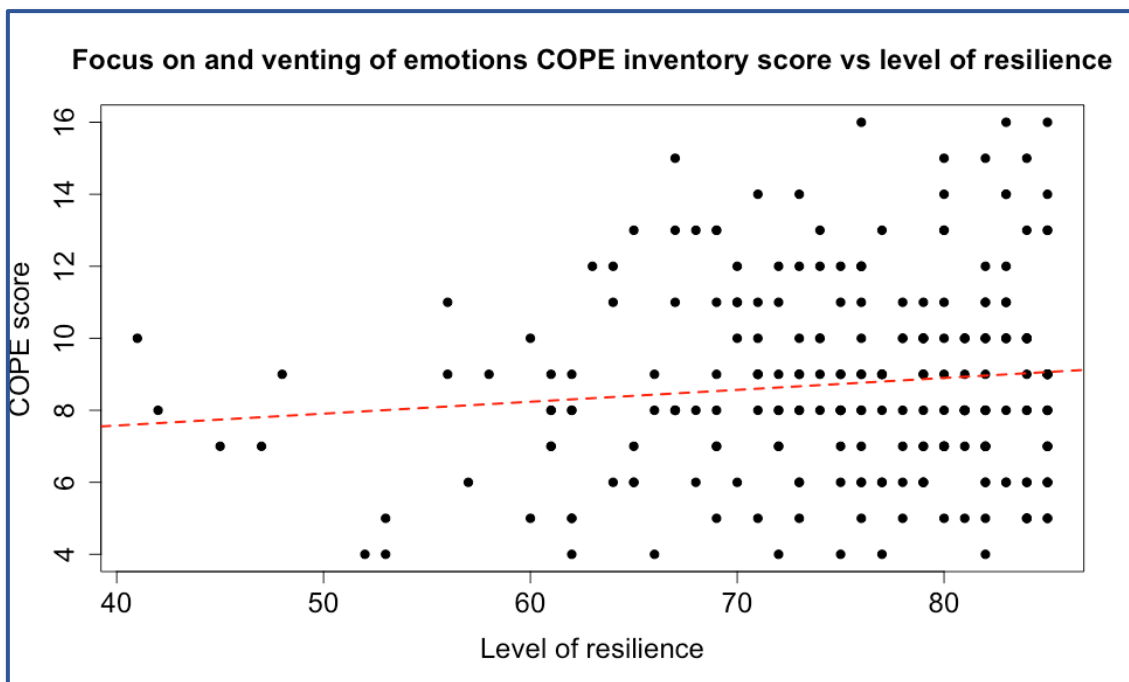
The answers that were summed for this scale are those relating to the following questions:

3-I get upset and let my emotions out.

17-I get upset, and am really aware of it.

28-I let my feelings out.

46-I feel a lot of emotional distress and I find myself expressing those feelings a lot.



Method	Value	p-value	Reject?	Conclusion
Pearson	0.109	0.091	Do not reject	Not statistically significant
Spearman	0.056	0.388	Do not reject	Not statistically significant

Use of instrumental social support

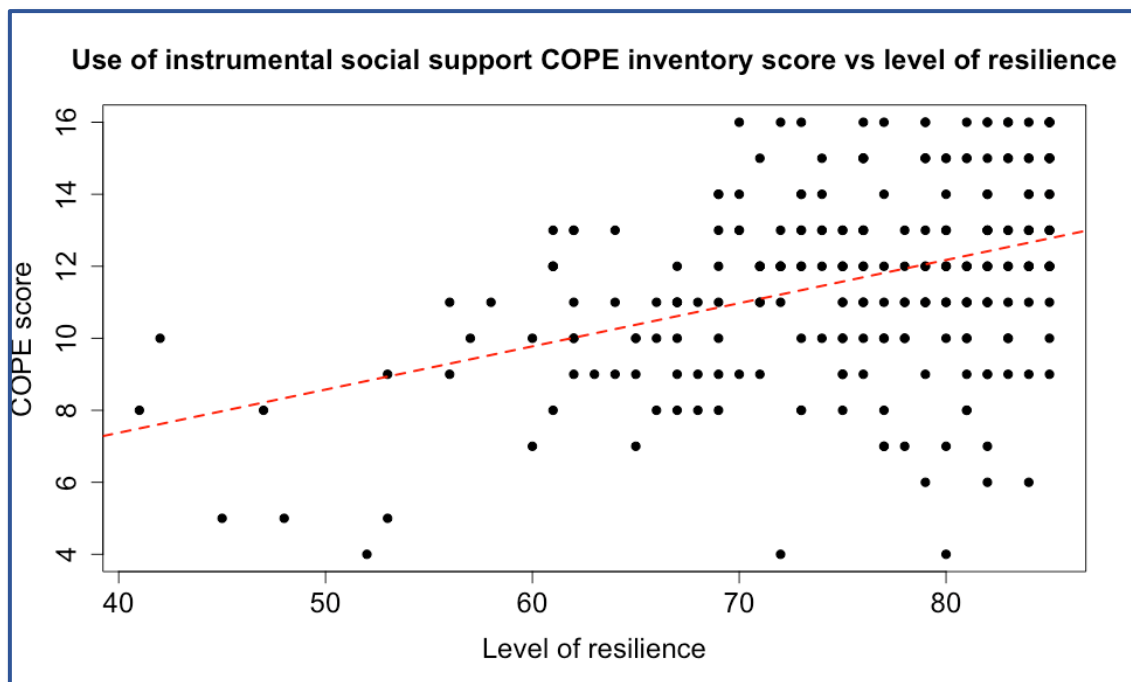
The answers that were summed for this scale are those relating to the following questions:

4-I try to get advice from someone about what to do.

14-I talk to someone to find out more about the situation.

30-I talk to someone who could do something concrete about the problem.

45-I ask people who have had similar experiences what they did.



Method	Value	p-value	Reject?	Conclusion
Pearson	0.398	<0.001	Reject	Statistically significant
Spearman	0.355	<0.001	Reject	Statistically significant

Active coping

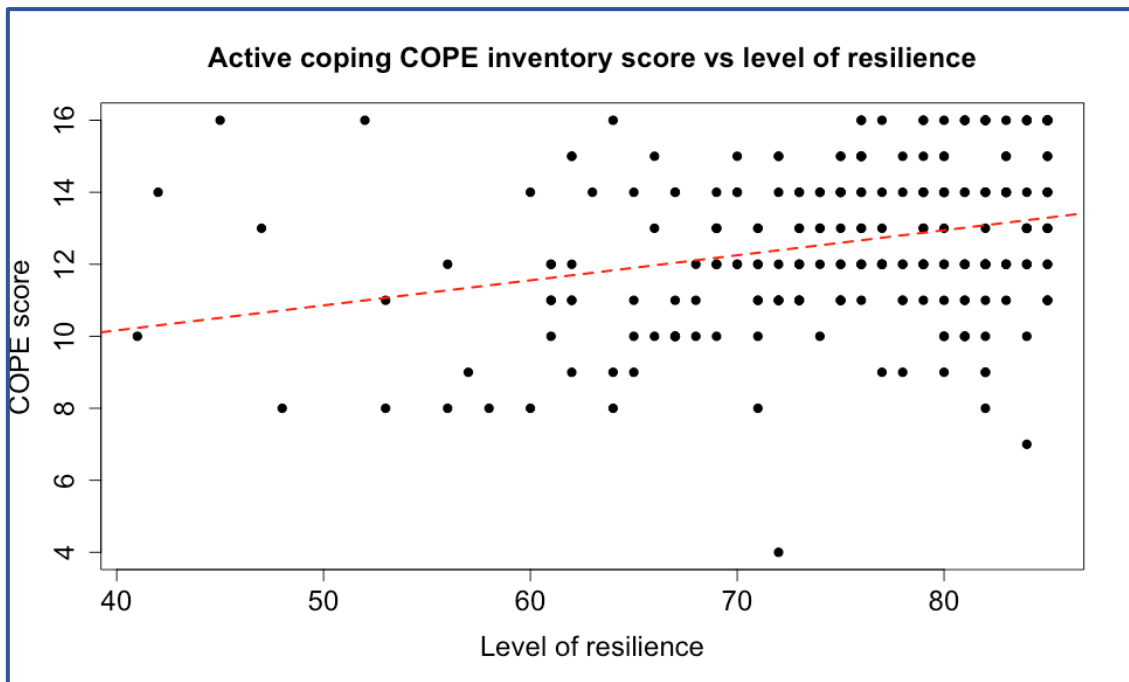
The answers that were summed for this scale are those relating to the following questions:

5-I concentrate my efforts on doing something about it.

25-I take additional action to try to get rid of the problem.

47-I take direct action to get around the problem.

58-I do what has to be done, one step at a time.



Method	Value	p-value	Reject?	Conclusion
Pearson	0.279	<0.001	Reject	Statistically significant
Spearman	0.291	<0.001	Reject	Statistically significant

Denial

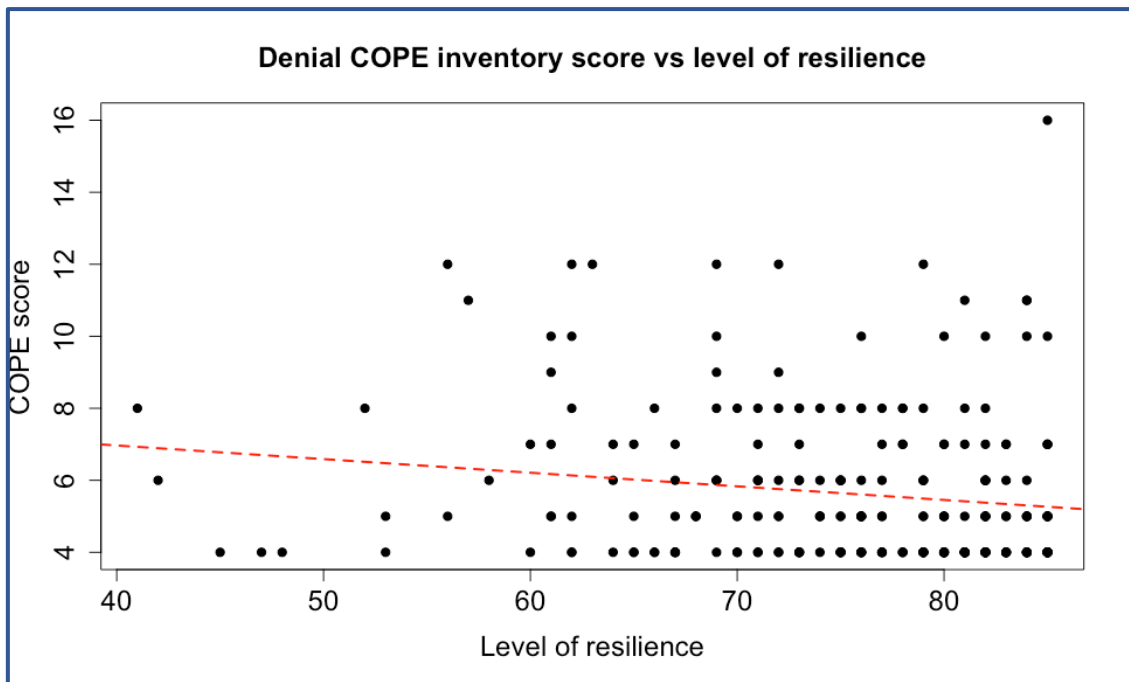
The answers that were summed for this scale are those relating to the following questions:

6-I say to myself “this isn’t real.”

27-I refuse to believe that it has happened.

40-I pretend that it hasn’t really happened.

57-I act as though it hasn’t even happened.



Method	Value	p-value	Reject?	Conclusion
Pearson	-0.155	0.016	Reject	Statistically significant
Spearman	-0.190	0.003	Reject	Statistically significant

Religious coping

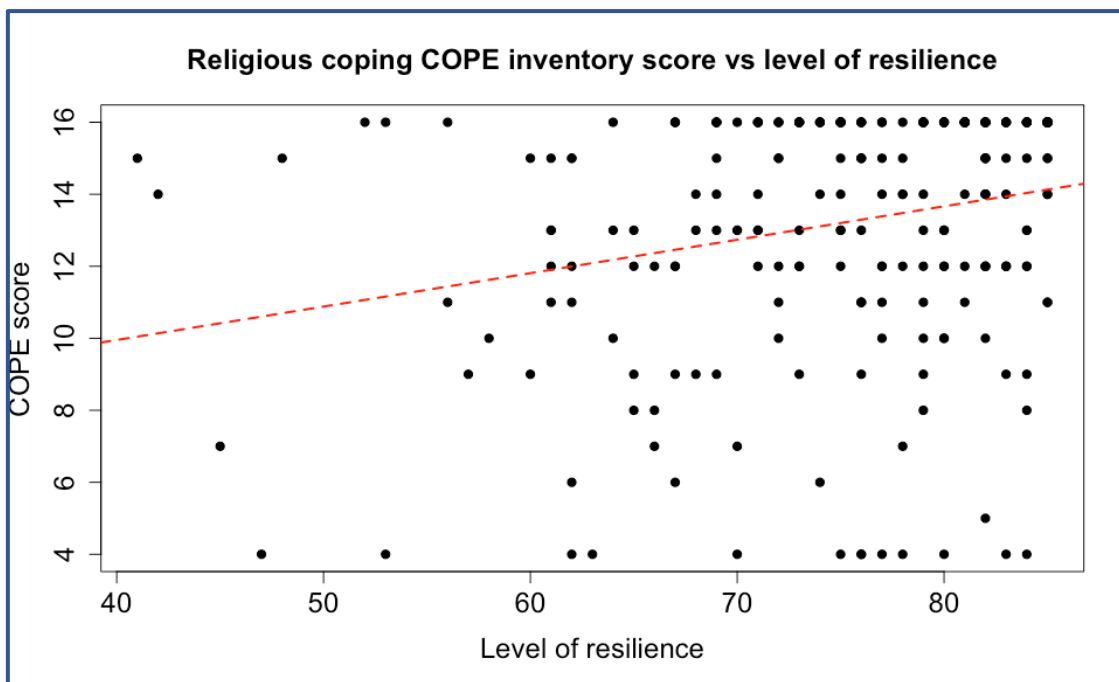
The answers that were summed for this scale are those relating to the following questions:

7-I put my trust in God.

18-I seek God's help.

48-I try to find comfort in my religion.

60-I pray more than usual.



Method	Value	p-value	Reject?	Conclusion
Pearson	0.238	<0.001	Reject	Statistically significant
Spearman	0.254	<0.001	Reject	Statistically significant

Humour

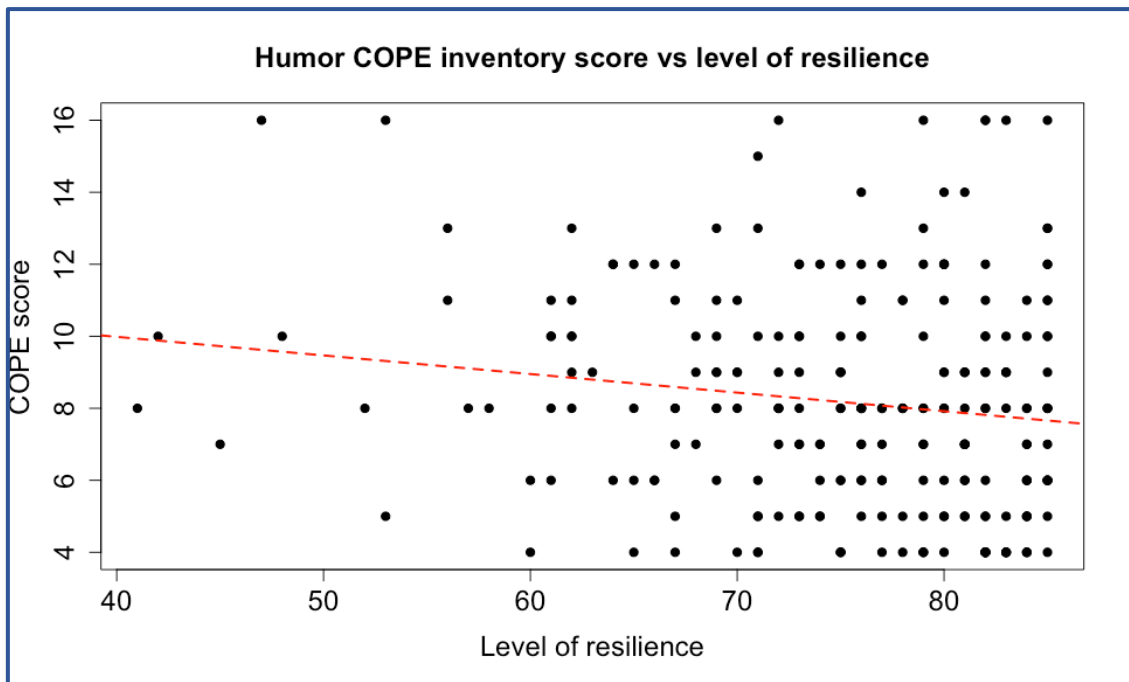
The answers that were summed for this scale are those relating to the following questions:

8-I laugh about the situation.

20-I make jokes about it.

36-I kid around about it.

50-I make fun of the situation.



Method	Value	p-value	Reject?	Conclusion
Pearson	-0.149	0.021	Reject	Statistically significant
Spearman	-0.141	0.028	Reject	Statistically significant

Behavioural disengagement

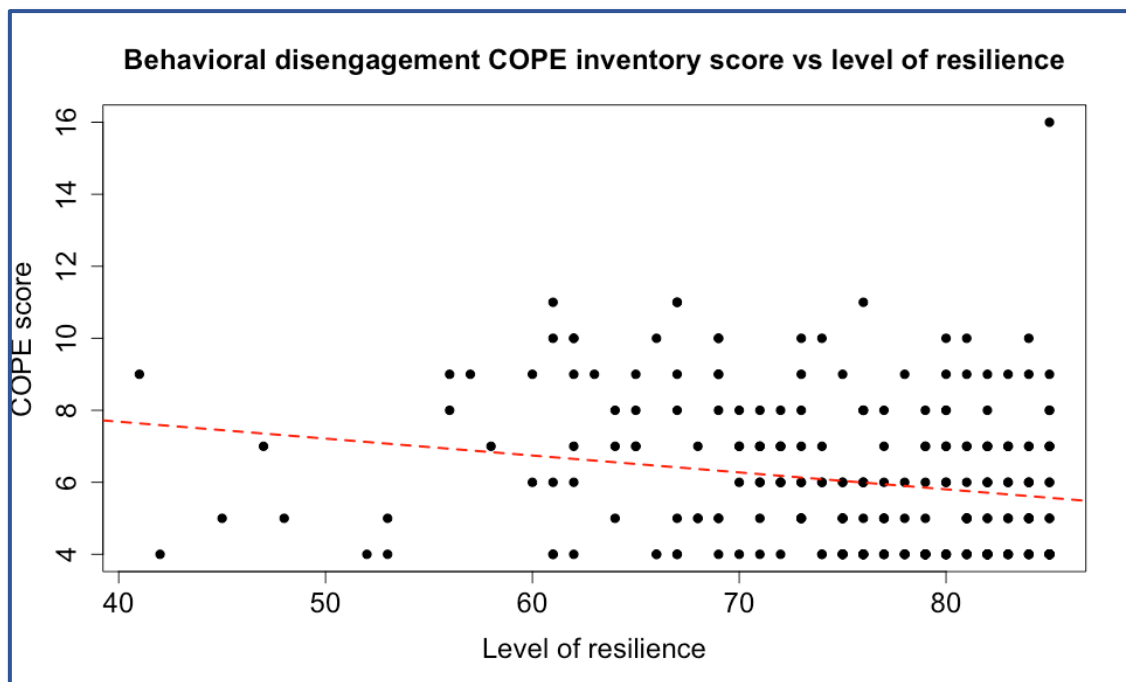
The answers that were summed for this scale are those relating to the following questions:

9-I admit to myself that I can't deal with it, and quit trying.

24-I just give up trying to reach my goal.

37-I give up the attempt to get what I want.

51-I reduce the amount of effort I'm putting into solving the problem.



Method	Value	p-value	Reject?	Conclusion
Pearson	-0.201	0.002	Reject	Statistically significant
Spearman	-0.227	<0.001	Reject	Statistically significant

Restraint coping

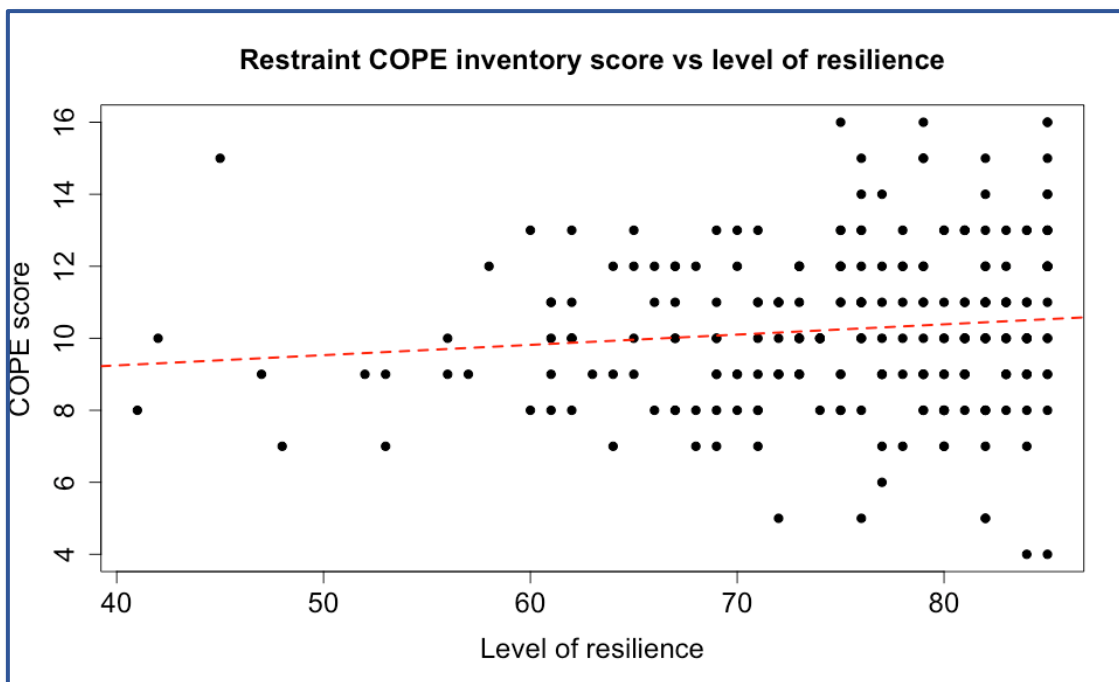
The answers that were summed for this scale are those relating to the following questions:

10-I restrain myself from doing anything too quickly.

22-I hold off doing anything about it until the situation permits.

41-I make sure not to make matters worse by acting too soon.

49-I force myself to wait for the right time to do something.



Method	Value	p-value	Reject?	Conclusion
Pearson	0.113	0.08	Do not reject	Not statistically significant
Spearman	0.130	0.044	Reject	Statistically significant

Use of emotional social support

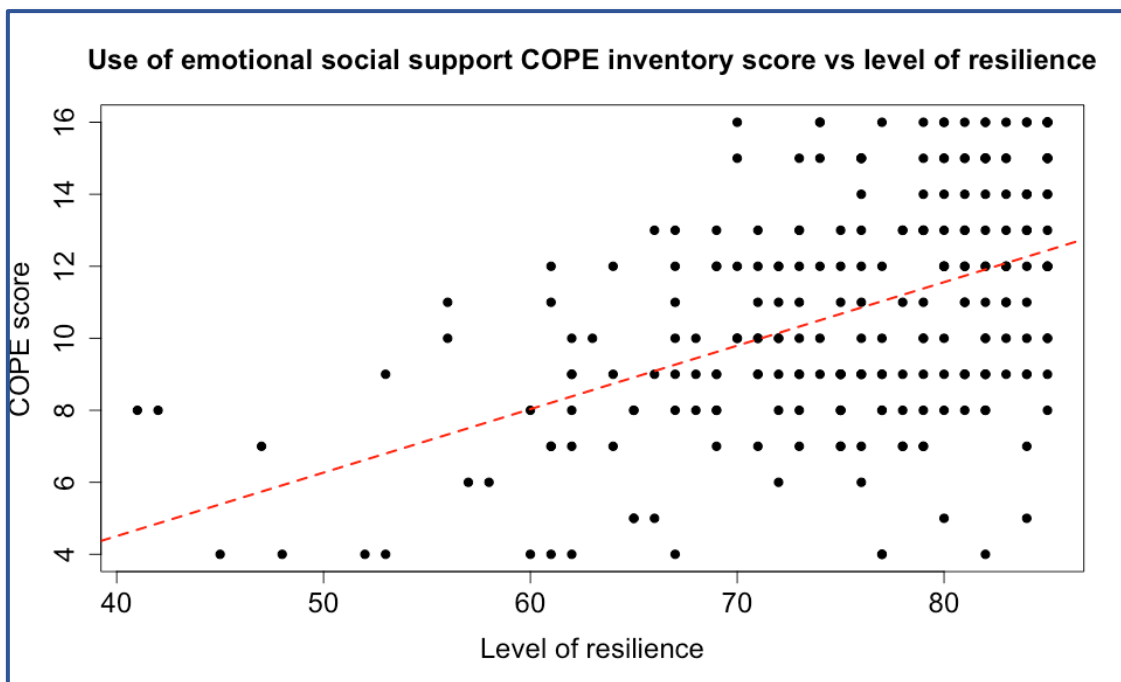
The answers that were summed for this scale are those relating to the following questions:

11-I discuss my feelings with someone.

23-I try to get emotional support from friends or relatives.

34-I get sympathy and understanding from someone.

52-I talk to someone about how I feel.



Method	Value	p-value	Reject?	Conclusion
Pearson	0.483	<0.001	Reject	Statistically significant
Spearman	0.461	<0.001	Reject	Statistically significant

Substance use

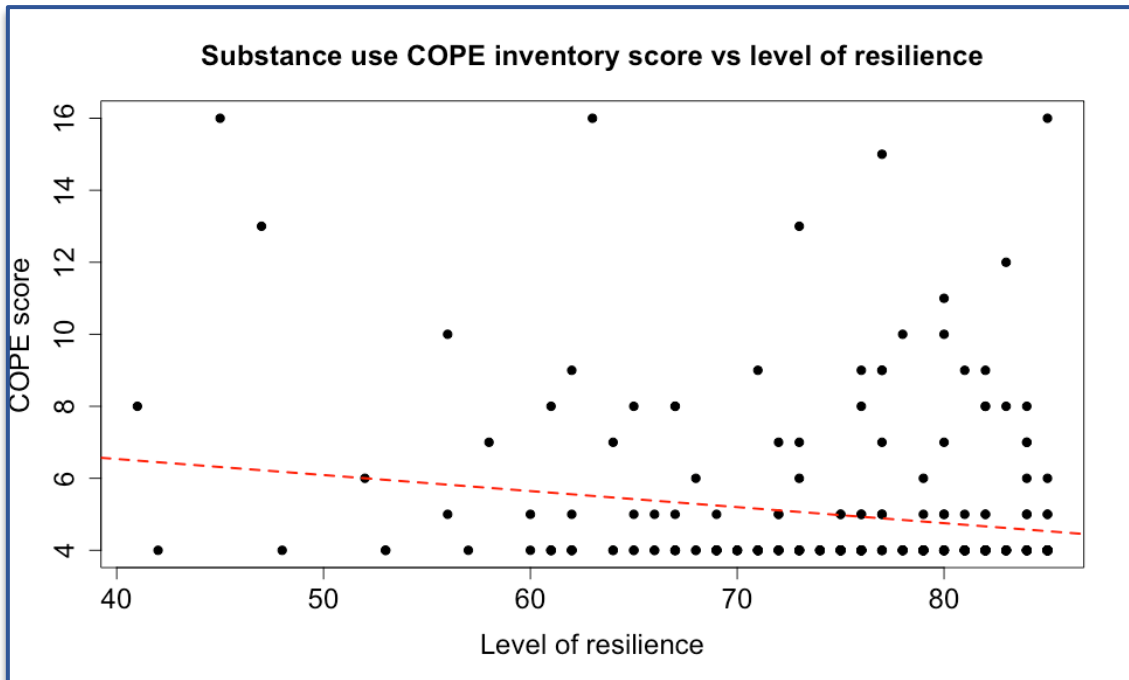
The answers that were summed for this scale are those relating to the following questions:

12-I use alcohol or drugs to make myself feel better.

26-I try to lose myself for a while by drinking alcohol or taking drugs.

35-I drink alcohol or take drugs, in order to think about it less.

53-I use alcohol or drugs to help me get through it.



Method	Value	p-value	Reject?	Conclusion
Pearson	-0.177	0.006	Reject	Statistically significant
Spearman	-0.095	0.143	Do not reject	Not statistically significant

Acceptance

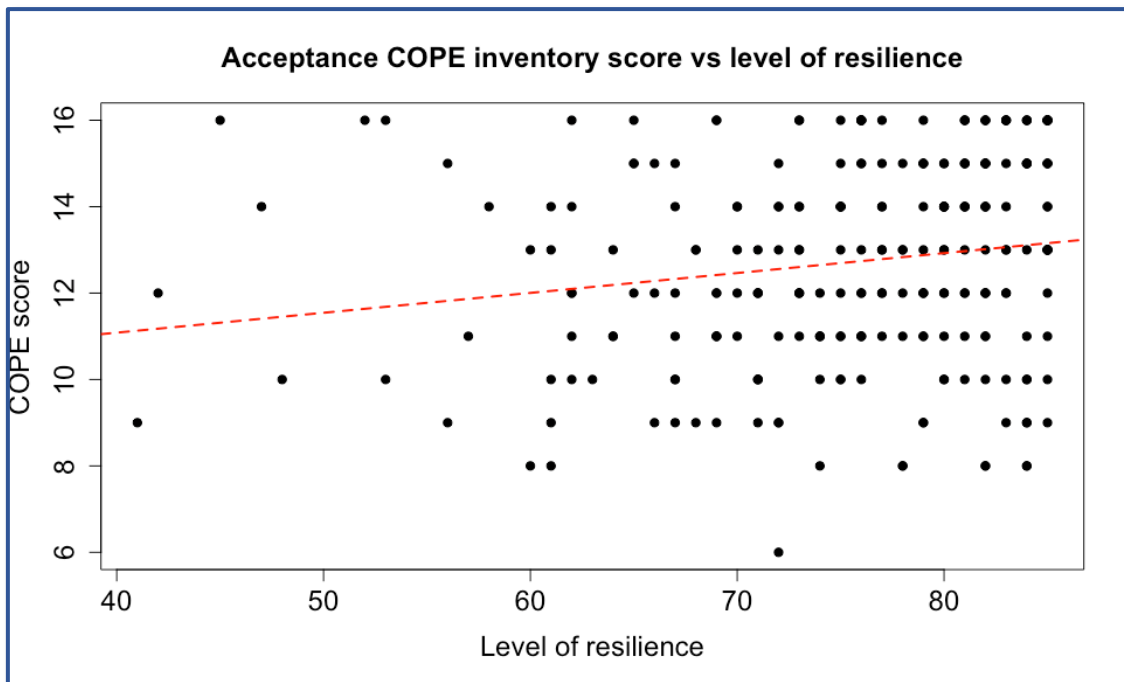
The answers that were summed for this scale are those relating to the following questions:

13-I get used to the idea that it happened.

21-I accept that this has happened and that it can't be changed.

44-I accept the reality of the fact that it happened.

54-I learn to live with it.



Method	Value	p-value	Reject?	Conclusion
Pearson	0.171	0.008	Reject	Statistically significant
Spearman	0.212	0.001	Reject	Statistically significant

Suppression of competing activities

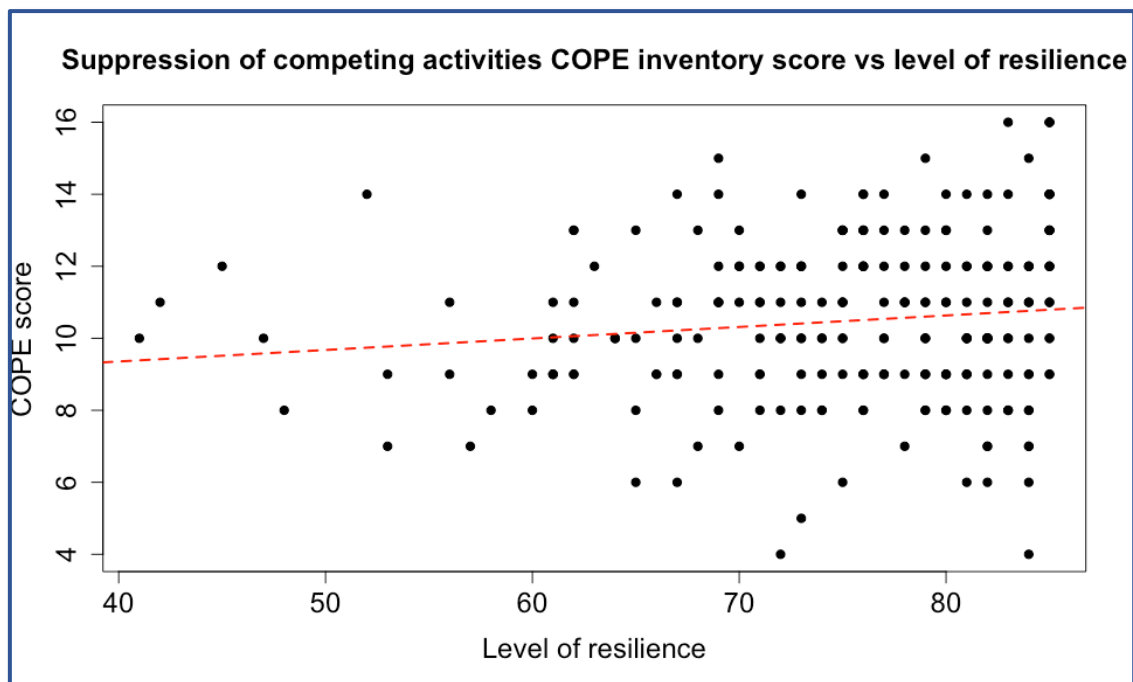
The answers that were summed for this scale are those relating to the following questions:

15-I keep myself from getting distracted by other thoughts or activities.

33-I focus on dealing with this problem, and if necessary, let other things slide a little.

42-I try hard to prevent other things from interfering with my efforts at dealing with this.

55-I put aside other activities in order to concentrate on this.



Method	Value	p-value	Reject?	Conclusion
Pearson	0.126	0.052	Do not reject	Not statistically significant
Spearman	0.128	0.048	Reject	Statistically significant

Planning

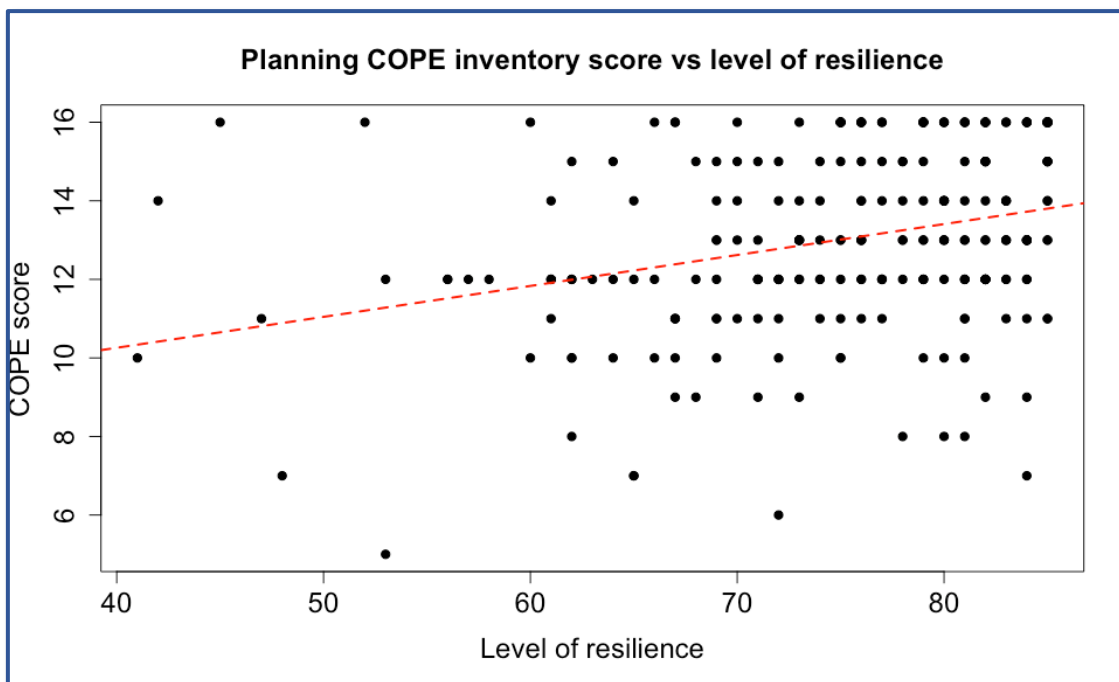
The answers that were summed for this scale are those relating to the following questions:

19-I make a plan of action.

32-I try to come up with a strategy about what to do.

39-I think about how I might best handle the problem.

56-I think hard about what steps to take.

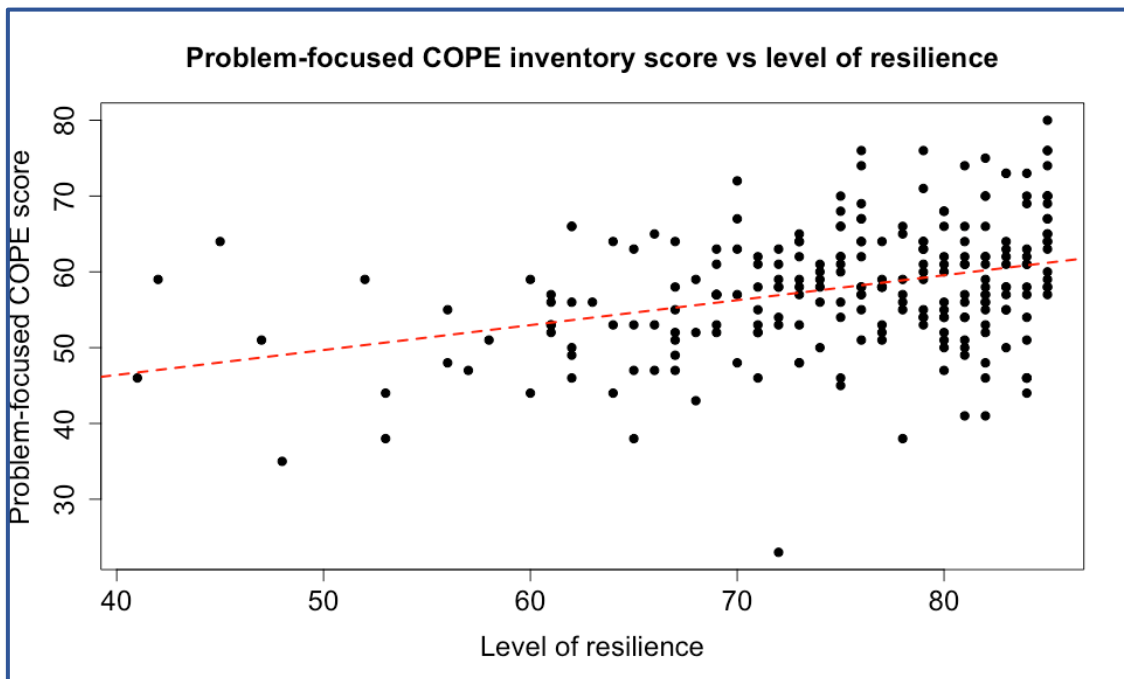


Method	Value	p-value	Reject?	Conclusion
Pearson	0.299	<0.001	Reject	Statistically significant
Spearman	0.313	<0.001	Reject	Statistically significant

Problem-focused COPE inventory items

We now determine the correlation between the sum of the problem-focused COPE inventory item scores and the resilience measures using various correlation coefficients. The COPE inventory items included in this analysis are:

- Use of instrumental social support
- Active coping
- Restraint coping
- Suppression of competing activities
- Planning

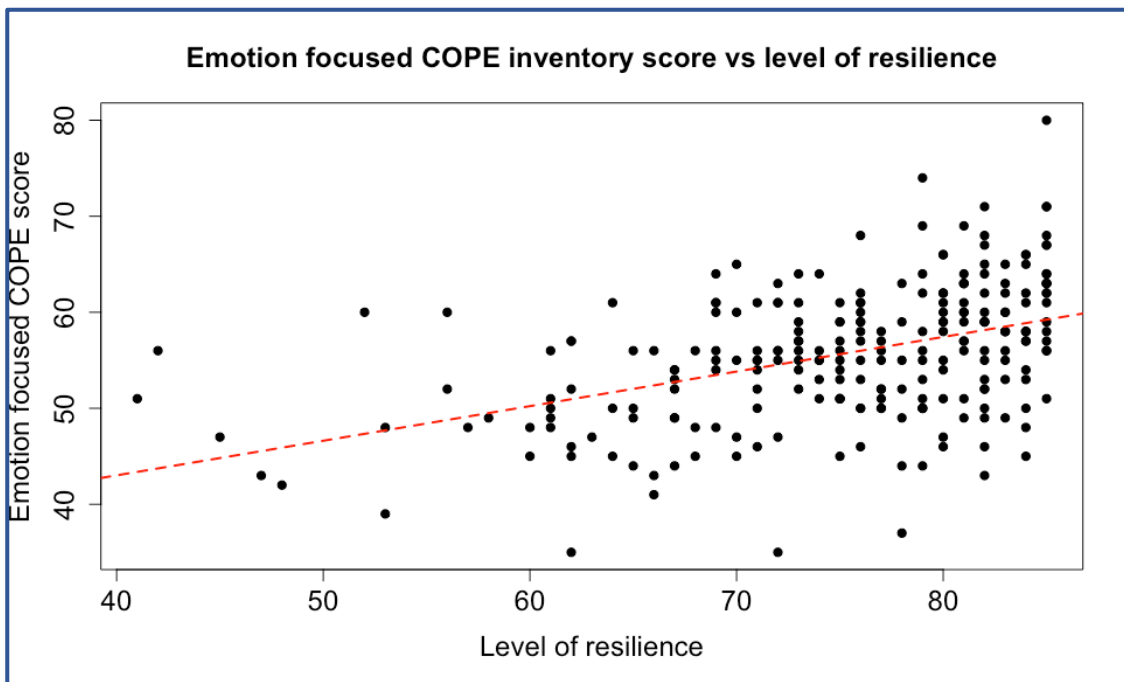


Method	Value	p-value	Reject?	Conclusion
Pearson	0.346	<0.001	Reject	Statistically significant
Kendall	0.235	<0.001	Reject	Statistically significant
Spearman	0.327	<0.001	Reject	Statistically significant

Emotion focused COPE inventory items

We now determine the correlation between the sum of the emotion focused COPE inventory item scores and the resilience measures using various correlation coefficients. The COPE inventory items included in this analysis are:

- Positive reinterpretation and growth
- Denial
- Religious coping
- Use of emotional social support
- Acceptance



Method	Value	p-value	Reject?	Conclusion
Pearson	0.445	<0.001	Reject	Statistically significant
Kendall	0.324	<0.001	Reject	Statistically significant
Spearman	0.456	<0.001	Reject	Statistically significant



APPENDIX L: REPORT 2 (RESPONSE ANALYSIS FOR SEMI-URBAN SCHOOLS)

T20092 Report 2: Response analysis (Semi-urban)

Introduction

Since the rural sample only had 4 participants, this investigation was not performed as it would not be valuable on such a small sample.



APPENDIX M: TABLE OF ANALYSIS (DEDUCTIVE AND INDUCTIVE)

Deductive phase: Theoretical integration of definitions and the associated *a-priori* categories and sub-categories

Problem-focused coping		
Main category	Theoretical definition integration (Carver, 2013; Carver et al., 1989)	Sub-categories based on objective indicators
<p>Category 1: Active coping</p>	<p>A problem-focused approach referring to any <i>steps taken</i> in an attempt to alleviate, remove or lessen the effects of stressors.</p> <p>Indications of attempts to do something to alleviate the challenges, concentrating one's efforts on doing something and take additional/direct action, including:</p> <ul style="list-style-type: none"> · "I take additional action" · "I concentrate my efforts on doing" · "I do what has to be done" · "I take direct action" · "I learn to live with it". 	<p>1.1. Keeping busy and doing tasks Being pragmatic and doing what it takes in order to cope (Bonanno & Mancini, 2008). The efforts of individuals are increased and they tend to take direct action in order to cope (Carver et al., 1989; Naidu, 2021; Wuest & Subramaniam, 2021).</p> <p>1.2. Adapting to changed circumstances Coping is associated with adaptive and flexible behaviour (Brooks et al., 2022; Robles-Bello et al., 2020; Wuest & Subramaniam, 2021), adaptive reactions of individuals (Masten, 2014; Masten & Cicchetti, 2016) and trying different ways to cope (Bonanno, 2020).</p> <p>1.3. Acquiring new skills A strategy that tends to dominate when individuals view that something constructive is possible to be done during coping (Carver et al., 1989). In coping with challenges related to the COVID-19 pandemic, individuals acquired skills as part of self-enhancement (Brooks et al., 2022).</p>
<p>Category 2: Planning</p>	<p>A problem-focused approach to thinking about how to cope with and manage stressors and how best to handle challenges with <i>action strategies</i>.</p> <p>Indications of attempts to try to come up with plans via action strategies to accomplish a desired outcome, such as:</p> <ul style="list-style-type: none"> · "I try to come up with a strategy" · "I make a plan" · "I think about the next step" · "I think about how I might best handle the problem" ... "one step at a time" · "I focus on dealing with this problem". 	<p>2.1. Taking things one step at a time Coping is done day-by day and planning accordingly (Bonanno et al., 2015; Mens et al., 2021; PeConga et al., 2020) to carry out realistic plans (Riopel, 2020).</p> <p>2.2. Maintaining a routine Routine in coping includes the efficient allocation of time to cope (Brooks et al., 2022). By keeping a routine, coping is supported (Brooks et al., 2022).</p> <p>2.3. Staying in control of what is possible Exercising control over stressors adds to coping and thus provides a sense of control (Bandura, 1989b; Benight & Cieslak, 2011; Thompson, 2021).</p>

<p>Category 3: Suppression of competing activities</p>	<p>A problem-focused approach to suppressing of competing activities relates to “putting other projects aside, trying to avoid becoming distracted by other events, even letting other things slide, if necessary, in order to deal with the stressor” (Carver et al., 1989, p. 269).</p> <p>As part of this strategy, mental (conscious) disengagement “occurs via a wide variety of activities that serve to distract the person from thinking about the behavioral dimension or goal with which the stressor is interfering” by “using alternative activities to take one’s mind off a problem” (Carver et al., 1989, p. 269), which is useful during coping as it assists in minimising distress.</p> <p>Indications of the suppression of competing activities in order to cope include:</p> <ul style="list-style-type: none"> · “I turn to work or other substitute activities” · “I reduce the amount of effort I’m putting into solving the problem” · “I keep myself from getting distracted by other thoughts or activities” · “I focus on dealing with this problem, and if necessary, let other things slide a little” · “I try hard to prevent other things from interfering with my efforts at dealing with this” · “I put aside other activities in order to concentrate on this” · “... to think about it less”. 	<p>3.1. Prioritising what is important at the time Individuals may prioritise what is important and urgent and focus their energy thereon during coping so as to avoid obstacles, barriers or potentially competing behaviours that may hamper their coping (Brooks et al., 2022; Lin et al., 2020; Wuest & Subramaniam, 2021).</p> <p>3.2. Conscious disengagement During coping, individuals may distract themselves and avoid, for example information overload, that may hamper current coping (Chen & Bonanno, 2020; Liang et al., 2020; Robles-Bello et al., 2020; Staal et al., 2008).</p>
<p>Category 4: Restraint coping</p>	<p>A problem-focused approach indicates that restraint coping includes “waiting until the appropriate opportunity to act”, holding oneself back”, “not acting prematurely” and is also described as “an active coping strategy in the sense that the person’s behavior is focused on dealing effectively with the stressor, but it is also a passive strategy in the sense that using restraint means not acting” (Carver et al., 1989, p. 269).</p> <p>Indications of restraint coping include the following:</p> <ul style="list-style-type: none"> · “I restrain myself from doing anything too quickly” · “I hold off doing anything about it until the situation permits” · “I make sure not to make matters worse by acting too soon” · “I force myself to wait for the right time to do something” · “I get used to the idea that it happened” · “I accept that this has happened and that it can’t be changed” · “I accept the reality of the fact that it happened”. 	<p>4.1. Accepting the situation for the time being Coping may include tolerating uncertainty (PeConga et al., 2020) and accepting what cannot be changed (Wuest & Subramaniam, 2021).</p> <p>4.2. Remaining calm The attitude of teachers towards change is deemed as a significant resource in response to challenges posed by the pandemic (Sokal et al., 2020).</p>

<p>Category 5: Seeking out instrumental social support</p>	<p>A problem-focused approach whereby individuals seek "advice, assistance or information" (Carver et al., 1989, p. 269).</p> <p>Indications of seeking instrumental social support in coping focus on seeking advice/information as well as relying on relationships for assistance are indicated below:</p> <ul style="list-style-type: none"> · "I try to get advice from someone about what to do" · "I talk to someone to find out more about the situation" · "I talk to someone who could do something concrete about the problem" · "I ask people who have had similar experiences what they did" · "I try to get emotional support from friends or relatives". 	<p>5.1. Seeking advice or information The support from colleagues and management aided in the coping of teachers (Ainsworth & Oldfield, 2019; International Task Force on Teachers for Education, 2020). This support included online social support and advice provided in seeking out professional guidance and making use of teamwork to provide individuals with support in navigating challenges (Bonanno, 2020; Brooks et al., 2022; Robles-Bello et al. 2020; Staal et al., 2008; Wuest & Subramaniam, 2021). Also, the instrumental support with tasks of daily living and the provision of practical information offers opportunities for insight and varying perspectives about similar challenges related to COVID-19 (Wuest & Subramaniam, 2021) that can facilitate coping (Bonanno et al., 2015; Juliana et al., 2021).</p> <p>5.2. Relying on relationships with significant others Coping was supported by teacher affiliation with colleagues and interpersonal connection as well as relying on the support of others (Bonanno, 2020; Bottiani et al., 2019; Howard & Johnson, 2004). Also, social support as well as social and community cohesion act as protective factors against adverse consequences of stressors (Mandavia & Bonanno, 2019).</p>
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Themes as deducted and adapted from Carver (2013) and Carver et al. (1989)

Inductive phase: Codes and subthemes

Theme	Sub-themes	Codes (Labelled ideas and grouped evidence)
6. Nurturing a growth mindset	6.1. Engaging in self-discovery and personal growth	<ul style="list-style-type: none"> · Personal growth · Develop various virtues · Independence · Potential for development · Self-discovery · Coping for the sake of others
	6.2. Drawing on reflective practices	<ul style="list-style-type: none"> · Vulnerability · Renewed perspectives · Introspection
	6.3. Maintaining self-care	<ul style="list-style-type: none"> · Boundary setting · Health habits e.g. diet (nutrition), exercising, supplements · Engaging in hobbies · Developing enriching life skills
	6.4. Nurturing spirituality	<ul style="list-style-type: none"> · Meaning-making · Faith / Religion / Higher power · Family value · Spiritual grounding · Spiritual breakthrough · Value orientation
	6.5. Exercising optimism	<ul style="list-style-type: none"> · Positive reframing · Thinking differently · Hope · Humour



APPENDIX N: DECLARATION BY TRANSCRIBER



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Declaration by transcriber

I, Marnie Potgieter, acting as the transcriber for the studies of **Elisma Williams and Stephan Dippenaar** (Ethics reference numbers EDU181/20 and EDU230/20) declare the following:

- I subscribe to the principles of privacy, meaning that the **confidentiality and anonymity** of human respondents would be protected at all times.
- I undertake not to allow anyone but the researchers access to the transcribed focus group discussion documents.
- I understand that the data collected in the course of the research become the institutional property of the University of Pretoria.
- I undertake to permanently delete all raw data after transcription and provide the researchers with the transcribed focus group discussions related to research.

Singed at Pretoria on 18 October 2021

M Potgieter



APPENDIX O: DECLARATION BY TRANSLATOR



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Declaration by translator

I, MAURIVE FISCHER, acting as the translator for the studies of Elisma Williams and Stephan Dippenaar (Ethics reference numbers EDU181/20 and EDU230/20) declare the following:

- I subscribe to the principles of privacy, meaning that the confidentiality and anonymity of human respondents would be protected at all times.
- I undertake not to allow anyone but the researchers access to the translated focus group discussion documents.
- I understand that the data collected in the course of the research become the institutional property of the University of Pretoria.
- I undertake to permanently delete all raw data after translation and provide the researchers with the translated focus group discussions related to research.

Singed at Soweto West on 2 June 2022

M Fischer



APPENDIX P: TRANSCRIPTIONS AND THEMATIC ANALYSIS

Section		ONLINE PARTICIPATORY FOCUS GROUP 1: 22 September 2021	LABEL
1.	EW	How did you experience the challenges of stress during COVID-19?	
2.	P1.1	Yes, one had no choice but to learn to be adaptable and so on. One had to learn to do stuff portion by portion and to see what is the most important and to ensure that it is done and then one moves on.	<p>1.2. ADAPTATING TO CHANGED CIRCUMSTANCES (Flexibility)</p> <p>1.3. ACQUIRING NEW SKILLS</p> <p>2.1: TAKING THINGS ONE STEP AT A TIME</p> <p>3.1: PRIORITISING WHAT IS IMPORTANT AT THE TIME</p>
3.	R	So, I hear two things. I hear that you are very adaptable people and although many of us think we constantly stick to structure you were thrown into the deep end and you simply had to change. There were constantly changes and you just had to adapt and carry on. And then I hear creative solution. Creative problem solving, because stuff was dumped in your laps and you had to make a plan and you did not know what tomorrow would bring. So, it's that unpredictability with which you coped. It wasn't that you were so structured, you just could not get out of that groove, you were extremely adaptable.	
4.	EW	Uhm.	
5.	R	Do you agree EW? You've read the literature, I did not.	

6.	EW	<p>Yes. And what I also hear is prioritising. And it comes in with, and what I also hear is prioritising. I am jumping a bit ahead, but it comes in with one of the following strategies that is about things that distract your attention from matters that have to be attended to now. So, almost to prioritise, it also became clear to me in what you are saying. I don't know if that is what you meant, P1.1?</p>	
7.	P1.1	<p>Yes, no, definitely, I don't know. I often feel I plan too far ahead and yes. I am not someone who is fond of changes, probably not. Because you were forced to learn new skills, I mean we had to do online teaching and make videos which had to be very interactive, especially with the little ones. They can't really do anything on their own. You can't just tell them, do this page, or read and learn it, one must simply learn to do interactive things and so on. So, you also had to learn new skills. I think it was initially difficult to make that head shift from what you are used to and then just... – so now we must be on Google Schools and do everything online and you cannot physically be in the classroom and help the children. So, I think it was, yes - we learn lots of new things, which was also good, learnt new skills, and yes ...</p>	<p>2. PLANNING (Changes interfere with, / resistance to change) 1.2. ADAPTING TO CHANGED CIRCUMSTANCES (Forced) 1.3. ACQUIRING NEW SKILLS (Learn new technical and virtual) 1.3. ACQUIRING NEW SKILLS (Learn interactive way of teaching, struggle to change) 1.2. ADAPTING TO CHANGED CIRCUMSTANCES (To lack of physical presence / new skills) X2</p>
8.	P1.2	<p>I think the most difficult for me was – as you say P1.1, you like planning, you are not someone who acts irresponsibly and... – I think the difficulty in my case was to prioritise what the most important was. So, you had to sort of educate yourself on how to use Google Classroom. Uhm, how to use videos, how to make meet recordings, where to save them and then to carry on and then, yes. So, I think the most important for me was to prioritise which was first to present the best possible you to a child who does not sit still in your classroom. I mean, he is going to see you on a screen and what he sees on the screen is a reflection of who you actually should be, although it is</p>	<p>2. PLANNING (Interference with) 3.1. PRIORITISING WHAT IS IMPORTANT AT THE TIME (Difficulty in)</p>

		<p>not necessarily who you really are. Uhm, so you cannot make that contact or joke which you would have done in a classroom, because the work has to be handled first - after which there may be time for casual conversation or banter. And I think many children who are not used to someone like me who usually speaks quite loudly uhm, would think that I am shouting at them. Where I have to tone down my voice when speaking over a microphone and then feel that I cannot hear myself. So, I think it was a great challenge to me to physically teach myself how to use it. And then, yes, I think that I have discovered a lot about myself in terms of, you know, as you've said, P1.1, we are adaptable. And, uhm, someone who likes white and black and lives according to it, eh-eh, I actually realised that, okay but, anything that jumps at me I should be able to do. I just need a little longer to take it in or to be able to do it, than, for instance someone who does not function in white or black, someone who is easy going, who is creative. Yes. I think it was the greatest challenge for me and I have now also learnt a lot about myself and, yes.</p>	<p>6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH (Independence, autonomous learning) 1.3. ACQUIRING NEW SKILLS (Technical virtual skills development) 3.1. PRIORITISING WHAT IS IMPORTANT AT THE TIME 6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH (Self-discovery) 5.1. SEEKING ADVICE OR INFORMATION 1.2. ADAPTING TO CHANGED CIRCUMSTANCES (Flexibility)</p>
9.	EW	Okay. Thank you P1.2.	
10.	P1.3	<p>I think to also add to this: In the class environment it was half, as mentioned by P1.1 and P1.2, similar to a big adjustment on its own. To me it was also almost like meeting each other on the veranda and saying, my class is struggling with..., simple example, my grade two's – my children are still struggling with change (monetary term). Listen, could we quickly fit in another week for revision thereof? And especially in that hard lockdown period it was, nothing happened naturally. Everyone is just on the phone all the time. To me a phone or any technology is the most unnatural thing, and I don't enjoy it at all. I will... - the less I am busy with my phone or laptop the better and it was a great adaptation to adjust to that, because one becomes so dependent on it and it is almost the only medium that one uses. So, yes, again, that adaptation, but also half, the battle between communication. About, you can't just find out something quickly, everything now has to be worked out well in advance. And again, also not, because you cannot plan two weeks ahead. Because, you can actually just say, fine, what is happening next week. So, it's that, constantly, half that conflict between, you don't know what you should do, or not. Its, you don't just find out something quickly. Everything felt like this big discussion all the time. You can't just quickly say, listen, how do I teach this or, is this okay. It felt as if you had to go back all the time. It is half, okay, we must now arrange</p>	<p>1.2. ADAPTING TO CHANGED CIRCUMSTANCES 1.3. ACQUIRING NEW SKILLS 2.2 MAINTAINING A ROUTINE (Predictable routine) 3.1. PRIORITISING WHAT IS IMPORTANT AT THE TIME 5.1. SEEKING ADVICE OR INFORMATION</p>

		the meeting because we have to discuss something. So, it was just, yes, to me it was almost as if the inter-personalities or the interpersonal relationships were rather a challenge, apart from just teaching. To prepare the lessons amongst each other and then take it to class. So it was, yes, to me rather difficult to be busy with technology all the time, you must be constantly concerned with technology, because it is almost as if everyone is dependent upon it now.	1.3. ACQUIRING NEW SKILLS
11.	EW	Yes, I think many, as far as I have heard, there are many, uhm, many who now have had to adapt to using technology...where there have also been many adjustments in terms of technology. And I think it links up with P1.3's socio-emotional part of those interpersonal relationships that could have, uhm, a little, I wouldn't say they have suffered a loss, but presented more of a challenge in coping. And we will come to that. Understand? How it is dealt with. And what was done there.	
12.	R	EW, can I interrupt you?	
13.	EW	Yes	
14.	R	I think, I think actually you should just talk.	
15.	EW	Yes	
16.	R	Doesn't matter if it is SD's stuff or EW's stuff.	
17.	EW	Yes	
18.	R	I think, you should just chat. I think. Because, SD, are you recording this session?	
19.	EW	Yes	
20.	R	No, you must switch on your microphone so that I can hear.	
21.	R	No, man you should. I cannot see her. No please go and sit next to EW. Thank you. So, I think, just carry on and chat. What I heard from P1.2 – it is, it is, it was difficult for you to, to be human on a non-human platform, almost, not so? Because you felt you could not be there and the children could not... No, P1.3, don't go and hide.	
22.	EW	You must stay in the circle so that we can hear.	
23.	P1.2	Make the circle smaller P1.3.	
24.	P1.3	My circle still looks very good.	
25.	R	Now I can see all of you.	

26.	EW	Okay.	
27.	R	So, I think let this just be a chat, because I want to hear, P1.3 for instance from you – what have you done. If you now say you felt that the children did not yet understand change (monetary term). Did you call someone, or did you tell your head of department ...or what did you do about it?	
28.	P1.3	<p>One often sort of, you perhaps hear from one person, and then in the end one feels that you will handle it in your own way. You, you sort out that which you have to handle now. And I think it is the way that teachers in general deal with such a matter. And the reason why I think teachers could adapt so easily to all these things, contrary to most other occupations. Your every day is so predictable. Every day a child comes in who is usually so calm, and today they are so restless, so, and you have to adapt to it. In addition, you still need to carry on with your daily planning, or so. So, you often manage to do more. You often do slightly less of some tasks and try to catch up the following day, so I think to a certain extent I almost did my own thing. And then, after a while you just follow up and say, listen, this is approximately where I am because you don't want to say, listen, things are rough. You just compare yourself with someone else, or yes, just get some more inputs - to hear, listen here, how do you feel about this? And then the worst is, the answer is, listen, I felt just the same. I also felt it wasn't quite the case. So, I think, yes, it is rather difficult, because everybody probably felt the same, but no one communicated it to each other. Because everyone just felt, okay, what should I do. Each one has his/her own class. It is my responsibility. You know that all people have their own stuff. You just have to cope with what you have. So, I often think everybody feels the same, but you take what you have and do the best you can.</p>	<p>2.3. STAYING IN CONTROL OF WHAT IS POSSIBLE (Structured control)</p> <p>1.1. KEEPING BUSY AND DOING TASKS</p> <p>1.2. ADAPTING TO CHANGED CIRCUMSTANCES</p> <p>2. PLANNING</p> <p>6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH (Independence)</p> <p>5.1. SEEKING ADVICE OR INFORMATION</p>
29.	EW	Yes	
30.	P1.2	<p>But it worked for you to do your own thing and then follow up later? Or would you rather have preferred that all of you met on a by means of a Zoom meeting and say okay, these are the problems that we've experienced. Are we going to carry on or are we going to wait a while, or are we going ahead because the children understand it? And then, with you personally, have you spent more time with your friends? Because I know you are not like many other people who spend lots of time on the telephone, as you pointed out. But now you had to do it. Did you spend more time with your friends than on your own? And that is your own personal thing. It has nothing to do with academic matters. So, my two questions to you, P1.3, is: 1. For the academic [work], you enjoy doing your own thing, or would you rather have preferred a structured week on a Monday? And then 2. Did you spend more time on the phone with your friends or did you have more of that face-to-face value, as more people would have preferred to have?</p>	<p>6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH (Independence)</p> <p>5.1. SEEKING ADVICE OR INFORMATION</p>

31.	P1.3	Well, after a while, I have, if you yourself constantly have to determine how far you are with your tasks, then we definitely arranged a weekly meeting to say, listen, all of us are feeling slightly lost, all of us reach a point where we say, I am not sure any more. So, then we started to arrange meetings more often. Exactly once a week and we still do it. It just needs to be planned to quickly reflecting on where we are with the following week, does anyone think anything else is necessary? So, academically it has helped. Because one often feels, or I did, okay I do it now, but it is, perhaps something isn't working at all. And then it's just, someone else tells you what works for him or her and it is so easy. So, one must. One cannot be without it. You can't just say, okay, I am going to do my own thing, because then you are inside your little box and you don't broaden your knowledge or your manner of teaching in class. So, I think one must definitely do it. And then, like with the telephone, personally, I think I will be like the term, "I ghosted people". So, I did not, my phone was still not with me. It was very frustrating. I only used technology for academics, I just do not want a telephone.	6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH (Independence) 5.1. SEEKING ADVICE OR INFORMATION 1.1. KEEPING BUSY AND DOING TASKS 2. PLANNING 6.2. DRAWING ON REFLECTIVE PRACTICES 3.2. CONSCIOUS DISENGAGEMENT
32.	R	Okay, again I heard two things like what you said. Firstly, one learned, I again learnt two things in what you said. In the first place, you learnt, all of you learnt, or you had no choice but to think on your feet, and to tap in on your own strength and that within you, that in which we often do not believe. We are often very relaxed to think, no, I must find out about this work before I do it. But you were forced to do it, and later had the sounding board from your peers, to hear how they did it. And then you almost got affirmation from them of yes, the way I did it worked, or, I could also have considered this. But to me it is almost a biarticulate matter. The first thing was, think on your feet, find a solution for this problem and do it. And I think this connects to what P1.3 also said earlier, if he cannot be as he is in the classroom. So, he had to do something with that online platform to still try and have the same impact on the children, although by using other creative ways. So, thrown in at the deep end and had to do something else, is what I hear. P1.4 why so quiet, what are you doing?	
33.	P1.4	No, I am waiting for an opportunity to speak.	
34.	R	Well, you have it now.	
35.	EW	There you are, it's yours.	
36.	P1.4	No, I listen attentively. I don't know, I am a bit hesitant to speak, because I think what I want to say, I don't want to step on anyone's toes. Because, I understand that it has been a rough time for people, but I did not experience it as such. It was not difficult for me. Uhm, and I say it with respect. I really don't want anyone to feel that I look down on you. I do not say this out of haughtiness.	
37.	EW	That it is not what I am thinking	
38.	R	There is no right or wrong	

39.	P1.4	I just don't want any of my colleagues to take offense and throw a pie at me tomorrow at school or something.	
40.	R	They may write on your windscreen with lipstick, That's even worse.	
41.	P1.4	Yes. That is exactly what I am afraid of. Especially from P1.3, but no I am joking.	
42.	P1.3	Let me hear.	
43.	R	Don't send her a WhatsApp she is not going to answer her phone.	
44.	P1.4	<p>Yes. No, I am joking. No, you know, I must say, it wasn't as rough for me as it was for other people. Uhm, I am definitely the opposite from P1.3 when it comes to technology. Technology is, I use my technology every single day. To me it is second nature. Uhm, it is part of who I am and how I do things, so it was very easy for me to begin using it in a work respect, but I think, uhm, if I can be honest about why it wasn't so difficult for me emotionally, is because of technology I was constantly in contact with my friends and loved ones. Uhm, yes, I will say more about that in a moment. But I think the most important to me is that in which I am rooted. Uhm, I understand, I think in the section on faith, I answered quite strongly because I am grounded in my faith. Understand, I live to have a relationship with the Lord. That is priority in my life. That is first to me and it gave me security in a time when there was no security. I also experienced an unbelievable development at the time. I did, I mean I was appointed in a fulltime position at the school. Understand, a lot of things happened during that time which also gave me affirmation of my faith. So, to me it was not emotionally difficult. I definitely think the fact that, as I said, that I was technologically in contact, actually constantly with my friends and family, contributed to it. Some of you will possibly know Discord. Discord is a platform that people use to chat on while they play games together. Understand, I did not work fourteen hours a day, because there were not fourteen hours in a day's work. So, what did I do? I played games. And then I sat and chatted to my friends while we were playing. So, I think I wasn't home as much as most of you, and I say that with respect. I was one of the first who was called back, because I was with grade 7 at that stage. Uhm, so we were totally thrown in the deep end. No one really knew what to do when we arrived there and uhm, I was still privileged to work with Miss (Name). And she was absolutely an action driven person. So, she literally told us, okay, this is what they are telling us, this is what we must do, let's go. And, we made plans and we worked. And I think the biggest adaptation that I had to make was, in English, to do "expectation management" – I had to manage my expectations. I think, whatever you said, I am someone who prefers to plan ahead, and it simply wasn't possible. So, I had to be okay with being at the school all day with working on several things, making videos, or whatever. And then to pitch up at school the next day, just to be told okay, we're not going to do that anymore. And then, you haven't, you could not afford to be disappointed about it, because there were another bunch of things you had to do. So, I think we were absolutely focused on what we were busy doing. What are we going to do to make it work, and in the end for us, I think I and Miss (name) have discussed it at length, what we are going to do to help the children? Understand, our focus was the child. How are we going to help that child? I think especially in a subject like Maths, which one has to understand. It is something that one has to practice. It</p>	<p>6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH 6.4. NURTURING SPIRITUALITY 5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS 6.3. MAINTAINING SELF-CARE (Habits) 1.2. ADAPTING TO CHANGED CIRCUMSTANCES (Flexibility) 1.1 KEEPING BUSY AND DOING TASKS (Work activities) 6.4. NURTURING SPIRITUALITY (Spiritual meaning – how to serve the child / meaningful motivation) 2. PLANNING 4.1. ACCEPTING THE SITUATION FOR THE TIME BEING</p>

		was important for us to constantly think, okay, if we do this, how will the child benefit? And that is what drove us the whole time and in the end. specifically, also at work. Sorry, I have spoken a lot now R. Am I forgiven?	1.2. ADAPTING TO CHANGED CIRCUMSTANCES (Flexibility)
45.	R	Yes, there is nothing to forgive.	
46.	P1.2	Do you know, P1.4, I will join you in that. To me also emotionally, it wasn't so bad for me, you know, I had to get out of the house. And, you know, it was in a way to me, because I am so busy and I like to have things to do, I find it quite pleasant. You know, I could only paint so many rooms. I could only rearrange so many things, I could only fix so many things. Uhm, but, to us, and I (Name) talk about it often. To us, lockdown was one of the best things that could have happened in our family. I mean, we saw how (Name) cut her first teeth. We saw how she rolled over. We saw how she started to crawl. We saw how she stood up against things, took her first step. You know, we saw all those things. So, for me and my family this lockdown was really one of the best things that could have happened. And I mean, we also learnt so much about each other. Now, with our second daughter, with (Name), then I think I, gosh, she could already roll over. I missed it the first time, when she rolled over. Uhm, I will, while at school ten to one, miss her cutting her first tooth, with my luck. And so on. So, if we should have another hard lockdown, I will again be very happy, because I know what I will receive during the time. And I also know how to handle myself during this time with teaching and to manage my family and do things. So, if there are again five weeks' lockdown – I am ready for it. As you say, we can play games, we can video call. I love this place. This place is very cool. We can do it more often.	1.1. KEEPING BUSY AND DOING TASKS (General tasks) 6.4. NURTURING SPIRITUALITY (Family value) 1.2. ADAPTING TO CHANGED CIRCUMSTANCES
47.	P1.4	This is cute, I also like it.	
48.	SD	But yes. So, so P1.4, I can honestly tell you, lockdown was not emotionally so bad for me.	
49.	P1.4	Yes.	
50.	P1.2	Because you know, I could, I could understand everything better, I could also learn more about myself and also, I learnt more patience, actually patience. Uhm, but the academic part was a challenge for me. Because I am this loud person and this guy who cannot stand still in front of a class, but who walks around and who, uhm, cracks jokes and I think the image that I placed on a screen and the image I present face-to-face in class, did not correspond.	6.3. MAINTAINING SELF-CARE 6.2. DRAWING ON REFLECTIVE PRACTICES (Personal growth)
51.	P1.4	Yes, yes, it is completely different. Yes.	
52.	P1.2	To me it was genuine one of my biggest challenges. Because, a video cannot tell me how I really am.	
53.	P1.4	Yes	

54.	R	So, what you say is, emotionally you depended, or you found comfort in that which held value for you. That is really what you are saying. Because, where P1.2 is now in his life...no, where you are going to, thank you. What is now important to P1.2, are those small bodies and that growth as a family and each other, and to really appreciate it. And what is important for P1.4 in his life is his faith. And you held on to that which is valuable to you, you possibly had more time for what is valuable to you in life and it was probably why it wasn't so emotionally difficult for you. In spite of the hard facts that the academic work was difficult. Because it was a process of adaptation, it was totally new. P1.1, did you want to say something? Because we are not giving you a chance.	
55.	P1.1	No, no, no, I'm listening attentively.	
56.	R	But we also want to hear you.	
57.	P1.1	No, I just think it depends which part of lockdown we are talking about. Because the first part when we were not allowed to go out at all, when we were at home, I remember. I remember I was in Ermelo on a farm and we had to send out work-cards (for children) and it was frustrating. You send out a work-card and just hope it is correct. But, shame, you don't know if the children are doing it correctly. You don't even know if some of the children are doing it. You don't know how the parents struggle to explain it to them correctly.	
58.	R	Struggled a lot.	
59.	P1.1	Understand, I think it was difficult. Because when I was on the farm, there were two children and they also sent work to school. I had to help the children and I know it was a struggle because the children didn't want to work and it was also (unclear). However, it was older grades, but later on one succeeds. But when I saw what our school did in comparison to what their farm schools did, I thought, I felt very sorry for those parents because we are very structured. We gave them some work. You get this and this work card. That is how it is done. They were a bit disorganised and it was rather a struggle. But when we came back, the children could not come back yet. But we were there, it was fine, because it was, you went to work. You are there for a few hours. You work everything out for the week. Everyone sat together to do their tasks. Yes, it was difficult because you had to make videos and all kinds of things. But our grade sat together every day, outside in the sun and conversed and spoke about what we had to do, what was important. And there everyone started to understand, like P1.3 and I, who now work together in the same grade, I saw more of how she did the planning of the English. And all of us could contribute to it and where they could help me with maths, what they could contribute and so on – so it was actually very pleasant, because there were no extramural activities. It was just school. In your extra time you now had to go out of your way with extra videos and online things but there was time to do it and to play around and actually try and work out cool things and so on. And I feel when the children came back, yes, then things went crazy, because you noticed that some of the parents had really gone out of their way to help and they are aware of what was happening. Other children had simply done nothing during the entire period and they were almost a year behind. So, I think it was the difficult part, because of the lockdown and everything – it was hard and it was an adjustment when the children came back. To go from hey, these children are already going to grade 3 and other children cannot even	<p>2.3. STAYING IN CONTROL OF WHAT IS POSSIBLE (Structured control)</p> <p>5.1. SEEKING ADVICE OR INFORMATION</p> <p>2. PLANNING</p> <p>5.1. SEEKING ADVICE OR INFORMATION</p> <p>1.1. KEEPING BUSY AND DOING TASKS (Work activities)</p> <p>1.2. ADAPTING TO CHANGED CIRCUMSTANCES</p> <p>6.3. MAINTAINING SELF-CARE</p>

		write their own names. That was a bit rough. Then you had to do the same work, get everyone on the same page and some of the children had to catch up. But at the same time, you had to keep the children who know what is going on and keep them entertained. And you have to keep their attention, otherwise they will just sit and do nothing, understand so they sit and waste their time. To me that was difficult. And when the sport started again, <i>joh</i> . I think one got so used to sitting at home and doing your hobbies. Oh, and I can now do this, and do this, and do this. And I can go to so much trouble with lessons and videos and now that extramural activities and other things are added, one doesn't have time for those things. And, yes. I think things then started to become difficult. When everything had to be "mushed" together again and no one really knew what was going on, it was rough.	3.1. PRIORITISING WHAT IS IMPORTANT AT THE TIME
60.	P1.4	Listen, what you are saying is funny.	
61.	P1.2	Literally, it is as you say P1.1, the tempo, from when you walked into the school, was like that. And when the children came it was like that, and we carried on. And when extramural started, everything sky-rocketed and, uhm, I was so scared that, because I was involved in so many things and everything had to be done because, uhm, the children must enjoy it. And then, on the other hand, one thinks about the academic work, that still ...those children, as you say, who have done nothing – they had to catch up. We see this in the sport and we see it in class. Especially in sport, children who, a year ago, played cricket, now don't know how to play. And they are younger than 10. Academic work; children who have done nothing and they come back, you almost have to coach them from start how to do it. So, you don't teach that child, you coach him now to be able to do these things. And then later, you as teacher burn out and you don't have those creative thoughts anymore. You don't want to do it anymore. You just want to get through this day, put up your feet, drink your wine and literally let go, but you can't. Because tomorrow is another day. And tomorrow will be even worse with its own challenges.	1.2. ADAPTING TO CHANGED CIRCUMSTANCES 1.1. KEEPING BUSY AND DOING TASKS 3.2. CONSCIOUS DISENGAGEMENT
62.	EW	Can I ask something, in terms of, you now say, you know, the previous time's coping, I hear there is, I hear so much resilience in terms of emotions and people on whom we depend. And we learnt about technology and to me it is, this time is to me very insightful. And I think, SD, as with our study, we really looked forward to hearing from you. Uhm, but do you think that for instance, what you learnt last year and had to, had to cope with, and those skills that you – the growth process that you went through in the resilience – do you think it has been carried over to where we are now? Because look, now there are also, as you say, many challenges, also COVID-related and actually as result of the backlogs that took place. However, that which was determined last year in terms of how to prioritise, how to adapt, how to think on my feet, how to be creative. Do you think some of it has been carried over to where we are now?	
63.	P1.4	Yes, for me definitely, yes. Absolutely yes.	
64.	P1.2	Yes, I just think you, you handled last year as a guinea pig and this year you just carried on with what you had done. So, to me it felt like it has become second nature.	1.1. KEEPING BUSY AND DOING TASKS
65.	EW	Okay	

66.	P1.2	That whatever problem comes your way, we sort it out and we carry on and move forward.	1.1. KEEPING BUSY AND DOING TASKS 3.1. PRIORITISING WHAT IS IMPORTANT AT THE TIME
67.	P1.4	Yes	
68.	P1.2	I don't think; there's no time to stand still. Because you have to show progress.	1.1. KEEPING BUSY AND DOING TASKS
69.	P1.4	Yes	
70.	P1.2	You can't worry about – and now it sounds very bad – you can't worry about that hind ox that dawdles on behind. You have him in the back of your mind. Like I have him in the back of my mind. But for now, as you said, P1.1. You have to do something for those children who in fact did some work, to still teach and keep them occupied. So, I think it literally spilled over and became second nature.	1.1. KEEPING BUSY AND DOING TASKS (Work activities)
71.	P1.4	Yes	
72.	P1.4	I think what P1.3 mentioned earlier about what ... (some audio missing)	
73.	EW	We are losing you P1.4, perhaps you should repeat it. There you are, please tell us again. We missed you.	
74.	P1.4	Sorry, I was busy saying – P1.3 earlier spoke about we were forced to start talking to each other in a new way. We had to start sitting together and talk about how we do things	5.2. RELYING ON RELATIONSHIPS TO SEEK ASSISTANCE
75.	EW	Oh, yes?	
76.	P1.2	P1.3, how do you do it?	
77.	P1.3	P1.3 laughs. I am going to wait so P1.4 can tell me how I did it.	
78.	EW	While we are waiting, I just want to ask something else – sorry R you must say if I should...	
79.	R	No, I am just wondering about you and SD. Where's the wine? Didn't I say that you have to see that each of us at least has a glass of wine in this	
80.	EW	I told him. But no. The man ...	
81.	R	Really?	
82.	EW	No really, there were cocktails, wine, options and everything, but no...	

83.	R	So where is it? I mean...!	
84.	EW	EW laughs	
85.	P1.2	I have wine!	
86.	R	SD could have put everything here for us. This room that you created is lifeless. There aren't even flowers.	
87.	EW	Virtual wine, yes.	
88.	R	Sorry, EW, I interrupted you.	
89.	EW	That it is why I asked what we brought over from then on until now. But what you mentioned earlier, P1.3, about, you just carry on and you're, you know, there's almost a burn out. Uhm, I don't know, if there is a general feeling of people around it, or what is it. And, uhm, are there other ways to use now to adjust it? Because, to look at something like this and we'd like to hear from you. But one should look at yourself in terms of handling it. But if you could expand on it. I would like to hear more about it if we have time, I don't know. P1.4, perhaps you should tell us what you wanted to say first, then we can come back to this...	
90.	P1.4	Sorry.	
91.	R	Excuse me, P1.4, I would like to quickly join up with EW. I think what it comes down to is that it was difficult. And P1.2 said, you, sometimes just want to, you can't wait just to lift your feet and relax. But you made it, and I know, the teachers were unbelievably tired at the end of last year. More so than I've ever seen them. So, it was a very tough year. But you made it. And I think that is what EW is asking, why did you make it? But, now P1.4 can go back to what he wanted – he has now, it seems to me, jumped out for a while.	
92.	P1.4	The thing just decided to restart. It thought it was a good time. Uhm, sorry I was just busy to, yes, shortly, the communication that we were forced to acquire last year has helped me a lot this year. I just suddenly got heaps and heaps of more responsibilities this year and it actually placed me where I don't micro-manage as I previously did. Because I am someone who likes to know exactly what I am responsible for, I want to know exactly how it works and I want to know who did what about it and there just isn't time for it anymore, it has forced me to improve my communication with people.	1.3. ACQUIRING NEW SKILLS 3.2. CONSCIOUS DISENGAGEMENT 6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH (Improve communication)
93.	EW	To delegate?	
94.	P1.4	Excuse me.	
95.	EW	Sorry, no, I interrupt you. I just wonder, to delegate. And not that control...	

96.	P1.4	Yes, yes, yes. Basically, to when I delegate, also communicate better about what needs to happen.	6.1 ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH (Personal growth) 1.3. ACQUIRING NEW SKILLS (Improve communication / learn skill)
97.	EW	Okay.	
98.	P1.4	Uhm, because it's easy to say to someone, listen here, do this for me quickly. And then when you have, you micro-manage it, you don't have to communicate constantly what you are doing, you can just keep on and on. However, I have now been forced to very shortly tell someone, listen, please do this quickly. That is what must happen, and then trust them to make it happen. Uhm, understand and there is not always time to handle everything yourself. It is definitely something that I learnt from last year. To know what is now the most important, what must I give attention to and what should I rather leave to someone else to do. Uhm, it meant a lot to me this year.	1.3. ACQUIRING NEW SKILLS 3.1. PRIORITISING WHAT IS IMPORTANT AT THE TIME
99.	EW	Okay	
100.	R	On the other hand, it teaches you to do better time management, not so? All of us are inclined to waste time on unnecessary things.	
101.	P1.4	Yes.	
102.	R	Uhm, you do actually have time management on your side.	
103.	P1.4	Yes. I think, sorry, now that you are saying that, I also think to come back to something that I mentioned earlier on about managing my expectations better. Because if I ask someone to do something for me, I cannot expect that it is going to look exactly as I did it, so I have to be satisfied with it. This year has been a great one for me. (Name) is my assistant. When I ask him to present a class for me, then he does it differently from how I do it. The point is however still made, and I cannot be dissatisfied because his methods differ from mine; he did what I asked him to. And understand, if I can explain it practically, it is straightforward, but there are other aspects surrounding it.	1.2. ADAPTING TO CHANGED CIRCUMSTANCES (Flexibility)
104.	EW	Uhm.	
105.	R	It connects with what P1.2 also said, around those expectations which one has to manage. The expectations around the children and to know what to let go and what to pursue. You are actually saying a lot of things. Many important things; P1.3, I want to jump back to what you said earlier, you're not keen on your phone or technology. Well look, I hate technology. This platform that we got hold of now is about the only one that talks to me and I resisted before I went on it, but then I did and I actually liked it. What did you do to get over that you had to use your phone last year?	

106.	P1.3	<p>So, yes, this matter of technology – it is not that I have a block against technology or struggle with technology. I think like with all these things on google, I adapted very easily. One learns to use it and you are able to do it. One just has to be open about it. But it actually is, I am more of a face-to-face person, than to send you a message: how are you? Then, once a month visit means much more to me than if I send you a message twice a week and say, I hope you are well, how are you? It feels so impersonal. I don't do it. But then I feel when I meet up with people, I am intentional. I will get to that. So, what was pleasant with COVID, I almost feel, teachers in general, are like that. That is why you work with children, or why you work with people. Staff members look each other up, you chat, you joke and you tell and make up stories. So, to me it was rather bad, you come back to school and it is your grade. It is all you see for months. If you don't see someone for a long time and this is possibly the most that I've seen P1.4 this whole year. It is rough out there. I think it was my biggest problem. I could not wait to go back to school, because then I can do what I want to. I want to be with children, I want to stand before them and talk to them. I did not study to give of technology. I did it because it is expected of one at the moment. But it is just, I enjoy personal contact. So, what was pleasant, one now had more time on your hands, because you can't get to the children now or necessarily the school; before the extramural were back you had more time on your hands, so then one walks the extra mile and you get to the people with whom you can have that interaction. And I think it was to me like, I need people, I am energised when I spend time with people. It doesn't tire me it makes me live. So that is then where I start finding it difficult. So, when I talk about technology it is not so bad that I am afraid of technology or cannot do it. I, all of us have now adjusted. You do your PowerPoint, perhaps you sit here and there...P1.1 is very good with the sounds and the animation on the PowerPoint. But you learn, you begin to adapt. It is now more... it was a challenge to me not to get that energy from people, because I am totally excluded from people's energy. However, what was pleasant, I know I need it. So, I did it. I followed up with friends. I made plans to spend time with friends and spend time with family. So, yes. But I definitely had to adjust to using technology. It simply is one of those things. You just have to do it. There is no other option. You can't ask a parent, listen, please come and see me quickly, I want to chat, you send a WhatsApp, you make the call, because that is what's expected of you. You adjust to that. It just isn't natural to me. I don't enjoy it. But you do what you have to do.</p>	<p>1.2. ADAPTING TO CHANGED CIRCUMSTANCES 1.3. ACQUIRING NEW SKILLS (Technology) 1.1. KEEPING BUSY AND DOING TASKS 5.1. SEEKING ADVICE OR INFORMATION (Feed of progress of others) 5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS 3.2. CONSCIOUS DISENGAGEMENT 2. PLANNING (Predictable routine)</p>
107.	P1.2	<p>Do you know, P1.3, concerning that, P1.5 and I discussed it the other day. You know, we in the senior phase who roamed as we as staff are roaming teachers, we go past each other so quickly. Because you must get to that next class quickly. The periods are rather short, you have to get to the class. There are things that need to be done. And it is true, like you who work from people's energy, just to walk past that person and say, "Hi, how are you, we'll quickly chat during break" – is much better than to, as you say, send a message. But we spoke about it the other day – it isn't pleasant anymore to walk past each other and say; "Hi, how are you, it's fine, sorry, I have to go". Uhm, and you don't hear any more about what is happening in people's personal lives, when you actually do get together, you talk about how rough things are at school.</p>	<p>1.1. KEEPING BUSY AND DOING TASKS 5.1. SEEKING ADVICE OR INFORMATION (Feed of progress of others)</p>
108.	P1.3	Yes, precisely, yes.	

109.	P1.2	You can't anymore. This child is driving you crazy. This class is driving you crazy. So, I think that personal aspect of, how are you, genuine – is out of the picture.	
110.	P1.3	Yes.	
111.	P1.2	Hi. So, I think it is rather challenging. And you know, like us who so seldom see each other. It doesn't help to go and sit down one afternoon and have coffee or go and have a glass of wine, or whatever it may be. Because you can't, there are other things - extramural activities that have to be done. Sometimes one has just had enough. You literally don't want to do it.	
112.	P1.3	Yes.	
113.	EW	Hmm.	
114.	P1.4	[cannot hear the words]	
115.	P1.2	Yes P1.4, you.	
116.	R	But lots of other things you are saying - what you are saying is actually interesting – much of what you are saying the children have also done. (Name) did his expo on how the grade 7 and grade 8 children experienced it. That some of those children are saying they still don't know what the children from the other schools look like, because they've never seen them without masks. And what you also said, P1.3, its almost, on this platform one can at least see each other. It came out strongly that what the children experienced very negatively was that they could not see the teachers' faces or mouths. Because just to see eyes is very limiting in terms of the message you are getting. How did you handle the children's emotions? And the children's frustrations?	
117.	P1.4	P1.4 laughs. Yes.	
118.	R	Are you playing on the computer P1.4?	
119.	P1.4	If I may say, I have a very difficult grade. They are very, very busy. So, we had to be stricter in terms of debits and so on, but it was to uphold discipline. The children's emotions – it's difficult to say if they are just at that age where their hormones are starting to bother, or is it really the result of the lockdown. Although, if I look back, rather to last year, I remember when we just started and only the grade 7 kids were back, it was terrible. Those children sat in that classroom like zombies. They did not talk. Uhm, they literally looked as if they were panic-stricken. No one wanted to do anything. They just sat there and looked at you. You'd ask a question and, we are used to, while we teach, get feedback – such as, listen, what are you saying, do you remember, who can tell me what this is. To ask that type of a question and those children are literally sitting and staring at you. There is nothing. That to me was the biggest frustration when we just began to – those emotions, I don't know – I can't remember what we did to get the children going again. I think it happened naturally, oh okay, we can live again – they just had that realisation and carried on.	4.1. ACCEPTING THE SITUATION FOR THE TIME BEING

120.	EW	Hmm	
121.	R	I want to say it was due to your example. Because you were unsure and the children also had many fears. But it was the way in which you handled it that made it easier for them. What you do.	
122.	P1.4	Yes	
123.	R	Because you remain their role models. We can say what we like at home, I mean, Miss P1.3 and Miss P1.1 are actually the ones who know. [I think she knows; she actually knows nothing] – overlapping voices. Who you were and who you are, was the reason that the children eventually relaxed?	
124.	P1.4	I think for sure; I can refer to what I've seen. All of us know that Miss (Name) is a very jovial, loud, active person. And that is also how she teaches. And I definitely think, R, that the children also took a lot from that. Miss (Name) will say straight forwardly when the children are just sitting looking at her, she will shout, why are you so dull? And then she will start raging. And then they get a fright and think okay, it's okay to be normal, so I think definitely... [voice fades out]	
125.	P1.2	You know P1.4, I think there ...where... half, the masks also played a big role to me, because you cannot see when the child smiles. They can't see when you smile. One can't really pick up the sarcasm in your or in a child's voice, because you speak half between the teeth and then there are really people who mumble and to top it all, behind a mask. It makes it that much worse.	
126.	P1.4	I just wonder, P1.2, if it hasn't sort of forced us and the children to communicate our emotions better to people? Because we don't have our expressions to show everyone, we are forced to listen more to what people are saying. So, I think it has definitely improved communication.	1.3. ACQUIRING NEW SKILLS 6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH (Personal growth)
127.	R	Hmm.	
128.	P1.2	I think like P1.1, you P1.3, you who are in the foundation phase – you can't really give the child an indication that you are satisfied with him or you know, this child who is a non-verbal child – just smile at him and say, you know, it's okay, just to use your smile. Now you have to say it physically, that it's okay, and those – that non-verbal child, to retire into his shell, because he cannot read the emotions on your face.	
129.	P1.4	Yes	
130.	P1.2	So, I think the fact that we wore masks – in the beginning they were half afraid and felt they couldn't live – those are my thoughts – why they were so lethargic - and uhm, when you started walking a road with them, they started – okay, when teacher says this or that, then, uhm, he or she means it in this way, or whatever may be the case.	

131.	R	You are saying something very true there.	
132.	EW	Hmmm	
133.	R	Because, if one thinks about communication and non-verbal-communication – how large a percentage it actually is that we believe. And we couldn't see it. We could not see it behind a mask. So, you are saying something very true, and that the children over time possibly had to learn how to, uhm, express non-verbal, verbally. Because it doesn't come naturally, we just don't do it. I mean, it's not what we are used to. Very interesting what you are saying. P1.5, what are you doing now? But you have to turn on your microphone if you want to talk to us.	
134.	P1.5	Okay.	
135.	EW	He earlier mentioned that he had problems with his technology, so – “Hello, are you there?”	
136.	R	All of us keep quiet.	
137.	P1.2	He went to fetch (Name) from school.	
138.	EW	Oh.	
139.	P1.5	But I am back again. Yes. Sorry.	
140.	P1.4	You have a lot to catch up, P1.5.	
141.	R	You must turn on your video, even when you sit at the pool with your whisky, it's okay.	
142.	P1.5	No, I've now gone to the spare room.	
143.	R	Is it in disorder or what is wrong, because P1.5 can come and paint it, I hear.	
144.	P1.5	Me? Paint?	
145.	R	P1.2., P1.2 can come and paint it.	
146.	P1.4	P1.2 is going to paint it.	
147.	P1.5	What? What, my spare room?	
148.	R	P1.2 likes painting. He says in lockdown he enjoyed painting, but now he ran away. I see.	SUB-THEME 1.1: KEEPING BUSY AND DOING TASKS

149.	P1.2	I am just trying to get to where I can see myself.	
150.	EW	Are you ready?	
151.	P1.2	Yes.	
152.	R	P1.5 has thought out work for you. You can paint his spare room.	
153.	P1.5	My spare room is actually painted.	
154.	EW	Laughing.	
155.	P1.5	He's just a bit mixed up.	
156.	R	Well, welcome back.	
157.	P1.5	Thank you. Thank you.	
158.	EW	It's your turn now, you have a lot to catch up.	
159.	P1.5	Okay, what must I say?	
160.	EW	Laughing.	
161.	P1.3	Oh, can I quickly fall in here? I think for me and P1.1, I think I will agree with that, for the young ones the adjustment to come to school wasn't such a problem. They were there, they could see their friends again. To them, ...it was just something more. I think, or well for me, the biggest challenge was those energy levels that came into the classroom. You can imagine – to say to a Grade 2 learner, quickly do this work that the teacher has sent you. Uhm, I will just now, I just want to watch television quickly, or I just want to ... So, they are used to, throughout lockdown, be held busy and watched television, by doing anything except to concentrate for long periods. So now they come back into your classroom. One does one activity and then those little faces sit and dream and wander and you can see ...things are rough. And then you must quickly – “okay, everyone. Get up quickly, get up quickly, okay, blow like trees, okay, touch your toes, okay, look this side, look that side”. And you just do what you can and then you say, okay, sit. Come let's do the next activity. After 10-minutes you have to do it again. Okay, stand up again. Okay do this again, do it again. Okay sit. Another activity. So, for me, it was very difficult to get the children to again – you left your previous grade where they were ready to go to grade 3, you had just started to work with them, up to and till March. They've missed out completely. Now you get these strange zombie-children who cannot think for themselves. They can't concentrate. They don't feel like working. And now you must get them to do their work, to keep up the pace. “Okay, come now, we have to work now. We must be busy”. It is rather an adaptation to have to go back, to jump so far back is rather an adjustment , to say, fine, you can't expect them to do what you	<p>1.2. ADAPTING TO CHANGED CIRCUMSTANCES</p> <p>5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS</p> <p>2.2. MAINTAINING A ROUTINE (Predictable routine)</p>

		<p>did in March or the previous time that you saw them. You have to go and fetch them where they were and say: "okay, fine, we're going to, now, take out your book, yes, it's the book of poems". It was rather frustrating to have to jump so far back to again get them to concentrate, but it is also unbelievable to see where we are now. Now you say, "fine, take out your book, take your green pencil, take out your spelling book, open it on page 5". And, the average child can do it. So, they have also grown. As we've adjusted, they've also arrived there. However, I think for the children, or - for me - it wasn't so bad that the children had to adjust more than that they had to adjust to academic work. And to get into that routine again. Because before everyone came back it was ...[unclear] girls Mondays, Wednesdays and Fridays, Tuesdays, Thursdays. Tuesdays and Thursdays. And they rotate every Friday. So, for them that routine is not there at all. When they are at school the teacher expects them to do all this work. The following day mom and dad are busy on their computers with work and say, "keep yourself busy, go and watch television". And then I have to compete to get them off it to the following day and say, "fine do you remember Monday's work? It's now Wednesday. "We must continue". You can't go and fetch them every day from Monday. We must now carry on. And the children were just total zombies. So, to me it was a challenge to get them back in routine, where they know, fine I am now expected to work, I must be able to do it and, uhm. Yes, amongst the friends, I feel children are much more adaptable with the mask stories than three quarters of the grownups I know. So, they know the rules. They tune each other - "your nose shows" or "your hands must be sprayed". They just carry on, where in the academy specifically they found it difficult to get into that routine.</p>	
162.	EW	Okay	
163.	P1.2	(Very far from the microphone) You have to excuse me please. EW, SD, R, thank you for the opportunity...	
164.	All	Say goodbye P1.2 and thank him for his contribution	
165.	R	P1.5, over to you.	
166.	P1.5	Are we talking about how COVID affected me, how it affected the children and how I see the situation?	
167.	R	Actually, more how you coped. You did cope. You are stunning. Everyone thought, wow, how is it going to happen, how are these children going to get through school. And you made it! I mean, you made it happen. Why?	

168.	P1.5	I think every person cope in his own way with different things. Uh, I think most of the people at school know my whole story and how I coped with the whole COVID by beginning to jog and it was my outlet. So, to me, to go back to school was not such a big deal. I did the work that I had to do. It was nice to see the children again, uhm, the workload, I felt, has definitely become more. Uhm, how we handled children definitely had to change. Uhm, yes, you couldn't anymore – just the childrens' emotions – you couldn't see it at all anymore. So, it was a new thing to learn, like reading eyes where one could usually see the whole face. Now you had to begin reading eyes, because you can't... uhm, body language too. Body language has also started to play a big role, because you can't see the person's face at all anymore. I think it has also started to make many children insecure, those children who stood out by using their face to do things, have now fallen back. And the children who are reserved, who did not really show emotions, are now those who became more emissive, because, uhm, they can hide behind the masks. So, I think every teacher probably handled it in his own way. As I said, to me it wasn't such a hard time. I actually learnt more about myself, than I've learnt in the past 33 years. So, it has taught me to handle different situations. In teaching it was actually a very good learning year-and-a-half for me. I mean, we are never again going to have what we've had the past year-and-a half. So, I believe if one could get through this year-and-a-half, two years, then what lies ahead will be fairly easy. We have learnt to start from nothing, and we have a whole school who is at the school. Yes, we have all adapted. it was either you adapt, or you go down.	6.3. MAINTAINING SELF-CARE (Healthy habits) 1.1. KEEPING BUSY AND DOING TASKS 6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH (Personal and professional growth) 6.5. EXERCISING OPTIMISM 5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS 1.2. ADAPTING TO CHANGED CIRCUMSTANCES 1.3. ACQUIRING NEW SKILLS
169.	EW	Hmm. It is very valuable, because it is precisely what resilience is, buoyancy is to get through difficult times to the other side and to be able to apply it in future. It's really very valuable. I just want to hear, are there other things? I know about the jogging but are there other ways that you've thought of that helped you through it?	
170.	P1.5	What also helped me was the fact that I started doing other things, like at school I became part of the technology committee. It also took my mind off other things. It's never pleasant to ... and I know all of us are on Facebook and we are on Instagram, and when you open Facebook or Instagram there are negative stuff.	1.1. KEEPING BUSY AND DOING TASKS 3.2. CONSCIOUS DISENGAGEMENT
171.	R	I am not, I'm too old,	
172.	EW	Neither am I, so sorry.	
173.	P1.4	And neither is P1.3, don't worry.	
174.	P1.5	When you open it, it's just negative stories. But we keep on looking at it. Yes, I try and see past the negative things, by staying busy with other things.	3.2. CONSCIOUS DISENGAGEMENT 1.1. KEEPING BUSY AND DOING TASKS
175.	R	You've said a number of things, P1.5, you talk about reflection, you talk about keeping yourself positive, you talk about becoming involved with new things. Those are strategies, that you... [overlapping voices]	

176.	EW	It's very valuable	
177.	P1.5	I think it's also to try out new things. When we had that three months' lockdown last year, instead of watching TV, my wife, little daughter and I, built small hedges and did different things just to keep our brains occupied, not to just watch TV or sit and look at each other for three months. It's also where you start building up stress in your head, and then start taking it out on each other. So, yes, to remain busy was the most important. [It was important] not to get entangled in this bubble in which we are living now.	1.3. SKILLS ACQUISITION 1.1. KEEPING BUSY AND DOING TASKS 3.1. PRIORITISING WHAT IS IMPORTANT AT THE TIME 3.2. CONSCIOUS DISENGAGEMENT
178.	R	It's almost like this is now our reality and we must cope. What is the best way to do it?	
179.	P1.5	Yes, so I deal with it. We are here now. It is not going to go away, so learn from it and try and move forward.	1.2. ADAPTING TO CHANGED CIRCUMSTANCES
180.	R	And that is what it is in essence, what resilience is.	
181.	EW	Yes	
182.	R	Resilience is to be in a difficult situation and accept it as your reality. Resilience doesn't say we deny that there are negative situations. Uhm, but I had a look, what do you have in yourself and your environment on which you can depend, to make it work and to make the best of this and stay positive. And it is what you've done. Everything that you've said this afternoon, is what you've done. P1.4 got it through his games and technology. You had different ways of how you kept your children motivated, got them through it and coped. All of you coped with different challenges in different ways and on different levels; small children have their challenges and grade 7's has their challenges, on different levels. And that is totally different. Everything you say. EW and SD – do you have more questions? Or did you get what you were looking for?	
183.	SD	Yes, R, sorry, I did.	
184.	R	Did you hear what P1.3 said, she said personal contact with people is rather important.	
185.	SD	Yes, R. I did.	
186.	R	Did you make a note of it?	
187.	SD	Yes, R. I am just wondering – before COVID we of course had things that were important to us. Or things that we had to do, or things that we had to get that were valuable to us, that give us energy and make us feel more positive, etcetera. I just want to know, during this COVID-19 time, is there anything of which you have experienced anew that actually is valuable to you now, that you feel you need to remain positive. Yes, as mentioned by P1.4, faith has always been important to him and in COVID-19 faith became even more important to him due to things that he went through. So, I would like to hear from the rest of you if there were things that you valued before COVID-	

		19 that might have changed, or during this time that made you aware of what you feel now is really valuable to you now that you actually make time for because it contributes to your positive disposition to function, now.	
188.	P1.1	<p>I think it gave me lots of perspective, especially in the time that we had to be on our own and we were completely on our own... Or if you had COVID and you had to isolate or so, because I live on my own. So, it was actually rather bad. In the hard lockdown I was on the farm together with nine other people. So, I think, there are many ways to cope. Time helped tremendously, because initially it was bad. Everything was just, it is lockdown, it is happening now. Because I still – I had to move into a new house two days before lockdown. Everything just happened so fast and it was just like, this overload of fear and all of that. Only later one realises, okay, but it doesn't help to stress about everything now. There are things that need to happen. And, one realises later, okay, what must I prioritise. What will be important. What should I not stress about, but important things? Later on, one realises, it doesn't help I am now stressed about something. It is not going to help. And especially, then one begins to stress about work and this and that. And there are actually people dying from contracting this virus. In the beginning, everything was so terribly negative. Everyone watched the mortality numbers each day. What is going to happen today? The people with whom I went away, were terrible. The woman especially took us to the farm because she thought there would be a war that would be super intense. Everyone is anxious and, on the edge, and when you go to the shops its gloves and masks and before you enter its just ... just clean I think people just got perspective about what is important. I personally had to spend much time with myself, and I realised what is important to me. Such as, sometimes, especially at school, it takes over one's whole life. Because there is never a time when you think, phew okay, my work is done, I can now do something else. It is constantly, oh, but these books should actually be marked, or, that child is a problem, I must do something about it; oh, I still have five SNAs to fill out, or, all these things. There's constantly something. I think to prioritise yourself and to look at what you are interested in. Like P1.5, who started jogging, or P1.4, who plays games...say for instance, I enjoy working on my house and in my garden and to restore my furniture and things like that. And that one actually builds yourself up by doing that. Such as, I started playing tennis. I am extremely bad at it, but I started to play. I am not good at it at all, but I started doing it. Yes, it is also pleasant, one also has to build yourself up and not just work, work, work, because in the long run, it is also about yourself.</p>	<p>6.4. NURTURING SPIRITUALITY (Value orientation) 5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS 4.1. ACCEPTING THE SITUATION FOR THE TIME BEING 4.2. REMAINING CALM 3.1. PRIORITISING WHAT IS IMPORTANT AT THE TIME 6.5. EXERCISING OPTIMISM (Positive reframing) 1.1. KEEPING BUSY AND DOING TASKS (Technological engagement, Activity engagement) 6.3. MAINTAINING SELF-CARE (Healthy habits) 6.2. DRAWING ON REFLECTIVE PRACTICES 6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH</p>
189.	EW	Self-care, yes	
190.	R	Self-care, teachers don't do it. We give so much to others that we never get to doing that. It's so true.	

191.	P1.3	<p>I think, if one had constantly watched the whole social media, during the first COVID, it was as if, everyone was half - what is that new skill that you have acquired. Whether it is baking a banana loaf, I think everyone did that one. Or did you attempt playing a new instrument. Everyone tried to fulfil the emptiness with something that you would not have done under normal circumstances. And then it is strange, I wonder, how many people actually had things on which they then spent time, how many of those things are they still doing. I then feel that is what we do. One fills your brain with so many things. You think, the more of these things I do, the busier I am, the more things or activities I engage in, the better it will be for me. But when things start getting hectic and you go back to those one or two things – it also made me realise, okay if I only had time, this would have made me feel better. If I had done more of this, it would have made a difference, but if you don't have that time, what is it that you are going to do that will make you feel better. And for me, P1.5, it was also to exercise. So, I know it doesn't help if I only have an hour in my day, it is useless to try and fill it with lots of unnecessary things that I think will make a difference. Because afterwards, one sits with that same fear or stress in your thoughts and you realise, flip-it, before the day after tomorrow, I still have to do this or that. So then that hour of relaxation has not helped at all, because you have not stepped away from it mentally. I think everyone realised they have that one thing. Whether it is to read a book for half an hour, or to jog, or whatever. But everyone I feel, reached a point where they knew, it works for me. When I feel like that, then I go and do it, because there was a pattern of each time when I applied it, it worked. So, for me it was to fill your life with things that did not hold much value in the end. It causes you to stress more or does not contribute and you walk away from the situation thinking, oh okay, now I've wasted half an hour because it has not helped at all. Where now, I focus on things that I am sure works for me and I go with that.</p>	<p>1.3. ACQUIRING NEW SKILLS 1.1. KEEPING BUSY AND DOING TASKS 6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH 6.3. MAINTAINING SELF-CARE (Healthy habits) 3.1. PRIORITISING WHAT IS IMPORTANT AT THE TIME</p>
192.	EW	<p>That is very valuable. To me it sounds as if it is about selfcare. And it is about that reflection of what works for me. And it is about – and tell me if I understand it correctly – and to me it is about being in the moment, instead of to worry about this and that, but it is about that bit of mindfulness and just being in that moment. Uhm, that is what I hear, I don't know if that is what you... It is really valuable.</p>	
193.	P1.5	<p>I think in general COVID caused us to also look at our health. Not many people realise it, but one inevitably has to start looking at what you are putting into your body, you look at what you eat, how often you eat. Because all the stories that emerged, if you have diabetes, you are a high-risk patient, if you are this, you are a high-risk patient, overweight, underweight, this DNA, that DNA. There are so many stories that people went into a flat spin. And actually, in a positive way, people also started looking at their own health.</p>	<p>6.3. MAINTAINING SELF-CARE</p>
194.	EW	<p>It is also a strategy. It's also a cognitive strategy. However, you want to do it, it goes with exercise, that you do, it is about nutrition and exercise. But it is part of the literature and that is what you are telling us now. It's a very good strategy that one uses and it helps with coping by eating healthy, sleeping well, jogging, exercise and everything. It's very valuable and it is in the literature, that you are teaching us now.</p>	
195.	P1.5	<p>No, we don't teach you anything.</p>	
196.	EW	<p>No, you teach us a lot.</p>	
197.	R	<p>I said I would just pop in and look how long I am already sitting here.</p>	

198.	EW	We are keeping you busy for a very long time, Sorry. Yes, Okay.	
199.	P1.1	I just want to add, I think what also helped a lot was to talk to other people such as colleagues who are going through the same. I know, me and P1.3 also made dates for video calls just to chat a bit and unload. But also, at the same it is important to surround yourself with the right people, because there were people who just carried on about the negativity of everything, how ill everyone was and so on. So, I think, one looked in depth at the people with whom you surround yourself. You were much more in contact with the few people you saw and they had a greater influence on you. The negative people one tried to push away quickly.	5.1. SEEKING ADVICE OR INFORMATION (Feed of progress of others) 5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS 3.2. CONSCIOUSLY DISENGAGING 6.3. MAINTAINING SELF-CARE (Boundary setting)
200.	EW	Yes, yes. I don't know if someone wants to add anything more. We are over what we wanted to mention to you, so we don't want to take up your time. We are here, if you would like to chat some more. It is really very valuable and discerning to me.	
201.	R	It is unbelievable. From my side, thank you very, very much. I know how valuable your time is and I really appreciate it. Sorry, P1.4. I interrupted you.	
202.	P1.4	No, I just wanted to say, I think you will have a rough time in your other groups that you will put together, because we have now said everything.	
203.	EW	Yes, we don't have anything more to learn.	
204.	P1.4	The other people don't talk as much as these people; I also hear it at school. These were talkers.	
205.	EW	We appreciate it tremendously. Really, we know how valuable your time is.	
206.	P1.5	I think the most important is, even if things become difficult and even if one goes through a difficult time, you have to, as far as possible, try and stay positive. I know I enjoy it a lot and I enjoy the song very much; Bob Marley's "Three Little Birds", where he says, "every little thing, is gonna be alright".	6.5. EXERCISING OPTIMISM
207.	P1.1	How does it go P1.5, sing it for us quickly?	
208.	P1.5	No.	
209.	EW	R, I will make it the title of my dissertation.	
210.	R	What?	
211.	EW	Three Little Birds. Thank you, P1.5.	
212.	R	You can use it for one of your themes or sub-themes.	

213.	EW	Hmm. No, I will. No, thanks a lot.	
214.	R	We just quickly discussed a bit of the academic work of EW. P1.4, we interrupted you again.	
215.	P1.4	No, I will rather not say anything. I am just laughing at P1.5. I just wanted to hear what the song sounded like. I don't know it at all.	
216.	EW	All of us want to hear.	
217.	P1.5	Go and listen to it. Everyone knows it.	
218.	R	P1.3 is going to appreciate it more if you sing it, because she doesn't want to look for it on her phone.	
219.	P1.5	No, I have a bit of a sore throat. I won't be coming to school tomorrow.	
220.	R	Do you have other symptoms also?	
221.	P1.5	Headache.	
222.	All	Thanks, and goodbye.	
ONLINE PARTICIPATORY FOCUS GROUP 2: 28 September 2021			
1.	SD	We predict in our study that you in fact are resilient. We believe that you are already resilient, because both our participants who are here at present, are teachers and you are here today. You also came throughout the past year-and-a-half. So, we predict that you are in fact resilient in this period, we are just going to dig deeper, how your resilience was, how you coped. So, which cognitive and psycho-social strategies you as teachers used to guide you through this period. EW, I don't know if you would like to add something from your side, before we give the floor to the participants to share their views with us.	
2.	EW	Thank you, SD. All I would like to ask, P2.2, if you are right in the middle of the circle all of us can hear you clearly. So, to remain within the circle I think is ideal. And then I think one can move around as much as possible. If you don't mind, please turn on your cameras and unmute yourselves so that we can have a pleasant discussion. Hello, P2.1. Thank you. As SD said, there is no right or wrong answer. Uhm, it is merely that, you are the experts. We wanted to know – to see, after we have analysed our data, in the quantitative part that was a questionnaire. we saw that you are resilient. And I remember there was an inquiry in terms of, I wanted to write a bit more or say a bit more. This is now the me platform where we would like to hear what you wanted to say more. How you were resilient, because we could see that you were. There were many adaptations that we had to make. It was really just a new normal and we had to act and cope very differently. You know, there are no right or wrong answers, so we really want to open the floor to you to tell us what you experienced as valuable and how it was valuable to you.	
3.	P2.1	I think too, for me personally it was, to still have contact with my family . Even telephonically, because we couldn't get there, but I could at least talk to them and hear that they are well and there were no problems . I think it also gives one a feeling of peace to know that all is well with your family . The second thing is that, I think the partner with whom you are, has a very big influence on who you are and how you've experienced the whole matter I know,	5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS (Social support, Family

		through my colleagues who are single parents or are on their own, struggled terribly. It was terribly difficult for them. One friend of mine literally says that she has become lonesome and forlorn. My partner has however had an enormous impact on how I experienced it because I had an outlet all the time, just to say, this is what I feel like, this is how I don't feel, I hate it, I like this, this is horrible. I could share my feelings. The third thing was that, I think it depends from school to school, but I know that some of the grade groups struggle terribly, because they don't really have people with whom they socialise. But we, as a grade 4 group, the staff, are inclined to talk to each other. So, during times that we could not be in the staff room, we could see each other between class periods for 2 or 5 minutes, I think it eased the situation for me, just to communicate with other people. I don't know if someone else would like to say something while I ponder on it.	Social support, Life partner, Colleague support)
4.	SD	P2.1, May I ask you, uhm, during these contact sessions that you had between periods or breaks - were the contact sessions different from the ones you had previously? I mean, the interaction with people, was it different from what you had previously experienced, before COVID-19, if it was, how did it differ?	
5.	P2.1	Because we had to do many new things technologically in classes, a little background, our school is one of the few that is still very set on protocols. because our headmaster wants things done correctly, which I respect, we as teachers still transition from class to class. In other words, you have to take your laptop, you have to take your cables, you have to take your, uhm, the papers of the children who are absent, with. You must take your own pen box, your own black board eraser, your own stationery, so the whole package that has to be carried from class to class is overwhelming. The other thing is that there is so much that you must have with you because today one learner is absent, tomorrow two are absent. But, one of them is only coming back in two weeks' time, who has already missed two weeks' work. All of it is in your classroom, so you have to go and fetch it. And every computer plugs in differently in each classroom. So, you must constantly be aware of how it will have to work. It therefore takes a lot of time out of one's periods. Where at first, we perhaps spoke about learners in general and some learners about whom we are worried, we did the discussions from before COVID, when we at first spoke about friends – listen did this child do his homework for your class? I don't know what goes on at his home, things like that, changed to – that plug doesn't work. Let's just keep our grade's black board rubbers in a specific place, because, uh...- You know, it's more that type of logistical discussions that took place and uhm, was an outlet – ugly words. It scares a person.	2.2. MAINTAINING A ROUTINE (Predictable routine) 5.1. SEEKING ADVICE OR INFORMATION
6.	SD	Of course. Yes.	
7.	EW	Okay, so there were lots of...sorry, what I hear is that, apart from an interpersonal, emotional and social connection that one tries to uphold one should now think logically or logistically, as you say, and uhm, and actually plan. Lots of planning goes into it on a material level. So, it takes up one's head space. Not just to cope with the emotions behind it but to actually be – because I know you are quality teachers, to still provide the best learning experience for the children.	
8.	P2.1	Yes.	

9.	EW	Is that how it ...	
10.	P2.1	Yes, it was. I mean today, just an example, uhm, I have five English classes. The videos of four out of five worked perfectly, the sound was fantastic and the children enjoyed it. But one class, uhm, for some reason that class's speaker tripped all the time. So, I couldn't play my video for that class today, which meant that my lesson did not work. So, I had no choice but to adapt to presenting the lesson orally when I had actually planned just to plug and play.	1.2. ADAPTING TO CHANGED CIRCUMSTANCES
11.	EW	So, there were actually – like whatever we heard in previous sessions - adaptability? That actually links up with resilience.	
12.	P2.1	P2.2, I don't know about you, but I am not a technological teacher. I am a contact person. I like to touch a child's shoulder and to say, you are doing well. Or, I give you a look – you are not telling the truth now. But, uhm, throughout this time we suddenly had to learn so many new skills. It is not something for which you received training beforehand, so, during this process we attended many courses to enable us to teach and mark in Google Classroom, it was, it is quite challenging for someone who is not a technological person, to suddenly, all these, and – if you are someone who does things correctly it loaded lots of stress onto you.	1.3. ACQUIRING NEW SKILLS (Learn) 1.2. ADAPTING TO CHANGED CIRCUMSTANCES (Flexibility)
13.	EW	Yes.	
14.	P2.1	It took me a long time before I could get my lessons onto Google Classroom in such a manner that I approved of it. So, it was terrible, the whole technological side thereof. Uh, yes.	
15.	EW	Okay.	
16.	P2.2	I must say, I am privileged – uhm, because I see it as a privilege. Not all our children have uhm, access to the internet and so on. So that pressure was taken off us, to constantly perform on Google Classroom. And it really makes a big difference, because, uhm, I mean, like, to prepare those extra lessons beforehand and some schools I heard, had to load their lessons two weeks before the time. So, I must say, I am very privileged, but with my school there are other politics and drama, I agree with you, logistically it is chaos. Because, you'd go to a class, and suddenly remember, oh my goodness, I've forgotten something. Then you have to run back and waste time, but you have to remain calm throughout. You must keep your cool, if I may say so. So, yes. And then, also as you said, you like touching people and so on. You had to set new boundaries. One must know what is comfortable for you, permissible for you as a person. I must say, truly, I am still okay with people and so on, but many children are not, because they had – everyone did not experience COVID the same. Many people have lost loved ones. I am privileged not to have had it. So, you have to set boundaries and be sensitive to each one's experience of the whole COVID situation.	4.2. REMAINING CALM 6.3. MAINTAINING SELF-CARE (Boundaries)
17.	EW	Hmm	

18.	P2.1	And I know about many teachers who were absolutely terrified to mark books, because, uhm, there are 144 books you have to go through a few times a week. In our grades, I mean, they are still small, its snot and sputum and dirty and sticky, and so forth. And now I have that extra pressure of working through 144 different books that children touch all the time and I know it was a huge problem for people. I think the first few times I had to mark, I was, almost, I don't know, I didn't want to. But then, afterwards, it didn't bother me. However, I know for many other people it was a huge thing – I have to mark all these books.	4.1. ACCEPTING THE SITUATION FOR THE TIME BEING
19.	EW	Hmm.	
20.	P2.3	I think what you are saying P2.1, is, one had so many fears and uncertainties because no one really knew – I mean we are fighting an invisible enemy – and we are also people with fears and uncertainties. But through all of this, these 25, 30 little pairs of eyes are sitting in front of you and they bring along their fears from home and see you as teacher standing in front of them in class. You must remain standing and if your wheels come off, all the rest will lose theirs. So, that pressure was also upon a person, to keep yourself intact, even when you feel you are losing the plot.	1. ACTIVE COPING 6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH (Personal growth) 6.3. MAINTAINING SELF-CARE
21.	EW	Hmm. P2.3 may I ask something? You are saying, you know, you have to make sure your wheels don't come off. Now, how did you manage that, that your wheels did not come off, because we see that you are here, you are resilient and did it so well. And P2.2 said earlier, if anything happens, you must keep your cool. So, we'd like to hear from you, how do you keep your cool? And, how do you make sure that the wheels don't come off. What did you do to manage it?	
22.	P2.3	For me, I think it was, ugh, it was a process to unpack it for yourself and how do I get to work tomorrow in one piece. So, I would say, the first was to make time in the morning for my quiet time to get that Spiritual injection into my day and to say to myself, it is rough and everything, but that piece in the Bible where the Lord says that He will not send anything on your path that you cannot handle, uhm, told me, He believes in me and my ability to cope. So, I do in fact serve a purpose where I am, therefore I just have to take it day-by-day and yes, focus to remain standing and hold on to it. And then, as P2.1 also said earlier, I came back to a healthy environment in the afternoons when I came home from work. I found my joy in my children and my husband and plugged into them a bit and I almost want to say, stole some of their energy – positive energy. Uhm, such as, yes, to see the positive side, because previously people... – well statistics show that divorce figures are so high after COVID and the time that people had to spend time together at home during lockdown. So, broken children are sitting in front of you and broken people are all around you so you do your best not to focus on it, to focus on the positive circumstances at home. And then, I practice to keep the thoughts clear, gain some perspective and to break away from everything around me. I don't know what the clever people call it, but to self-talk and gain perspective while I jog. And then, yes, work, it is not always possible to break away. Teaching is an occupation which people believe one only works half a day, but one actually goes home and takes the work with you. However, at least, on days when I had lots of work to do at home, I could just disconnect for an hour or so and leave the work and the problems concerning it at	6.2. DRAWING ON REFLECTIVE PRACTICES 6.4. NURTURING SPIRITUALITY (Faith / spiritual meaning making) 2.1. TAKING THINGS ONE STEP AT A TIME 6.4. NURTURING SPIRITUALITY (Faith) 6.5. EXERCISING OPTIMISM (Positive reframing) 6.3. MAINTAINING SELF-CARE

		<p>work. I also got to know myself. On days when I feel, <i>gee whiz</i>, the burden is heavy. It is okay not to switch on my computer today and fiddle around with work. Tomorrow is another day; we'll handle it when I feel stronger again and able to handle it. And then, yes, I think, one is privileged to sometimes – the pressure is high – and, although management expects a lot from one, they are also supportive and human. It helps to turn to people who are stronger than oneself when one feels weaker, just to hear someone else say, everything will be okay.</p>	<p>(Healthy habits) 3. SUPPRESSION OF COMPETING ACTIVITIES 5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS 6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH (Self-discovery) 4.1. ACCEPTING THE SITUATION FOR THE TIME BEING 5.1. SEEKING ADVICE OR INFORMATION</p>
23.	EW	Okay. So, you talk a lot about	
24.	P2.1	<p>Quiet time has also always been important to me. If I hadn't been for praying, those first few weeks were rather difficult on a psychological and emotional level. Uhm, I also think, P2.2, what you said – we had to submit everything two weeks in advance – we were like that. Well, we are still like that. And the trouble is that what one sometimes does in class, is not 100% the same as on Google Classroom. So, you put in extra hours. That Google Classroom takes 4 hours out of my week to set up. And, as subject head, another 4 hours to look at other peoples' and make sure it is correct. I have never, in my whole life been as tired as now and I have never put in as many hours into schoolwork as I do now. I now get a B-complex injection twice a week, no, every two weeks, I get an injection, because I don't make it.</p>	<p>6.4. NURTURING SPIRITUALITY 1.1. KEEPING BUSY AND DOING TASKS 6.3. MAINTAINING SELF-CARE (Supplements)</p>
25.	EW	Gosh. Hmm.	
26.	P2.2	<p>I must also say, definitely my faith. And people who stand with you. People who know you as person, can see when you are drained and so on, who will come to you, tap you on the shoulder and say, listen, I see that things are difficult, what can I do for you? So, your circle of friends is very important. You need to know who contributes to your good moods and who, how can I put it, your bucket – who empties it and who fills it up. How to avoid it. Something I had to learn was to set boundaries and to say no. And no isn't nice, because no causes conflict, but I also had to realise, this is my parcel and it is most important to me. So, I have to do it and say no, and it is not easy, because it causes conflict. To me it was quite something to realise – to stand up for yourself, also without being hard or harsh, and also – as P2.3 has said – that bit of just taking time for yourself – there comes a day when you have to decide enough is enough. Today I am leaving early to go home and that's it. I close up from</p>	<p>6.4. NURTURING SPIRITUALITY (Purpose) 5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS 3.2. CONSCIOUSLY DISENGAGING 6.3 MAINTAINING SELF-CARE</p>

		school. As difficult as it may be, because at the end of the day, if you don't do it, you will continue to suffer burn-out and never reach your goal. So, twist to take a break.	(Boundaries)
27.	EW	Yes. Yes. So...	
28.	P2.1	I started to overeat. I realised when I am very stressed and I learnt it from myself during the past few months – I realised that it is true when it feels as if my wheels are coming off, then, uh, my tuck-shop account is through the roof, that is terrible, when I say, so and so please go to the tuck-shop for me, the children are already shouting, "Miss wants a 'papita'", it's a chocolate. I realised I am eating.	1.1. KEEPING BUSY AND DOING TASKS (Unhealthy habit)
29.	EW	Okay.	
30.	P2.2	Oh, something I wanted to say about what I say, you must keep your cool in front of the children, that I also learnt – you must also be vulnerable in front of the children. They should also be able to see that you sometimes have a bad day. But that's how you then handle it, so that they can see, but wow, it's not only us who feel we are losing it. That you openly communicate. And I have also seen, if the lesson goes totally south, take 10 minutes and just talk to the children. Yes, you don't feel like listening to that story that you've already heard six times, but you know what, at the end of the day children need it. Because it doesn't help to fight and your lesson ends up nowhere. So that communication between you and the children, and that the children see that you are also vulnerable, you also struggle at times and it's okay, and you're allowed to ask for assistance and then we stand up and carry on.	4.2. REMAINING CALM 6.2. DRAWING ON REFLECTIVE PRACTICES (Vulnerability) 4.1. ACCEPTING THE SITUATION FOR THE TIME BEING
31.	EW	Yes. Sometimes one thinks it's not okay not to be okay, not so?	
32.	P2.2	Yes.	
33.	EW	However, to, as you say, to sometimes show that vulnerability, is often valuable, because then you have support. But you have spoken a lot about – sorry, I have so many questions and then I am afraid I will forget what I want to ask. So, stop me if there is something. You spoke a lot about selfcare, and it was noticeable; P2.3 with the jogging and self-talk and surrounding yourself with positive people.	
34.	SD	And faith.	
35.	EW	And faith, setting your boundaries. But what I also heard was that there was probably a time of reflection. P2.1, you said you learnt about yourself and the value that it added. Is it something you feel one can apply in this time, because you have learnt about yourself? You know how important self-care is and how important people around you are, as well as planning and logistics, actually things that work. Does it feel that it is something that has added value to possible future challenges?	
36.	P2.4	Yes, definitely.	
37.	P2.2	I think one astonishes yourself. It has also been a period of growth. Little more than a year ago none of us thought we were going to have an internet platform to teach with. It does cause more work and so on, but one surprises	6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH

		yourself. One did not know what you were capable of. So, one doesn't know what still lies ahead. However, I also thought we hoped that it would not last forever. That at some stage one could push these things aside.	(Personal growth, independence)
38.	EW	Yes. No, it is.	
39.	P2.3	I have a rather bad temper. Sorry, but I am now going to blatantly admit. I had to learn that the work stays the same so am I going to arrive at school and freak out about it, or am I going to enter calmly and accept it as it is. Because the outcomes will be precisely the same. So, will I arrive heavily upset for the whole day or will I just be calm and take it as it comes and the outcomes will be exactly the same.	6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH (Personal growth) 4.2. REMAINING CALM 4.1. ACCEPTING THE SITUATION FOR THE TIME BEING
40.	P2.1	But I've also seen some people will be fine for weeks and then they get this day when they're like, yikes come out of your classroom, let's take a walk.	5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS
41.	EW	Hmm.	
42.	P2.4	...[unclear], because I am afraid you may land up on the front page of The Citizen.	
43.	P2.1	People were fine at different times, not so... and people, others, you know. I don't know of anyone who did not have a day that wasn't [difficult utterance], you know that people just helped each other and said, phew, okay. You know, you try and stay as calm as possible , but my personality just is like, I get one day that I just, that the last person...EW also found me on the veranda one day, where she was by accident the first person whom I met that morning. Then I just stand still, listen and then I feel better and then we carry on again. I think each of us had our moments when it happened.	5.1. SEEKING ADVICE OR INFORMATION 4.2. REMAINING CALM 5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS
44.	EW	Yes. And it's also okay.	
45.	P2.1	Hmm. Then one carries on again.	
46.	P2.2	I had to learn with whom to share what, because some personal matters I could not share with everybody, and some people do not understand one like others do. Many people battle to keep things to themselves, whether the aim is to hurt one or out of care... Therefore, you must know who you tell what and also request assistance. If you can't anymore, it's not because of weakness to ask for help, but by being strong. To me, I see it as a strength and not a weakness.	6.3. MAINTAINING SELF-CARE (Boundaries, develop life-skill of vulnerability)
47.	EW	Yes.	
48.	SD	Is there anything that, are there any strategies that you use more, now that the children are back full time. Because I think we've become so used to children that [unclear] or come every second day, or to full classes. And then,	

		bam, all the children were back. How did you experience it and how did you get used to a full class again and a full day of school?	
49.	P2.1	It was better for me that everybody came back because with them ... Luckily, we just for a short while only did half-half. So, it was boys – five classes Monday, girls – five classes Tuesday. So, you taught the same lesson 10 times. So, by class number 6 you are fairly... it was very nice, but I'm now ..., [unclear] were now ..., that was it. So, it's much better for me that they are all back full time, because then you teach the same lesson five times, which makes it much easier. And, as far as your organisation is concerned, it is easier to take five books and five sets of everything than 10 sets. No, back fulltime is much better.	2.1. TAKING THINGS ONE STEP AT A TIME 2.3. STAYING IN CONTROL OF WHAT IS POSSIBLE
50.	SD	Great.	
51.	P2.2	It took me long to ..., okay I'm not going to say it took long to adjust, but here at school we use crates to transport everything. So, every morning I would kind of according to the timetable, so I know my grade 5 things are here and 6 things are here, then you are ready to carry on. So, I organise my stuff in the mornings and then I know everything I need is here. And also, when I am in my classroom I have shelves for certain things, if I have perhaps forgotten something, I know, okay I am not going to bother another teacher, because I quickly glance in my shelf, then I am out of the way again, So I think organisation is really important. And I come to school 10 minutes earlier, because we sit in our classes [unclear, background noise]. So, for me planning is rather, I am left-brained, so to me, everything must be... I prefer to come in earlier and get everything ready for the day, then I am set.	2.2. MAINTAINING A ROUTINE 2.3. STAYING IN CONTROL OF WHAT IS POSSIBLE (Time management)
52.	EW	So, one's time planning, is actually... I think you also spoke about time, planning and so on. It was in fact a way of making coping easier.	
53.	P2.2	Yes.	
54.	EW	Okay.	
55.	P2.1	I think the children also enjoyed being together again because they missed each other. They longed for each other and, uhm, to have normality again. So, I think for the children it was also better when we could open fully because we have all our strategies to cope, but children – after a week, it's to them as if it has always been like that.	
56.	EW	Yes, they are rather resilient.	
57.	P2.3	I think one could also notice the improvement in them. Being on one day and off the next, when that child comes to school again, everything the teacher has taught, is gone. Then teacher has to start again. So, I think it is not only good for them but also for teacher's wellbeing.	
58.	P2.2	The children make me tired, but they also give me energy. I always say, I love my work, but I am not always crazy about my colleagues, but I am crazy about my work. So, I also get my energy from the children. I also enjoy listening to all the stories and you know, the other day I got a letter – and then I'm like okay, all this fighting and emotional break downs are worthwhile for that one child who brings you flowers or gives you a letter. I also get my motivation from the children, because my first goal is to be here for them and for no one else.	5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS (Source of energy)

		The children are – I enjoy hearing all their chats and things. And we are sometimes the only positive influence they get. So, to know there are a few children in my class who think – yes, I will see this or that teacher today and I know she will smile at me, because I don't get it anywhere else.	6.4. NURTURING SPIRITUALITY (Meaning making)
59.	P2.1	Or, yay, we have English!	
60.	P2.2	No, precisely.	
61.	SD	I'm asking directly – in terms of your personal lives, are there things that you prioritise now, that you possibly did not prioritise previously. That you possibly realised during COVID-19, its important, I need it. Are there things that you make time for now, specifically? Or specifically prioritise to experience a satisfaction or to cope during this time?	
62.	P2.2	I found someone with whom I did not discuss school matters. Sometimes when one has friends who are teachers, one tends to revert back to school matters. Sometimes one can go into a spiral – of, I psych you up and you psych me up – and it's a problem ...[unclear]...and then, mental break down. So, one has to find people with whom you cannot discuss school matters at all, random things, stupid jokes, silly things, just have fun, just make a bit out of the school environment conversations.	5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS 3.2. CONSCIOUS DISENGAGEMENT 6.5. EXERCISING OPTIMISM (Humour)
63.	P2.1	My time has become so limited, uhm, that I can spend. And for me it is a great personal crisis. Uhm, I don't know how to handle it differently at the moment, most mornings, I uhm, get up at 3:00 to finish my work and I am a fast worker, I work until 19:00, 19:30 at night. And I have to move towards the bedroom at 21:00, otherwise I cannot get up early to continue working. So, at the moment to me, currently, one of my crises is that I do not have enough time for my husband. And he has already said a few evenings, it's enough now. Then, okay, I am coming. It is still a crisis for me and I have to work it out personally and I don't know how. There just aren't enough hours in the day.	2.2. MAINTAINING A ROUTINE
64.	SD	Of course.	
65.	P2.3	I make a point of it to exercise, to jog or so, but then I have the same problem as P2.1. It comes with other feelings of guilt and balls that one tries to balance in the air, not to drop them, like the time I spend with myself, is time of which I deprive my husband and children. Or, if I still have something that needs to be done for work, uhm, yes. So, it's always a difficult balance to keep up.	6.3. MAINTAINING SELF-CARE (Healthy habits)
66.	EW	Hmm. Yes, what you are saying is very valuable and I really hear your hearts. But P2.3, I think uhm, you know, work is one thing. And P2.1, then, we have to see what we can do about it. But anyway...On the other hand, I would like to say, you know, it is also about – this is not a session that comes from our side, we actually want to hear from you – it is similar to when we are in an aeroplane and there is something wrong, you have to put on your own oxygen mask before assisting someone else to put on theirs. So, selfcare is definitely important but P2.1, as	

		you say, balance is important, because it is about your own well-being and all of our resilience at the end of the day. Resilience is that – resilience cannot be defined without adversities, otherwise it is not resilience. However, one should emerge from it more positively and that is what we strive and work towards at the end of the day. But the strategies that you have so far mentioned and sharing your hearts with us, are so valuable. Truly, there are many themes, because in the end one looks at themes and so on, we put them together and write them up in a study. But it is still – don't think that we forget we are talking to people and their hearts – we are so thankful that you are part of the study. Even though it is anonymous, we really appreciate you tremendously, yes.	
67.	SD	Definitely.	
68.	P2.1	Before COVID we went to school, you would make yourself a cup of coffee and go and sit down in the staff room and the meeting would start. And then, for a long time, we couldn't make coffee and we couldn't be there together. And what surprised me throughout this whole thing, was how important that cup of coffee and those 5 minutes were. That people started making coffee in secret places, because it was like, my precious. I can't start each day without this little number. Even if it happens against the rules and stealthily, the plans that people made for that gem in the morning – here the focus is firstly going to be on coffee and then we'll take it from there.	5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS 2.2. MAINTAINING A ROUTINE (Predictable routine)
69.	P2.2	As result of the social distancing, we could not have the staff meetings, so we received it on a WhatsApp. And to me it was fantastic, because sometimes not to start the day and hear what on your to-do list is and how you did not submit this or that, to me, was fantastic. So, I don't know how the meetings in your schools are, but to me, not to sit there every day and think oh my word, I still have to do this, or that..., and you know, the morning meetings that we don't have, to me – it's fantastic.	
70.	P2.3	It will possibly be an adjustment to us to do it again, if we have to. I started at (Name) school just after lockdown, so I became acquainted with everybody with masks. The other day, we started to have openings in the hall again and the school song was mentioned. I only realised then, that I have never before heard this school's song. I then realised, all the things one is missing, such as to hear what a school-song sounds like, to have a staff barbeque at the beginning of the year, that so many people complain about, are actually privileges to get to know your colleagues on another level. I also thought, what keeps us going in a way, is the hope that it can change again and normalise – that I can hear a school-song or attend a barbeque or have that cup of coffee in the mornings in the staff room and pretend not to hear the principal when he reads out the to-do list.	6.5 EXERCISING OPTIMISM (Hope)
71.	P2.1	However, that togetherness is actually important. Uhm, especially for me with the technology...-just to be able to phone someone and to ask, are you also struggling? Did it also take you an hour, or am I the only one who struggles? You know, just to hear, no, I also struggle. That actually meant a lot to me, that I don't have to feel all the time. ...[difficult utterance]	5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS
72.	EW	Just to be able to sound-board a bit.	
73.	P2.1	Yes, my beetle is falling off. Okay, yay, us two. who else's is falling off.	5.1. SEEKING ADVICE OR INFORMATION

			(Feed of progress of others)
74.	EW	All of us are struggling with this. Yes Okay. SD, is there anything more that you feel we can...it was such valuable information	
75.	SD	Yes. Definitely. It was really very insightful and we have quite a lot of themes that we will be able to use and write up. So, it was great. I don't think I can think of anything specific that I would want to know, except, are there any values that you have used to cope in this COVID-19 period?	
76.	P2.4	Taught me to keep my mouth shut. Self-control. Self-control.	6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH (Personal growth)
77.	P2.4	Not to... your facial expressions [unclear].	
78.		A lot of voice overlapping occurs here.	
79.	P2.1	You're not allowed to look like that in a meeting, Miss, then it is sort of, what are you doing?	
80.	SD	Yes, yes.	
81.	EW	But if one can only show it with the eyes, then you are actually good, because with the mask, then...	
82.	P2.1	I must tell you, one thing that I discovered about the children and myself is: a) I did not realise how weak my hearing is, I did not know how much one should see people's lips to be able to hear properly. I never realised that I actually have a slight hearing problem. And with one of my test papers, I decided to test it. I placed photos of people with different facial expressions and all the children had to tell me was how the person felt. After a year of COVID there were lots of photo's that they could not identify. They could not distinguish between being cross or surprised, they could not make that distinction. And my photos were very clear, there were big differences. And I realised it with that exam paper, the children can't read facial expressions anymore. So, you [unclear] start off by telling them where you are on a level from o-o, o-o. They don't depend on facial expressions so much anymore. So, they don't see it anymore.	
83.	EW	P2.1, I think you should do a study on it. Think how interesting it will be.	
84.	P2.1	Between what? Between 2 and 3 tomorrow morning?	
85.	EW	Between 21:00 the evening and 3:00 when you get up.	
86.	P2.1	I am now the person P2.2, who you want to hit with something, but I am just going to say, no.	

87.	EW	That's very interesting. Can you believe it?	
88.	P2.1	Two weeks before the time – I showed them different slides and photographs and we spoke about the emotions and facial expressions and how long it took them to realise, oh, that is it.	
89.	P2.2	Something I also had to learn – uhm, it sounds stupid, but was compassion. Because, we are all fighting a battle. Sometimes when someone goes off at you, it's actually not anything about them ... -the other day, the poor woman...-she was the last pebble on my heap and I exploded. Then I had to go and apologise. It's not always pleasant, I was just like, you know – it actually has nothing to do with you, why I exploded now. So, to apologise and also to realise, everyone is fighting their own battle. So not everything is about you. Therefore, if the person shouts at you, it isn't really always about you.	6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH 5.1. SEEKING ADVICE OR INFORMATION 6.2. DRAWING ON REFLECTIVE PRACTICES
90.	P2.3	I ... what I wanted to say now is, patience. It is difficult to have patience some days, but when that colleague bursts in and goes off at you – sorry, don't kill the messenger. Just to understand, okay, something may have happened in the previous period or it possibly is a bad day. Yes, then don't take it personally and hold it against them, just continue tomorrow as if that incident did not upset you that day.	5.1. SEEKING ADVICE OR INFORMATION 3.3. CONSCIOUS DISENGAGEMENT
91.	EW	All of us have our own stories.	
92.	P2.3	Yes.	
93.	P2.1	However, it's astonishing to hear amongst the people, how many colleagues have started to use medication to cope.	6.3. MAINTAINING SELF-CARE (Medication)
94.	SD	Sjo.	
95.	EW	Okay. Yes.	
96.	P2.3	And it is frowned upon, isn't it? It's not funny.	
97.	P2.1	No, they ask each other, do you have a tablet for me? It was for me like, what?	6.3. MAINTAINING SELF-CARE (Medication)
98.	EW	Hmmm. Yes, there are ways. We had a list of questions with a lot of – I can name all of them for you – a lot of strategies. So now we want to see if what you are saying fits in here and what we can correlate. There is a lot of different strategies, not necessarily right or wrong, but it is very personal. And it is why we – you know, we appreciate it so much that we could tap in just to hear what the experts say, what our resilience is like in this time. So, yes, we really appreciate it a lot. I would just like to mention quickly, it may perhaps take a while, but if we write all of this up and there are still a few questions, is it okay if we just, one calls it member checking, so we add it to our themes and say, this is what we picked up, do you agree with it? You are still welcome to give inputs, in terms of, I actually meant it like that. So, if you agree, we would like to, at a later stage – and it is not compulsory – have your voluntary participation, just by email.	

99.	SD	Yes, we are basically just going to mention that we got these themes from all the sessions. Is it really what you meant or what you said? Then you can just give a sharp yes or no, or did you actually mean it. We will just amend it then, just to make sure that the data we pass on is a true reflection of what you really meant and used during this COVID-19 pandemic.	
100.	EW	Okay.	
101.	P2.3	It's fine.	
102.	EW	Thank you. From my side it was very valuable. There is not necessarily anything that I specifically would like to – you are more than welcome to mention more details or to chat.	
103.	SD	Yes.	
104.	P2.2	Goodbye.	
105.	SD	Yes, from my side, P2.1 and P2.3, I've also had enough from today's session so I don't have any more questions, but if you would like to add anything you're more than welcome. Otherwise, we are done with today's session.	
106.	All	Thank you and say goodbye.	
ONLINE PARTICIPATORY FOCUS GROUP 3: 30 September 2021			
1.	EW	Is there anyone who can start for us, can share? Something that stands out if one thinks back to last year and this year. I mean, we are still in it. Much has already changed. What made you cope? What has worked the best and what stood out? It's a lot of questions in one.	
2.	P3.1	I think whilst we [unclear] were that one's family members who are around you, that we carried each other and so on, And... [Two individuals talking simultaneously] ...to focus on the children. It's not on yourself and the surroundings. Its more on the children, to help them and support them. Then you feel you are there for a reason. And I think it gives you something to look forward to and to work towards.	6.4. NURTURING SPIRITUALITY (Meaning making, purpose)
3.	EW	Okay. Something that makes it more purposeful?	
4.	P3.1	Yes.	
5.	EW	Miss P3.2, I think there is something wrong with Miss's sound, because we heard Miss and Miss P3.1 at the same time. Is Miss's microphone at the bottom switched on so that Miss can hear us?	
6.	P3.2	Can you hear me?	
7.	EW	We hear, yes.	

8.	P3.2	Can you hear me now?	
9.	EW	We hear. If Miss can be closer to the circle, it will be better still.	
10.	P3.2	Okay. The sound is rather muted, sorry. No, I just wanted to hear, did you want to know about personal experience in the school situation, or school environment?	
11.	EW	Personal and school. But you know what Miss P3.2, click near to me, just underneath me, then Miss will hear more clearly if we are closer to the circle, the sound will be slightly better. Just click there with Miss's mouse. Click there near me. Place Miss's mouse there underneath me then Miss just comes a bit closer.	
12.	P3.2	O, okay.	
13.	EW	There you are. Is that better?	
14.	P3.2	Much better yes.	
15.	EW	Okay, right.	
16.	P3.2	What jumps to mind immediately in the school situation, and I see two of my school colleagues here as well. I can see that a number of us are standing together I think that what we could mean to each other and how we could give each other hope, was a strong coping mechanism in our situation. We shared a lot with each other and although we come from different environments, as far as our experiences and our school- and work experiences are concerned. So, for us, it was [unclear].	5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS
17.	EW	Okay. So, Miss means experiences and previous circumstances where there were perhaps difficulties that one could almost transfer to these circumstances?	
18.	P3.2	I mean, what we experienced, what was bad for us, what we enjoyed and what was sad, during the COVID time we shared with one another. So, we actually used each other as a sounding board.	5.1. SEEKING ADVICE OR INFORMATION (Bouncing ideas, advise)
19.	EW	Okay, it created a bit of togetherness?	
20.	P3.2	Yes, some togetherness of which we had actually had a shortage when you were on your own.	5.2. RELYING ON RELATIONSHIPS TO SEEK ASSISTANCE
21.	EW	Yes.	
22.	P3.2	When we came out of the lockdown it was almost a relief to know all of us have had the same bad experiences and shared it with each other.	5.2. RELYING ON RELATIONSHIPS TO SEEK ASSISTANCE
23.	EW	Yes, okay. Does anyone want to add anything? Remember, you are the experts. We have to learn from you now.	

24.	P3.1	EW, I want to add – I think the support groups at the schools were very important. Uhm, we have the grade guardians in every grade group at school and we have also now for instance made a group, or we have our own WhatsApp group, where we also shared with one another. When we were in total lockdown and we were not allowed at school, we tried to once a week arrange a Teams meeting, so that we as heads of the grade could talk to each other, besides talking to our friends and colleagues at school. But, yes, just to share things with each other, because the children started to suffer. We carried the childrens' social burden also rather badly, So the childrens' social co-operation was very important.	5.1. SEEKING ADVICE OR INFORMATION 5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS
25.	EW	What do you want to say, P3.3.	
26.	P3.3	No, I just want to say, from a personal or private point of view, I just want to say – I think had it not been that my husband had started working from home, these two years– I think it would have been more difficult for me. Because at least there was someone at home who could handle things while I went to school. So, in that way it made things easier for me.	5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS (Someone at home)
27.	EW	Yes, a little socio-emotional...- the context of one's circumstances and your system.	
28.	P3.3	I think in the past I would have done the difficult things at home myself, uhm, because he was away. You know, he was on the road or away for work. Uhm, the rolls have now a little ...you know, he's more at home now, uhm, could arrange things here a bit more, uhm, he for instance took the helper away, that I used to do in the afternoons, or helped with the children, with something. So, it made it easier for me to concentrate at school on the difficult circumstances there.	5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS (Someone at home) 3.1. PRIORITISING WHAT IS IMPORTANT AT THE TIME
29.	EW	Okay. If you say concentrate on the circumstances, was it for you to prioritise it so that it does not become half cluttered - to almost half ...- I don't know, I think of prioritising in terms of to do what needs to be done. Is it what you are referring to in both contexts?	
30.	P3.3	I think specifically with us in the grade R's, I think we are, uhm, you know, at the beginning of the pandemic, it was almost, you have to get the children comfortable – to wear the masks, to get them away from their parents. I mean, it's something that perhaps does not happen at primary school, but our parents always brought the children to the class. So, it required a lot of energy from us to get them so far as to leave the children at the gate. And, uhm, you know those types of things – to keep their masks on all day, uhm, not to touch one another all the time. So that part of our grade Rs was rather hard work. Uhm, we had to make plans to get them so far as to leave their parents at the gate. Uhm, make plans to get them to the gate in the afternoons again. You know, such things.	2. PLANNING
31.	P3.1	Emotional support, that one had to do extra as well.	5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS
32.	EW	Yes. So, there was also almost lots of adaptability. That's what I also hear.	

33.	P3.1	Sorry, EW, I cannot hear P3.3 at all. So, I cannot follow the discussion at all.	
34.	EW	I find it strange. I wonder if you can't, just below her and P3.4, insert your mouse, click and then move closer. Move closer and see if it won't perhaps help.	
35.	P3.1	Now I also see her, thank you.	
36.	EW	I don't know what the problem is today, so I apologise.	
37.	P3.1	Sorry. I don't want to repeat what she said or so...	
38.	EW	No, its fine. We would like to hear everybody's perspective and everybody's experiences. That's what it is about yes. P3.4, I know you have less time, would you like to share some of your views before you have to go? Okay.	
39.	SD	I wonder if p3.4 can hear us, because I notice that p3.4 is still muted.	
40.	P3.4	I have unmuted myself. Can you hear me?	
41.	EW	We hear.	
42.	P3.4	I noticed how we pulled our children off from their parents. They don't want to come and we still have children who are in the mind space – they are afraid to come to school. It's a big problem with the seniors, because we have to submit and finalise our assessments, but the children don't come to school, because they are scared. We found with the seniors that they support each other and I must honestly say, it was something very positive that came out of COVID. Although the circumstances were very bad, to me it was very positive to see ...[unclear]... They went through the same trauma. Many of them lost grandfathers and grandmothers, and I must say, uhm, I noticed in one class how two learners were so uplifting towards each other because they had gone through the same within the same week. [unclear]. It was a rough time, and we still have children who are scared and we still have to try and lift them up and tell them ...[unclear]. But yes, we try our best to motivate them, but it can only go so far. So, yes.	6.5. EXERCISING OPTIMISM
43.	EW	Yes. Yes, I hear. It also drains one's own energy. And then one also has to cope on your own.	
44.	P3.4	When you get home at night, you have to support your own family as well. [unclear] It drains one. [unclear]	
45.	EW	Yes. So, that is what we would like to hear now. We are talking about the school now and the challenges at school. But, where you felt you were drained, what did you do to gain energy, to handle it and to cope with it? There were discussions about talking to colleagues, to form WhatsApp groups and support groups at school. But what other strategies do you think were valuable to you? And possibly the most valuable?	
46.	P3.1	May I talk EW?	

47.	EW	Yes, please.	
48.	P3.1	To me it is just jog, exercise. And what I also enjoyed was, I am a member of a running club, and because one could not take part in races during that time, the club gave us - what they called a club challenge – they gave us a challenge every week. You know, during the hard lockdown and afterwards, they gave us a challenge that was rather hard to run. And it was for me personally it was very good, because it motivated me to keep on running. Due to not having a fixed routine when we were at home, look when one goes back to school again then you have routine again, but at home there isn't [unclear] really you know we now started at 8:00 with Google Classroom, but no one bothered whether you were dressed and pressed - and things like that. But for me the jogging, it is my sanity, has been already for a few years – and it especially worked in that time. However, I think that extra challenge that they put to us every week has helped a lot.	6.3. MAINTAINING SELF-CARE (Healthy habits) 2.2. MAINTAINING A ROUTINE
49.	EW	Yes, it's almost a lifestyle that has always worked, but what has proved itself to you now as being very valuable.	
50.	P3.1	Absolutely	
51.	EW	Hmm.	
52.	P3.2	I think the fact that one felt so restricted initially gave you the need to physically do something. I think I walked quite a lot. We went on long walks every morning and there was a certain routine of walking and ...my husband is retired, so it was good and pleasant exercise. I started doing Pilates as from the beginning of the year. I have gained from it tremendously. I am upset if for some reason I cannot attend it. So, I think if one can do it, not only Pilates, any physical exercise; it is an excellent outlet for any person. One doesn't realise it until you start doing it.	6.3. MAINTAINING SELF-CARE (Healthy habits) 2.2. MAINTAINING A ROUTINE
53.	EW	Yes. Yes. P3.3? P3.1?	
54.	P3.3	For me, it was lovely to be at home, and I want to say, almost to sort out my own life and the things that I've been wanting to do for some time but never had time for. Then one again feels in control of everything and everything falls into its place again. Yes, I rather enjoyed to just do small tasks for which one doesn't always have time during a term or during holiday time to sort out and get in order.	4.1. ACCEPTING THE SITUATION FOR THE TIME BEING (Own time as resource towards resilience) 2.3. STAYING IN CONTROL OF WHAT IS POSSIBLE
55.	EW	Okay. To create some structure again.	
56.	P3.1	I think that is the same for me also. Yes, I think, yes, I should probably get around to exercising and so on; that is a - but I think with our children and so on, things went crazy the last few years. However, uhm, I think, where one never had time, just to read a while and be lazy. That I think, just entered my mind. I know it must change at some stage and one will come back to it.	4.1. ACCEPTING THE SITUATION FOR THE TIME BEING

			(Own time as resource towards resilience) 6.3. MAINTAINING SELF-CARE
57.	EW	Different people have different ways of doing it, but at the end of the day it perhaps is what I hear – and you can tell me if I understand it differently or wrong – but to me it sounds like self-care. Understand. If it is important to sort out your house because you feel that you have control, then one feels better. If one exercises and you feel all those endorphins, it helps. When you read a while and have your bit of me-time, its selfcare. Peoples' ways of doing it differ and there is no right or wrong.	
58.	P3.1	It's like trying new hobbies or trying out new recipes. Goodness, I think all of us have tried out new recipes. The kitchen and the children...	6.3. MAINTAINING SELF-CARE 1. ACTIVE COPING (New things)
59.	EW	If you found flour in the shops at that stage, you did ...	
60.	P3.2	I actually started digging in the garden. What I have always done, but what I now had a little more time for.	4.1. ACCEPTING THE SITUATION FOR THE TIME BEING (Own time as resource towards resilience) 1.1. KEEPING BUSY AND DOING TASKS 6.3. MAINTAINING SELF-CARE
61.	EW	Okay.	
62.	P3.4	We also dug our garden up a bit. It's as Miss P3.3 said, things we never have time for under normal circumstances, but [unclear] I mean the family time that we spent in the garden, and I must say, I was very thankful for the lockdown at that stage. I am possibly the only person who says so. (Name) was born during that time and I have to confess, if it hadn't been for (Name) to help me, I think I would probably have become rather silly. So, I was very thankful to have him here with me, and I must say, I am very thankful to have him here with me. I must also say, he works a lot and terribly hard... [unclear]. I was so thankful for the time that we could spend together. I also love jogging. If I can't go and jog, I feel frustrated. One feels like you can climb up the walls. To be able to be in the garden and walk around a bit to feel one gets fresh air and exercise meant the world to us.	1.1. KEEPING BUSY AND DOING TASKS 6.3. MAINTAINING SELF-CARE 4.1. ACCEPTING THE SITUATION FOR THE TIME BEING (Own time as resource towards resilience)

			5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS 6.3. MAINTAINING SELF- CARE (Healthy habits)
63.	EW	Okay. Yes. It's wonderful.	
64.	P3.1	P3.4 and (Name) are former learners of mine.	
65.	EW	We are happy to bring you together again.	
66.	P3.4	It's a small world.	
67.	EW	Yes, you also don't have to worry. What is said here, stays here. You are welcome to go and have coffee afterwards to connect again. Yes. No. It is. So, there are lots of lifestyle, selfcare and family time that sounds as if it was almost prioritised. And that is very valuable. Have you learnt new things about yourselves? Miss P3.2 said just now she enjoys Pilates. Were there other things that you learnt about yourself?	
68.	P3.1	I clearly learnt that I will never be able to be a housewife.	6.1. ENGAGING IN SELF- DISCOVERY AND PERSONAL GROWTH (Self-knowledge)
69.	EW	Yes. Yes.	
70.	P3.1	It's lovely at home, but I once again gained respect for people who do housework and for maids, because yes, I don't think I am fit for it. One also realises how much you have to be thankful for. Things that you always took for granted, you realise are ...even the small things in life that you've taken for granted – you realise are not so ordinary and obvious, one should appreciate that it is valuable.	6.2. DRAWING ON REFLECTIVE PRACTICES 6.4. NURTURING SPIRITUALITY (Value orientation)
71.	EW	Yes. Yes. There we see you now, P3.4. Oh, for a moment.	
72.	P3.3	I can explain to you what she looks like.	
73.	P3.1	I think I learnt very quickly what it is to keep the mask on. I already started trying out different masks in lockdown and had them delivered here. I thought you knew; I will never be able to keep it on my face. So, I've learnt now that one can do it if you want to. It was quite a battle for me, but yes. Half the time the mask was not completely on my face at school, and it still is not. But, yes, I learnt to live with it.	1.2. ADAPTING TO CHANGED CIRCUMSTANCES (Do what is needed, flexibility)

			4.1. ACCEPTING THE SITUATION FOR THE TIME BEING
74.	P3.3	I think another skill that we acquired was to make videos and no more. [voice overlapping]	1.1. KEEPING BUSY AND DOING TASKS 1.3. ACQUIRING NEW SKILLS
75.	EW	Technology.	
76.	P3.5	With technology yes. Especially for people who were born before computers, we have lots of personnel who were not comfortable with computers. And then you have to make a video or something. And initially one is uncomfortable the whole time. And oh, yes. One records the stuff 120 times. And at some stage you just realise, everyone looks like that on the video. We just carry on. One makes peace, but I think the skills that we've acquired with online teaching to do all those types of things. It takes one to the next level. One underestimates yourself and thinks you won't be able to do it, but then it is actually unbelievable how much one learns.	4.1. ACCEPTING THE SITUATION FOR THE TIME BEING 1.2. ADAPTING TO CHANGED CIRCUMSTANCES 1.3. ACQUIRING NEW SKILLS 6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH
77.	EW	Yes. Yes.	
78.	P3.2	That's very true what you are saying.	
79.	P3.1	I think much self-development has taken place in this time. That you've improved yourself.	6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH DEVELOPMENT
80.	SD	Yes.	
81.	P3.3	Yes, we were forced.	1.2. ADAPTING TO CHANGED CIRCUMSTANCES (Forced)
82.	EW	We had to adapt. Yes, and it is what we are seeing. We see resilient teachers and that is what ...So it really is amazing. I can see now how hard all of you are working, so. SD?	

83.	SD	May I hear more specifically in terms of self-development what you've named now? In terms of that specifically.	
84.	P3.3	No, it is as P3.5 also said. You know, technology doesn't really appeal to me. It really has not been a priority in my life, but as she says, we were forced. We had to attend Google Classrooms, we had to attend courses that taught us how to use Google Classroom.	1.2. ADAPTING TO CHANGED CIRCUMSTANCES 1.3. ACQUIRING NEW SKILLS
85.	SD	Yes	
86.	P3.1	And one had to get out of one's comfort zone. And you had to risk and try to succeed in doing things. I think at a stage the stress levels were very high and so on, but if you've managed it, you feel like you've attained something. Yes, you feel you've empowered yourself. You feel you've improved yourself. Things that you would not have attempted earlier, or would have looked at, you investigated and realised that you can actually do it. Yes, as P3.5 said, you risked.	6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH 1.3. ACQUIRING NEW SKILLS 1.1. KEEPING BUSY AND DOING TASKS (Work activities)
87.	P3.3	I can only corroborate.	
88.	P3.2	I just want to say, I am one of the oldest teachers at school. So, for me it is a huge challenge. I am thankful for this time, because I acquired skills, that I would not have learnt if I had not been in this situation now. It was extremely stressful for me. But if one looks back on it now, you cannot imagine that you were actually so stupid. It is as if you've climbed a mountain.	6.4. NURTURING SPIRITUALITY (Value orientation) 1.3. ACQUIRING NEW SKILLS 6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH
89.	EW	Yes.	
90.	P3.2	We have definitely learnt skills that we did not have.	1.3. ACQUIRING NEW SKILLS
91.	P3.1	I think emotionally also, one can actually cope with much more than you think you can. How can I put it, I think we carried and also supported one another, as P3.2 has said? But you also realised, you are a stronger person than you had thought. And it is not always as bad as you had anticipated it to be. I think one grows in your personality as well as in your being.	5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS 6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH

			6.5. EXERCISING OPTIMISM (Positive reframing) 6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH
92.	EW	It is very valuable. And that is precisely what resilience is. The definition for Resilience is about – one cannot describe it as resilience if there are not challenges and if you are resilient, you emerge better on the other side. So, it is precisely what you are saying and it is wonderful.	
93.	P3.5	They say if there aren't challenges, no growth takes place. The moment when there are challenges, you know, growth and development take place.	6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH
94.	P3.3	EW, I think, in my case, I am someone who likes what is familiar. To me it was actually a terrible story, especially the computer that came into the picture as well. So, it forced me to move on, you know, if I had not been forced to.	5.1 SEEKING ADVICE OR INFORMATION (Need a voice) 1.2. ADAPTING TO CHANGED CIRCUMSTANCES
95.	EW	Yes. So, it is that adaptability and getting out of your comfort zone, as P3.1 said.	
96.	P3.3	Yes. No, definitely.	
97.	EW	Yes. No, it is very good.	
98.	P3.3	Yes. So, I agree. I agree with that, yes.	
99.	EW	Yes. SD, would you like to ask or add anything more. Or does anyone still have a ...uhm.	
100.	SD	Yes, I am rather inquisitive about, about values, about your things that you value more, now, that you previously perhaps did not value so much. Things that you will now specifically make time for because you realised during this time, that it is necessary for me to have an enjoyable and a pleasant day or experience, in order to be able to cope. Is there anything specifically that came to mind that you realised?	
101.	P3.5	I think I just realised, time with your loved ones is very, very valuable. We try to make time, because one never knows how long you have them. I think it has always been like that, but with COVID you see healthy people – you see them today, tomorrow they aren't there anymore. I think then one realises, time with your loved ones is very valuable and one should make time for it	5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS (Presence)
102.	SD	Definitely	

103.	P3.1	I would also like to add, the fact that I think concerns us, especially for us who are in teaching, can so easily become entangled in our own rat race. You know, because it must be done, all the work must be finished, and I don't know if you also feel like that some days... And that peacefulness that one had during lockdown, that you could feel gosh, but there is actually a life as well. Then one tries to half prioritise and say fine, when the school starts again, I am going to make time for my hobby, and I am going to make time ...before reality kicks in again. However, I think I got a bigger awareness of time with my family and my loved ones , but to also make time for a hobby and to do something that is relaxing, because, do you know, it's good for the soul because, you know to make time to paint or to sew; uhm, are what I felt add that value to my life. One should beware of not being so caught up in school tasks all the time, that you miss yourself. Self-care to me is actually a point on which I keep a close eye now. Yes.	4.1. ACCEPTING THE SITUATION FOR THE TIME BEING (Own time as resource towards resilience) 3.1. PRIORITISING WHAT IS IMPORTANT AT THE TIME 6.3. MAINTAINING SELF-CARE 5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS
104.	SD	And when we came back full steam with all the children and teachers, not every second day or a certain number of children in class, do you find it difficult to adapt and still have to function with this COVID-19 pandemic?	
105.	P3.2	I think what was the most difficult, is that one wants to see an end to it, a beginning and end to things. It feels as if one almost thinks, okay, now I've overcome this just to realise, but we aren't there yet. I am an eternal optimist, so I always want it to turn out well, and then one must return to reality and say, no, it hasn't worked out the way you expected it to. It happens constantly, but to adapt and to remain adaptable is extremely important. So, I think it is a benefit, if one can do it.	6.5. EXERCISING OPTIMISM (Positive mindset, hopeful mindset) 1.2. ADAPTING TO CHANGED CIRCUMSTANCES
106.	EW	Okay. P3.3, you wanted to say something earlier. I think you wanted to say something about values?	
107.	P3.3	Yes, I wanted to say, I think what we have not always realised, one could not really plan, uhm, during that time. It's also something we discussed with the grade R's a number of times. One wants to book a holiday; it's actually something that one accepts as obvious, that one can plan tomorrow or the day after, the weekend and the holiday, but we just can't do it anymore. So, I think it brought me that reality – of, do you know things can change terribly fast. I mean, would we ever have thought things could have changed so rapidly? In my life I would never have thought something like that would cross our paths, with the result that one cannot plan anything.	
108.	SD	Yes, one learnt to be flexible and adaptable. As circumstances vary one adapts to accommodate it.	
109.	P3.5	Yes, and then one has to remain positive. If I can apply it to school activities, that one just...- it's part of school – sport and culture and activities; and suddenly everything is closed. Now it starts to reopen again and one prepares for a big sport assembly and then COVID-19 wave 3 appears – and two days before the sport assembly, they say, no sport will be allowed. Then it is cancelled. It is then the task of you as teacher to uplift the children, because they have looked forward to this day, which suddenly falls away. There is nothing left, no rugby, no netball, no	6.5. EXERCISING OPTIMISM (Positive mindset)

		hockey, no stirring up of enthusiasm. And I must say, I realised that at our school for instance – it was a terrible disappointment for the whole school. But how the teachers actually had to step in and uplift the children and say, guys, this is unfortunately what we have to deal, with, we cannot...- you know however one plans, it can change at the drop of a hat. That resilience that one should transfer to the children, because I think the children are struggling terribly with it. Uhm, but I must say, it was rather – I can't say a value in my life, but something that I realised and experienced in my life during this time is the fact that things we are used to having at school, are suddenly gone. It has an influence on the staff members and the children. Especially those who live for their culture, sport and so on.	6.4. NURTURING SPIRITUALITY (Meaning making)
110.	EW	Hmm	
111.	SD	Yes	
112.	P3.4	Miss P3.5, I agree with Miss. With us, we especially noticed with sport, the children are not as motivated to come, because they feel we practice and practice, and they ask, to what avail? In the end we can't give them an answer, because we also don't know what for. We know it's good for them, for their well-being, so we urge them to keep on exercising, because when things eventually re-open we can take part in sports events again. Our children can however not grasp it. They want to exercise for a reason and towards a goal. The same applies to us, but we understand the concept of it being good for our health [unclear] that selfcare...But they want to see that event and know they are practicing for something.	5.1. SEEKING ADVICE OR INFORMATION 6.3. MAINTAINING SELF-CARE
113.	EW	I think her internet is perhaps a bit ...The sound is erratic.	
114.	P3.3	At our school we often say to each other, especially in the junior phase, teachers must be adaptable. I notice that the children are also learning to adapt. You know, it's difficult for them, but they are also learning that skill to adapt. [unclear]...learning a characteristic that they probably never would have had and, uhm, I think their personalities are being strengthened. I saw with my own children, they played a match, and there were no supporters. It was bad for the first match, but afterwards ... just to take part was a privilege. So, I think they learn from the whole situation and take it with them.	1.2. ADAPTING TO CHANGED CIRCUMSTANCES
115.	EW	Hmm.	
116.	SD	Yes.	
117.	EW	Yes, I have received so much valuable information from you today and it was so insightful. I think it is already my and SD's third session, not so?	
118.	SD	Yes.	
119.	EW	And it is unbelievable just to see how children (humanity) and how teachers have come through it. Specifically, how they came through it and specific things that helped all of them. And oh, it humbles me - it was really a privilege to have shared it with you Thank you very much for the time that you have set aside. We don't want to keep you	

		unnecessarily. We don't want to stretch things, so if its, we want you to share and be part of it, but if you feel there is not necessarily anything to share currently SD, if you would like to ask anything more...	
120.	SD	No, from my side I am fine.	
121.	EW	So, we really appreciate you and if there is anything more, we would like to hear...	
122.	SD	We are perhaps in a while going to do member checking as soon as we've finished writing up our data, but it won't be very long. Maximum 10 to 15-minutes where we will just check in to say, this is what we got from you. This is how we report it in the research and where you just confirm to say, yes, it is what we meant. And, yes, it is what we said. Or, no, I did not mean it that way, this is what I meant – so that we can change it in our research just to ensure that what we write down is what we really got from you is true and stated correctly. But, uh, it will be in a while.	
123.	EW	Yes, it will probably rather be by email. If there is anything you would like to say, you are welcome. If you don't feel like it, it still is voluntary.	
124.	SD	Voluntary. Definitely.	
125.	EW	So, if it can...otherwise. There is already so much valuable information and we've learnt from you; it correlates with what we've seen and with the statistics. So many, many thanks for your time. We appreciate it tremendously.	
126.	All	Goodbye.	
ONLINE PARTICIPATORY FOCUS GROUP 4: 4 October 2021			
1.	EW	We have seen from our quantitative data, or the statistics that we received, that you are in fact resilient, if we talk about resilience. Because that is what we've now tested, to see how resilient teachers are and what they've done to remain resilient during COVID. So, if you can perhaps, informally on the floor, open up and tell us what you did, what helped and supported you. Remember, there is no right or wrong, it could have been anything and in any manner, that worked best for you. Miss P4.1?	
2.	P4.1	EW, I think, I was so busy in that time, I hope it makes sense. I was so busy that there was no time to cope. I don't know, can there be something like that?	1.1. KEEPING BUSY AND DOING TASKS (By staying busy) 1.2. ADAPTING TO CHANGED CIRCUMSTANCES (Do what is needed)
3.	EW	Yes, there can, so one was almost – you had to prioritise other things? There you are. Yes, Miss?	

4.	P4.1	Because when I realised, another week had passed. And then suddenly, we had gone through another wave, or I had had to handle something else. And, and one just had to jump in and swim. It's not as if the world waited for you. It's not as if everybody said – oh, it's now COVID, we'll quickly stop all the other things, so that all of us can recover, and once we've become used to all these things, we'll carry on. At a stage, I would think, sjo, where was I when we went from this level to that level. Where was I when we went from so many people had been hospitalised to so many hospitalised. To me it felt as though I had missed a few things. I don't know if it was a blessing in disguise, because the fact that I had missed it, did not bother me that much – however, when I realised, wow, how the numbers had grown, how far we are with Google Classroom for instance – then a lot of things had happened, and I had had no time to recover strength. I must say, only when someone very, very near to me fell ill, you know, did I [sound of fright] I think my eyes were big, and oh, if it can happen to him, who in fact, I think, you know, is someone who is a sporty type of person. He exercises, he, you know, he is not really overweight, he is not over weight, he is not diabetic. If it could happen to him and he became so ill, sjo, then this is a terrible disease. But luckily, dear Lord Jesus had carried him through, so.	1.1. KEEPING BUSY AND DOING TASKS 1.2. ADAPTING TO CHANGED CIRCUMSTANCES (Do what is needed) 6.2. DRAWING ON REFLECTIVE PRACTICES (Making mistakes, being vulnerable) 6.4 NURTURING SPIRITUALITY (Religion / Faith)
5.	EW	We are thankful for it.	
6.	P4.1	We are thankful. Yes. I must, I just want to say one more thing – I prayed a lot. I hope you are not judging me as – oh, there she goes again.	6.4. NURTURING SPIRITUALITY (Religion / Faith)
7.	EW	Not at all.	
8.	SD	Not in the least P4.1.	
9.	P4.1	As, you know, I drive quite a distance to school every day. And I switched off Jacaranda, just, when I knew it was time for the traffic report, quickly switched it on. But the rest of the time I was busy praying. And not always for anything specific, uhm, I just spoke to the Holy Father and said, please help me today, because I don't know how to do it. I wanted to be an example to other people on how to handle it, so I did not want to lose courage. Other people would notice and say, well, if she can't cope anymore, then, then we have a problem. Uhm, and thank you, Lord, because some people said to me, somewhere it will catch up with you, then you will just crack and have a meltdown. But thank heaven, it did not happen. And it is just mercy, because it is just mercy. Okay, now I have said enough.	3.2. CONSCIOUS DISENGAGEMENT 6.4. NURTURING SPIRITUALITY (Religion / Faith)
10.	EW	Thank you very much. It is very valuable. So, it was actually prioritising and religion, and just positive thoughts? I understand Miss, if I add it all up?	
11.	P4.1	Definitely, positive thoughts.	6.5. EXERCISING OPTIMISM

12.	EW	Okay. Thank you. I see (participant), said his internet is a little, he may just move in and out, but we will talk to him. Thank you, Miss P4.1. Miss P4.2?	
13.	P4.2	I would like to agree with Miss P4.1. In the beginning it was strange and something new. We have never been confronted with anything similar and it was – the most important thing about it is, it is a worldwide pandemic – it almost grouped all human beings together and one saw how other people coped . Humans are made that way, God made human beings so that we have a mechanism to go into second gear and pull through. I mean, our forefathers walked over the Drakensberg. It took me back to my primordial instinct and, our Afrikaans culture which is to turn to God. And I must say, God carried us through. When I look back. I must say, Lord, You were with us when the shadow of death was lurking around. But what I pity is the bluntness that is noticeable with everybody. In the beginning we were prepared and we did the things they asked and I kept busy because I could not handle the monotony, of watching TV all the time, and keeping an eye on the number of deaths and so on . However eventually, you know, one felt, what must happen, has to happen . That to me is upsetting of people, the bluntness that appeared. I kept myself busy, I came through this and that is wonderful. Work keeps me busy so I don't have to think about it so much . As Miss P4.1 said, my family has survived it, survived COVID. I had COVID severely and after we had had it, we were again – all so were prepared, wore masks, took vitamins and made sure all of us were all right. And it made me feel scared and I was nearer to God again and God was nearer to me. But you know what, that also passed and, uhm, bluntness stepped in. I think one's nature is, you can't for so long, for 24-7, be adrenalin busy with this thing. Things must return to normality, otherwise you must take what comes to you . But throughout this I must say, my faith in God has been my anchor. To whom do I turn, except through You. I must say, throughout the whole process, my faith was strengthened. I don't want to know how anyone reacted or coped, if they were not anchored in Christ. That's all I will say.	5.1. SEEKING ADVICE OR INFORMATION 6.4. NURTURING SPIRITUALITY (Religion / Faith) 1.1. KEEPING BUSY AND DOING TASKS (Stay busy, follow instructions) 3.2. CONSCIOUS DISENGAGEMENT (Keeping busy with work instead, and from negative news) 4.1. ACCEPTING THE SITUATION FOR THE TIME BEING 1.1. KEEPING BUSY AND DOING TASKS (Stay busy, follow instructions) 6.4. NURTURING SPIRITUALITY (Religion / Faith) 4.1. ACCEPTING THE SITUATION FOR THE TIME BEING
14.	EW	So, for Miss, it was a very prominent handling mechanism?	
15.	P4.2	Handling mechanism and absolutely, a root. I realised how deeply anchored my faith was - especially in the Christian religion – where God told us He would never abandon or forsake us. And I called upon God in this time. I am also going to say the same as Miss P4.1, I do not want to adhere to it, but to me it was an absolute growth in my faith. And I can call out – the Lord is alive! He will never abandon or forsake us. It was an absolute deepening. My family time has also deepened and it has enabled me to move forward . And of course, my work ethics are –	6.4. NURTURING SPIRITUALITY (Religion / Faith)

		keep busy. Don't concentrate on the negatives all the time. You are in this, you will get through, as all of us did over the years. It was an experience that I learnt a lot, I got to know myself. And in fact, a thankful experience. But as I say, the bluntness thereof, came with it. Yes.	5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS 1.1. KEEPING BUSY AND DOING TASKS (Staying busy) 3.3. CONSCIOUS DISENGAGEMENT 6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH
16.	EW	I just want to ask – sorry, I have many questions and I don't want to bombard Miss. I would also like to get to P4.4 and P4.3. The bluntness - does Miss see it as a positive manner of how people coped? Because they – I want to understand it correctly – because they are not as focused on it anymore – Miss did not use the word, but in my head, “paranoid” comes to mind. The bluntness, was it a positive thing, or did Miss experience it as something negative, almost – emotions that were dulled and confirmed that people were not as connected anymore.	
17.	P4.2	You know, one cannot experience these high adrenalin levels 24-7 – sometimes it is, I cannot handle this stress constantly. That one gets to a point where you say, do you know, just let go. And as my son says, let go and let God. The positive side is that you realise that the time has come for you to stand back and believe that God is in control. We have prayed and said, God must be in control, and now you want to do it yourself all the time. There are certain things one must not neglect – such as for instance, sanitise your hands, wear your mask. But to be paranoid about it, I believe, is not right. We are not made to be like that all the time. You cannot 24-7 be on this high adrenalin level all the time. You have to stand back, take a breath and say – you know, that helped me, I am a paranoid person. I am constantly stressed. My jaw has gone into a spasm for which I had to be treated. Uhm, what I should have known, now I must turn back, now I have to take a deep breath, now I must know, God is in control. As He has always been. And what must happen, must happen. We had COVID. I had my first vaccination; I had my second one. Now I must return, things must carry on normally. It is necessary for one to then [unclear] It is a good thing for me to...-yes, it's blunt, but to relax with this bluntness.	4.1. ACCEPTING THE SITUATION FOR THE TIME BEING 6.4. NURTURING SPIRITUALITY (Religion / Faith) 1.1. KEEPING BUSY AND DOING TASKS (Do what you can) 4.2. REMAINING CALM
18.	EW	Okay. Okay. So, it's almost half a positive...?	
19.	P4.2	Its positive yes.	
20.	EW	Okay. Okay. No, I understand. Thank you. P4.3, P4.4, Do you ...uhm, we would like to hear from you. I don't know, P4.3, if you would perhaps like to tell us, what has helped for you, how did you handle everything?	
21.	P4.3	All right, apologies P4.4, I am a bit ahead of you. I would like to say exactly what Miss P4.1 and Miss P4.2 have said. I think it was, to summarise, a personal journey for each one, for everyone actually the same. But for each	5.1. SEEKING ADVICE OR INFORMATION

		<p>one, for all of us it was actually the same, because all of us were in the same situation. As Miss P4.2 has said, worldwide, we are all in the same situation. Uhm, so absolutely also the religious part. We don't have to elaborate further now; I think it is a very personal thing how each person has grabbed hold of it. I think what was for me the biggest [unclear] – we have all been dumped together in the same mess. I wasn't the only one who had to wear a mask, I wasn't the only one who had to teach online with two children. I wasn't the only one who was suddenly in this situation, its all of us. Everyone's situation looked different, it's not as if, if we had to compare me and you for instance – your work circumstances in level 5 were perhaps more positive throughout the day, in the sense that your work environment was quieter which enabled you to be more productive. My work circumstances during the day were not so easy, because my responsibilities as family member and mother were required elsewhere. But it made no difference that one of us was in the situation slightly less and the way in which we... - yes, all of us had to wear masks and everybody had to stay home. And I feel actually, as teacher under very stressful circumstances, one must perform, you must teach and its totally different. But our big consolation was, you were never alone. You have many colleagues. An excellent school management board who said, listen, here's the plan. We were wondering what the plan looked like when it was already on the table. It was typed, neatly and told you, listen here friends, this is what we do, this is how we handle it, uh, let's make a success of it. Then you felt, oh, I don't have to think of a plan, I don't have to stress about it, yes - I think it was for me the biggest part. I almost want to say, if you compare the disease with something like cancer – it is something very lonely, because you and your family, or the concerned family are going through this specific something. But this was, for all of us the fear was the same. Everybody feared, firstly, will I get it, what will happen if I get it, uhm, that uncertainty was rife with everybody. You knew you were not alone in your uncertainty.</p>	<p>5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS 1.2. ADAPTING TO CHANGED CIRCUMSTANCES (Do what needs to be done) 6.4. NURTURING SPIRITUALITY (Religion / Faith) 2.3. STAYING IN CONTROL OF WHAT IS POSSIBLE</p>
22.	EW	<p>Okay. So, for you it was the togetherness and to know the people surrounding you were going through the same, actually, together with the aspect of faith, was of great value to you. Do I understand it correctly?</p>	
23.	P4.3	<p>Yes, the burden that you have to carry is so much lighter, because you are not carrying it alone. So yes, it was the biggest part and, uhm, that also helped a lot – as they said, in the beginning we watched TV, kept an eye on the media and on the figures. But to do real research and to read up on the real facts, where you are finding yourself. Not to subject yourself to the hundred and two million thousand fake news reports. And you can bring it back to faith. Or, just to focus on the truth and the positive side. Yes, I think it is also about my view of life – I choose, it's a daily choice that I make – to choose to see the positive rather than the negative. To focus on what is good. Because if we had to focus on everything about COVID that is negative, – you will be in a permanent rut, because, if one really thinks about it, it is unbelievably big. And so many people are dying and it's so nearby. Just choose to see the positive, not to totally dismiss the negative, not to shove the negative aside, but to keep your focus on the positive. And also, all people in the world are not from the same religion... Choose to focus, as Miss P4.2 also said, choose where you place your focus, it makes a huge difference.</p>	<p>5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS 1.1. KEEPING BUSY AND DOING TASKS (Research) 3.3. CONSCIOUS DISENGAGEMENT 6.4. NURTURING SPIRITUALITY (Religion / Faith) 6.5. EXERCISING OPTIMISM</p>
24.	EW	<p>Yes. And the people who surround you, basically in it.</p>	

25.	P4.3	Hm.	
26.	EW	Okay. Thank you P4.3. P4.4, can we hear from you? I see you said in the chat: “faith is what carried us in this time of uncertainty. We are very focused to make sure the children stick to the protocol and it was a big responsibility that rested upon us. Or rests on us. P4.4, are you there? Sorry, we’ll hear again now. So, what I hear in the session today, and SD, please, you are welcome to join in as you see fit and the rest of you as well. Remember you are the experts here. So, we would like to learn from you and hear – it is positivity, faith and then the togetherness. That is what stood out for me, are there other strategies, socio-emotional, or possibly cognitive –that possibly helped? Hello P4.4 are you there?	
27.	P4.4	Hi, sorry, I only got it right now.	
28.	EW	No, its fine. Thanks a lot.	
29.	P4.4	I feel that colleagues have also supported one another tremendously throughout this difficult time. In times when we felt unsure and afraid and wondered how we would get through this, the colleagues supported each other. And, if you felt you did not know how you would go forward, a chat with a colleague always made you feel better. Just to see all of us go through the same fears carried us through this time.	5.1. SEEKING ADVICE OR INFORMATION 5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS
30.	EW	Did you sound-board a bit as well? You are welcome to switch on your cameras. You don’t have to, but you are really welcome. Hello Miss.	
31.	P4.1	I also think people opened up more and sound-boarded with each other.	5.1. SEEKING ADVICE OR INFORMATION
32.	EW	Okay	
33.	P4.1	If I think back, I now think, my days just after we were back at school – remember, I did not have a class at that stage but then – at the end of the day I think, I have not done any of my work, but – five people came into my office and chatted. Sometimes about COVID. However mostly it was about something totally different. And then, when they had left, I thought I, gosh, I never realised something so small could upset one to such an extent or become so big. However, I just realised that COVID had actually pushed them to the brink of their endurance. Meaning that, what they had to cope with that day, was not so bad; when they came into my classroom, they probably wondered how they could approach the matter and share it while in fact their frame of mind and their emotions were filled with COVID. So, when they had to handle another small matter, it became a mountain. Yes, thank heaven, we could converse in that time, we could talk to each other because, one heard of people who became more and more depressed and worried about things, but when they could talk, it gave them some relief.	5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS
34.	P4.2	EW, can I say something?	
35.	EW	Yes, please. Thank you, Miss P4.1.	

36.	P4.2	<p>If I think back, if I think back to those 6 weeks when we had the total lockdown, I remembered someone had said, as a baby needs its mother, a mother needs her baby. What I realised – I am a teacher. The 4 weeks was a welcome holiday, but later I longed – for teaching. I longed to stand in front of a class. It is my domain and I needed my children, my learners. I felt as if</p> <p>I got my energy-bounce from my children, my learners. I also realised the children needed me, as much as I needed them. It was interesting. I told my husband I am going to retire much later than I had thought I would. I needed my learners and I missed them. And they missed me. Someone once said, like a baby needs her mother, a mother needs her baby. What I realised was – I am a teacher. I decided to come into the class and I saw the children – I noticed that they were scared – as scared as we were. And I decided to do something more practical. I went inside, and it was as if the Lord – I hope you don't think this is a Biblical talk – but I felt God had lain it upon my heart to greet them. And I said, I greet you in the loving Name of our Lord Jesus Christ. He who was, who is, and will always be. And I taught them Ps. 46:10 – “Be still, and know that I am God; I will be exalted among the heathen, I will be exalted in the earth.” At first, they looked at me, totally confused. But you know, after a while – if I came into a class and forgot - I had a few classes, five at the time - when I would come in and forget, they would put up their hands and say – we greet Miss in the loving Name of the Lord Jesus Christ. And, uhm, each time they came, they would put up their hands and say, “Quiet”. I must say, when I was cross with the children, and I have often been angry at them – it was a way in which to ground myself. To know, you know, each time, five classes – they said to me: “Be still and know that I am God”. But what I intrinsically realised is, I am a born teacher. Because I needed some of their energy to carry on. I told the principal, uhm, I need the energy from the children. I need the parents' complaints. I need my colleagues. What we also realised, this platform was good and well for a while, but it cannot take the place of a teacher. Now, after a year, we notice that people do not go to Google Classroom. They need a teacher, they need a classroom, they need the other learners. I need the complaining parents. And, what I'd like to say, at the end of the day, it is good to have obstacles to overcome, that is what keeps you alive. It makes you feel you are not a robot. It keeps you alive, to be a teacher in all facets. I want the good, but you know, I also want the bad, it keeps me alive to carry on as a teacher. And the children – the children need the teacher, they need their parents, their friends and to socialise. That is what we realised is very important for a child's development, the socialisation with parents, with children and with teachers. That is what I've learnt out of this whole matter.</p>	<p>5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS</p> <p>1.1. KEEPING BUSY AND DOING TASKS</p> <p>6.4. NURTURING SPIRITUALITY (Faith / Meaning making / grounding)</p> <p>6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH (Who I am)</p> <p>5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS (Source of energy)</p>
37.	EW	Yes. So, I hear there was also much self-reflection.	
38.	P4.2	<p>Oh, Lots. Self-reflection and realisation – it's my breath, my learners. It is what I need to function, 129 learners. Naughty learners. Clever learners. Learners who have problems. It is what makes me grow and, I need it. I think the teachers will agree, it was not in the least enjoyable to do nothing, to stand and talk in front of a computer. I need that interaction from my learners. [unclear] don't ask me about it at the end of a term. No, I need nothing more. But after 4 weeks I embraced everything that encompassed teaching.</p>	<p>6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH (Self-discovery)</p> <p>6.2. DRAWING ON REFLECTIVE PRACTICES</p>

			6.4. NURTURING SPIRITUALITY (Meaning making)
39.	EW	Yes.	
40.	P4.4	P4.2, I want to agree with you there, I also missed the interaction with the children and the lessons. I felt no satisfaction with the online lessons. I did not have satisfaction.	
41.	EW	Thank you P4.4.	
42.	P4.1	EW, I can quickly say, it may mean something or you may understand if I tell you what the reason for it was. To me, it was bad - two things – in the mornings when we had to stand at the gate and measure the children's temperatures. It was almost as if I feared it, to press that button against her wrist and her temperature is high. Number 1, how am I, in such a manner, I have to let her stand aside for a minute to see if her temperature will decrease. But in that minute, you know, how does her little heart feel, about what is she worried. How is she experiencing it? So, I was really afraid – oh please, don't let there be a child with a high temperature. To me it was a sad part of the day. And the other thing; every day when we had to record the absentees – The parents let you know with an online form when children would be absent. And then the next question was, is it an illness, are they positive, which symptoms, when will they be back, and so on. That part of my day was also not pleasant. When I opened that Google form then it's, oh no, who is going to be positive today, uhm, is it a mom, is it a brother or a sister, is it one of them. I did not want it to happen with the children at this school. If I see it on that form, it is a reality, it is really happening. If I had to handle the children in the isolation station, oh, I felt so sorry for them, because you have to do it. You must remove them from the class and they have to sit there. You have to ask them if they cough, are they nauseous, what is their temperature. Now you phone the mom, and the mom says, she can't come right away. You go back to the child and tell her, her mom can't come now, but miss will stay with you. You can see the fear in the child's face.... So, to me it was the worst part to handle right in the beginning. You yourself are filled with fear and anxiety about this disease and you are obliged to help a child handle it. Uhm, also the protocols that the school has put in place, because not much of it was really in the end positive. However, one had to make sure. You had to handle it. It was perhaps nothing, but to me, it was the worst.	
43.	SD	No, it's very valuable, P4.1.	
44.	EW	Yes, yes. I just think about...Would anyone like to add anything? I want to ask – about a few other aspects. Can I move on. Right. Thank you, Miss, I think that is also a...you know, I would like to know how Miss usually handles it on a personal level. But then I will use a few examples. At the time and now, are there people who for instance start making other lifestyle choices. Is there anything in terms of what you have experienced that was valuable to you? I know Miss P4.1 said one had to do it and had to stay occupied. Some of you said you did not watch the news as a way to handle it, your environment that helped you cope. I am also interested, SD and I, about – personal ways, and Miss P4.2 spoke about how a person again realised your purpose, as well as your calling, and together with it a connection with people. Are there any handling skills that you found valuable?	

45.	P4.2	Personally, I go back to, as I say – spiritual.	6.4. NURTURING SPIRITUALITY (Faith)
46.	EW	Spiritual, yes.	
47.	P4.2	Things that we are used to, my family and I, if anyone came to visit us – We made it very practical -on Sundays we have Holy Communion	6.4. NURTURING SPIRITUALITY (Faith)
48.	EW	Okay.	
49.	P4.2	Do you understand, that is the way in which we now cope. I depend heavily on my Faith. I felt, whosoever visits us and comes to lunch, I don't care who you are, I serve my family with Holy Communion before lunch is served. It is a habit that we have established. My sons are now aware of it. Sometimes when they bring their girlfriends to visit, I feel embarrassed to do it, but I go ahead. In the beginning we also started eating healthy. Yes, I have started my little boy on a healthy diet. I was on a diet for a while. Uhm, once again, bluntness set in. All of us are vaccinated now, so we do eat cake and so on. One must of course, make sure of what you put into your mouth. Remember, if diabetics contract the virus, they die. So, there was that fear. One is inclined to go back to old habits, The habit we formed over the past year is the Holy Communion. But we go back, eat and exercise less. That is what I've done practically. I don't know if I've answered your question?	6.4. NURTURING SPIRITUALITY (Faith) 6.3. MAINTAINING SELF-CARE (Healthy diet) 3.2. CONSCIOUS DISENGAGEMENT 1.2. ADAPTING TO CHANGED CIRCUMSTANCES (Do what needs to be done)
50.	EW	No, it does, it does. Its lifestyle. In any manner.	
51.	P4.2	The mechanism to cope is to know, if one does certain things then – one is not protected, but one receives strength from the Word of God. That is what I did, my children, my husband and my parents. That's what we did. It is something practical that we do. And of course, as I say – practical – I walk into the class and I bless the children. I know (Name) miss, when the class leaves, when she leaves, she blesses the children. So, the school's children are blessed.	1.1. KEEPING BUSY AND DOING TASKS 6.4. NURTURING SPIRITUALITY (Meaning making)
52.	EW	I am going to come and sit with you.	
53.	P4.2	Yes, we bless them. There are probably many rituals that I began doing. If I came to a place where there was a cross, I lifted my hands and blessed Pretoria. My nature is to fall back, totally, Christian, to the Christian ways in which I grew up. Perhaps other people and other cultures will function in a different way. It just confirms, one falls back on ways in which you were brought up.	6.4 NURTURING SPIRITUALITY (Meaning making) 1.1. KEEPING BUSY AND DOING TASKS (Through spiritual rituals) 6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH

			6.4. NURTURING SPIRITUALITY (Revert to faith based / traditional habits)
54.	EW	Okay. So, it's also cultural?	
55.	P4.2	Yes, cultural. Absolutely.	6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH
56.	EW	Okay. I understand. It's very valuable, thank you. Miss. P4.3, what can you tell us...-or anyone. Miss P4.1, it looks as if Miss wants to say something?	
57.	P4.1	I chose to put questions that I had about COVID, to one specialist only and that's all. Because the more people you ask, the more opinions you get and the more mixed up you become.	5.1. SEEKING ADVICE OR INFORMATION (Trusted advice seeking) 3.1. PRIORITISING WHAT IS IMPORTANT AT THE TIME 3.2. CONSCIOUS DISENGAGEMENT
58.	EW	Yes. It is. Okay.	
59.	P4.1	And I did not always like what he said. There in the beginning – I cannot even remember what he said – I cannot even remember what the medicine was called - Ivermectin or what? One can imagine, the farming community said, yes, send it on, take it, approximately three times a day. And he said, no, don't. So, it's not that I chose him because he said something that I liked to hear, but if there is anything I need to ask, then I ask him. What he does, I stick to. I also did not get caught up in arguments with people. If you start arguing about, whether to get your jab or not – that's when people (I think often the devil, I don't know) – uhm, use it – oh, here's a chance, she is now going to listen to me, let me start throwing all different negative things in here, that in fact have nothing to do with the vaccine. So, I chose to only listen to (Name) my doctor and up to now it was good advice.	3.1 PRIORITISING WHAT IS IMPORTANT AT THE TIME 3.2. CONSCIOUS DISENGAGEMENT 6.4. NURTURING SPIRITUALITY (Faith)
60.	EW	Yes. Good advice. Okay, that's good.	
61.	P4.1	I think the more people you listen to, the more mixed up you become.	3.2. CONSCIOUS DISENGAGEMENT
62.	EW	Yes, it can also increase your anxiety, because the one says this and the other one says that and one doesn't know which side to turn to.	
63.	SD	Yes.	

64.	P4.1	When I talk to mom, she says, did you hear what they say on RSG? Then I say no, I have not heard. Then I say – and don't tell me.	3.2. CONSCIOUS DISENGAGEMENT
65.	EW	Good, so Miss also focussed on who to associate with and what information to allow?	
66.	P4.1	Yes.	
67.	EW	Okay. It's also a very good way. Yes. P4.4 of P4.3, do you have anything that you would like to add?	
68.	P4.3	I would almost say to be a mother or a teacher comes down to the same thing. I very early realised I need to be the parent over here. I have to be the adult and I need to set the example. Not only for my own children, but also for the children in class (as Miss P4.1 had said, if you carry stress or anxiety over to a child, they pick up on it very quickly and become afraid. – I soon realised, one has to count your words and manage the discussions you have in front of children. It's my responsibility as a parent of two children, to take responsibility and lead in this situation. It's the same with me as teacher, with the children in my class. Although one needs to talk about it, it is necessary to lead the discussion with the little ones. Miss P4.2's children are bigger, her own as well as those in her class. But it comes down to the same, how one manages the discussion and what one allows – my children are much younger – so the level on which I discuss it is very elementary. It is really basic in their language. The children in my class are slightly bigger – to discuss it and the facts, as Miss P4.1 has also said – with one person, you know, not RSG or Jacaranda's facts but just the basic scientific facts thereof – there is no need for insecurity, the cards are on the table, this is the given situation. How we choose to handle it is what makes the difference. With my own children, uhm, how we handle most situations at home – we acknowledge a situation as well as the emotions that it awakens in us. Because nothing can be done to change the situation, it is something outside yourself. You can however change the emotions you experience – give me two seconds, I would like to quote something: "O Lord, give me the mental calmness to accept what I cannot change and the courage to change what I can and the wisdom to accept what I cannot change". I think for a research project you can mention both by saying, this is how people who have a Christian conviction approach it, but one cannot base it on that. There is a huge difference between the given situation, the cards on the table and how one plays it. How one reacts towards the situation. If I could manage it, it's very important to set an example to show the children that it is extremely stressful and to manage it, so that the children see, oh, yes, it is very stressful, but my mom or my teacher or my aunt or whoever else, handle it systematically and get through it. It makes the anxiety levels - (I know the anxiety levels with my children were also originally very high, until they accepted that it is the situation, this is how we handle it and we carry on) – not to focus on the negative. And now - and the children are so – resilient really, there is not a good Afrikaans word for resilience, I feel, unless Miss P4.2 could help me here please – but that ability to stand up after you have been floored. Whatever life throws at you, to get up and say, it's fine, I will move on. Uhm, it is a decision you have to take, every morning, every day. Children are very resilient, in the sense of, look how they've adapted. And now, understand, how many millions of children go to school wearing masks, as if it is normal. How many millions of children do social distancing – understand - everything that's what COVID now...- they accept it as	6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH 6.2. DRAWING ON REFLECTIVE PRACTICES (Personal growth) 6.4. NURTURING SPIRITUALITY (Meaning making) 5.1. SEEKING ADVICE OR INFORMATION (Trusted advice seeking) 5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS 6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH (Identity leader) 2.3. STAYING IN CONTROL OF WHAT IS POSSIBLE 3.1. PRIORITISING WHAT IS IMPORTANT AT THE TIME 3.2. CONSCIOUS DISENGAGEMENT 6.4. NURTURING SPIRITUALITY

		normal. And they have been deprived of so much, [unclear] – if I can put it that way, over the recent year or two. Yes, I don't know, I am going to bore you.	1.2. ADAPTING TO CHANGED CIRCUMSTANCES (Making a positive choice) 4.2. REMAINING CALM
69.	SD	Not at all.	
70.	EW	Not at all.	
71.	P4.3	Okay I have finished.	
72.	EW	Thank you, P4.3	
73.	P4.2	Children are resilient, but what was interesting to me, was how adaptable they are. They totally accepted their circumstances as they were, they did not complain about it. They adapted and that is what I appreciated about children, they adapted easily.	
74.	EW	Yes, it is. As I have it, the Afrikaans word for resilience, is “veerkrachtigheid”, so I hope I have it right. I agree with Miss. Do you think the teachers were the same as the learners were and are?	
75.	P4.2	Yes, I think the teachers took it, grabbed the bull by the horns and said, we are happy to teach again, so grab the bull by the horns. There was an unbelievable energy between the teachers and the learners. They call us teachers and I must say, therein lay our strength – to connect with the children and be efficacious again. What one was born to do, you had the chance to do again. In the beginning it was a wow to me, to stand in front of a class again. I must truly say, that was what I had missed most, I your beloved teaching again and I adapted. Our senior phase had to rotate from class to class, while the Junior phase stayed in the same class. And, you know, we did it. It was no trouble to us. I would really like to say, I wish everything would return to normal again. The wow had receded, however, that absolute beginning was a learning experience, one longed to be amongst your learners again. It stood out for me, that I could be amongst my learners and could teach again and so on. They are so adaptable and we as teachers were also adaptable, in the beginning.	1.2 ADAPTING TO CHANGED CIRCUMSTANCES (Do what needs to be done) 5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS 6.4. NURTURING SPIRITUALITY (Meaning making, calling) 6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH 1.2. ADAPTING TO CHANGED CIRCUMSTANCES
76.	EW	Yes.	
77.	P4.1	I think there are probably professions that feel they had to sacrifice and adapt the most. But, think about it, from the moment we stop at school in the morning, before school, during break how we teach, how we mark books – everything had changed, but we grabbed hold of it and ran. Earlier when you mentioned how adaptable the children	1.2. ADAPTING TO CHANGED CIRCUMSTANCES

		were, I actually expected much worse. Those questions that cropped up in the beginning made me realise – those were actually the insecurities of the parents that emerged, not that of the children. The children just came in and wore masks So, it was the parents' insecurities again "will my child cope, what will it be like", that they verbalised. It wasn't the children who couldn't cope. I remember trying to ensure a mom that it wasn't the school's rules which stated that grade 1's have to wear masks, it was that of the country. She just said, my child is not going to do it. I walked into the class that day, to find the child sitting in class, wearing a mask as if nothing was wrong. It just shows that although the mom thought he couldn't, he did it. Do you know what I've noticed during this time? That children are mimicking us teachers more than ever before.	5.1. SEEKING ADVICE OR INFORMATION 6.4. NURTURING SPIRITUALITY (Meaning making)
78.	EW	Okay.	
79.	P4.1	I walk into a class, and the first thing I notice is the teacher's mask under her nose. Then when I look at the children, their masks are also under their noses. Then I come back into my own class, look closely at my children, and see, no, their masks are over their noses, because I wear mine over my nose. It's not only about masks, it's also about social distance. They still have that... -I believe in what my teacher says, I believe in what she does, I take note of what she does, that hasn't changed. I think moms can say "wear your mask" as many times as she wants to, but if Miss wears her mask in a specific way, then they will also do it like that.	
80.	P4.2	Human nature comes into play and demonstrates that you're a flock creature. If everyone, does it, you do it as well [unclear]. You don't want to be different, so because the groups wear masks, they also do it. At home when they are alone, Mom may have problems telling them what to do. But at school, everybody does it that way, then you follow suite. To remain adaptable.	6.4. NURTURING SPIRITUALITY (Meaning making) 1.2. ADAPTING TO CHANGED CIRCUMSTANCES
81.	EW	P4.4, are you still with us? Would you like to add something?	
82.	P4.4	Yes, I think, what I have also seen, it was difficult to wear masks in the beginning. I actually did not think it was possible to teach with a mask. But later on, people became used to it and one taught while wearing a mask; now one doesn't even realise you are wearing it. Yes, human beings are very adaptable and the children as well. The children adapted very quickly. It links up with what Miss P4.2 has said about we are adaptable and if everybody does it, you join in and do it as well.	1.2. ADAPTING TO CHANGED CIRCUMSTANCES
83.	EW	Yes, as P4.3 also mentioned, all of us go through it, so we are not alone. We are already on an hour and we can still chat for a long time, but we do respect your time. SD is there anything more that you would like to ask? We had such a pleasant conversation. We got so much valuable information. I don't know if I might have missed anything that you might have wanted to hear, SD?	
84.	SD	No, I think we have had a good informative session and your insight in our study is very valuable. I don't think there is anything specific that I want to question further. You have actually systematically answered the questions that I wanted to ask. So, it's fine. You were excellent participants in this session and we appreciate it tremendously.	
85.	EW	Yes, we are so thankful for your time. Member checking info. Expression of gratitude.	

86.	P4.1	I think the two of you are very clever to make something out of what we've said here.	
87.	EW	Remember, there is no right or wrong. You are the experts not us. We now have to write it up.	
88.	All	Good bye. (Expression of gratitude).	
		ONLINE PARTICIPATORY FOCUS GROUP 5: 7 October 2021	
1.	SD	We would like to say, thank you very, very much for your willingness to join us during the holidays in this session and that you form part of our research project. It is a privilege having you and we look forward to what you are going to share with us. Just a bit of background for those of you who do not know yet. EW and I, are working on a research project where - EW looks at the cognitive strategies and I look at the psycho-social or the emotional strategies that you as teachers have implemented during this COVID-19 period and how you became resilient. In the first phase of our data collection where you completed the online questionnaires, we already saw (Hi P5.1, welcome) that you are resilient. The aim of this focus group session is to find out in more detail about which strategies you implemented of what you have already answered in order for us to expand on what you've done to be able to cope or become resilient in this COVID-19 period. Yes, just one or two ethical matters – we are going to record the session, just for me and EW, when we write our chapter on this data, just to make sure that we have in fact written down what you had said. If you are not comfortable with the recording you can tell us now, then we won't record the session and we'll just write till it comes out of our ears. We are also not going to mention your name or that of the school where you are involved at all in the chapter. So, this is truly a safe, free environment to really tell us how you coped and what was possibly challenging to you in this COVID-19 period. EW, I don't know if I missed anything in this intro, or is there anything you would like to add.	
2.	EW	No, I think its fine. Thank you, SD. I think, to us it is actually about - really to hear what worked for you, what worked best for you, what was the most effective way and cope is the English word that we use - in relation with the challenges that COVID caused, personally and in your work. What did you do and what worked best for you, about how to handle it, because we noticed that you are resilient, as SD had said earlier in the questionnaires that we analysed earlier. So, how did you do it and what worked best for you? We'd like to hear from you. It's an informal discussion and yes, you are welcome to join in at any time. Does anyone want to open the floor?	
3.	SD	You can tell us now. P5.1, I don't know if you'd like to begin and tell us how you coped throughout this COVID-19 period? What did you do to be able to cope?	
4.	EW	We are not hearing you.	
5.	SD	Sorry, P5.1, the sound is a bit too low. I thought it was perhaps my sound that was turned off, but I am struggling a bit to hear.	
6.	EW	While we are waiting, I don't know if P5.5 or P5.3 would perhaps like to tell us? P5.6, I know you are struggling to talk there. I am struggling to hear.	
7.	SD	I will see if I can perhaps do something from my side.	

8.	EW	Sorry, I can't hear.	
9.	SD	No, sorry P5.1, still not.	
10.	EW	There you are, that's better. There was something. There you are.	
11.	SD	There you are, now we can hear you.	
12.	P5.1	It felt to me, in the time of COVID, the school's protocol – you know, the Department of Basic Education, in the end really determined how we coped with it.	2.3. STAYING IN CONTROL OF WHAT IS POSSIBLE (Dept. protocols)
13.	EW	Okay.	
14.	P5.1	So, what usually happened at our school was, that a COVID official was appointed – it was one of our deputy-headmasters. And to me it felt if we basically in that time, until now, lived a day-to-day existence, because you are waiting for them to dictate what a school day will be like. We waited for them to let us know when we could resume our extramural activities. We waited for them to tell us when the schools could be attended in full numbers again. I don't know of many other schools in Pretoria, but I do know most of the Afrikaans schools, especially here in the East, have continued in full numbers since February this year. We did not attend school in half numbers as I know many of the other schools in the country did. So, cope was just to wait. To me specifically it was, just to wait to hear precisely what happened. Do we have holidays. Don't we have holidays. When can we do extramural activities, when not? How the children are allowed to sit in class. Do you sanitise. What do you do when someone falls ill in class? So, it made up a very big part of COVID. That waiting, and just – each morning, check in on your emails to see what today's protocol are and carry on. When things started to relax and the levels became lower, I personally, I am the choir teacher at school – so at last we could bring music back into the school again. It meant that, slowly but surely, the children could start practising choir again, until they closed us and said choir practising was not allowed at all. Uhm, luckily for me, some of my university friends are also choir conductors so they started an adult choir. So, I coped by attending choir every week. Yes, I sing in two different choirs and in the end, it was how I started feeling normal again, especially at work. I know it was difficult for the children, especially for children who take part in sport. That's where we are lucky in the choirs, because the choir is usually a large group of children. My choir this year consisted of about 65. How I could make it work, was, I divided the choir into two sections. Luckily, from the start my choir consisted of only two grades. I have the junior choir, so it's the grade 2's and the grade 3's. So, on one day I could practise with the grade 2's and on the next day I could practise with the grade 3's. So, it meant that between 25 and 30 children could experience some normality in their lives, where they could see their friends and we could again do something pleasant, which was practising choir. I could see that the children who took part in sport, they were really suffering. We spoke about it the other day – it was as if - kind of – they've lost their identities. And they had to regain their identities, because the child who was always known as	2.3. STAYING IN CONTROL OF WHAT IS POSSIBLE (Dept protocols) 4.1. ACCEPTING THE SITUATION FOR THE TIME BEING 6.3. MAINTAINING SELF-CARE (Healthy habits, choir, interests)

		the rugby child, or the netball child, or the hockey child, had to find something else with which to express themselves. Yes, as I said, I think we were privileged that there was quite a number of children involved in the choir. It gave them the opportunity to express themselves and socialise. Especially that social element of choir singing, something I think that was rather important to them. I hope it answers your question.	
15.	EW	Yes, it helps. We would like to hear how the teachers themselves did it and we know the children also went through it. Every day in school we see how resilient they also are. However, what you said about choir singing in which you had also started taking part is very interesting and valuable, because it contains so many elements. It may be a passion and it may be a connection between people. So, what about the choir stood out for you in coping?	
16.	P5.1	It helped by establishing a measure of routine again. I knew on Monday and Wednesday evenings I would go to choir practise. And when I am there – choir is a wonderful thing in that respect of, because it is something that 70, 40 – (once upon a time 70), but 40 people do together at one point in time and that connection it makes between people played an important role to create a feeling of community. Especially after being on our own after so many months.	2.2. MAINTAINING A ROUTINE 6.3. MAINTAINING SELF-CARE (Healthy habits, choir, interests) 5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS
17.	EW	Yes. Okay, that bit of, uhm, that togetherness, almost.	
18.	P5.1	Hmmm.	
19.	EW	Okay. Thank you. Very valuable.	
20.	SD	Miss P5.2, Welcome to this session.	
21.	P5.2	I apologise for being late. Can you hear me?	
22.	SD	Not at all. Not at all. We can hear you clearly, yes. No, Miss is not late at all, we have just begun by saying that we record the session, that we write down the right things in our chapter and that we would like to hear from you as teachers, what you did and how you coped in this COVID-19 period with the uncertainties. What did you do to manage the children, your personal lives and your school obligations? Yes, so I don't know if Miss can contribute anything.	
23.	P5.2	To me it feels as if COVID has just left and I am on holiday now so I am not thinking about COVID.	3.3. CONSCIOUS DISENGAGEMENT
24.	EW	That's good.	
25.	P5.2	However, in April at the time it was rather rough because the schools commenced late in February. To catch up on all that work- load, especially with the matrices. And that stress, which children are online, which children aren't. Because it was usually your strong children who did well online. But those children who still want personal attention,	

		who still need the acknowledgement, who still want you to walk through the class and say, you're okay, don't worry – they suffered. So, I picked up those things. Then it was wintertime and we had just started with examinations and it was a bit of a problem with the children who became ill. And they were in lockdown for two weeks, they missed out on their exam papers and they were really ill, they couldn't really study. It caused stress and the sport season had just begun, then it was stopped again. I enjoyed not having sport, because I could concentrate on the other academic tasks. Then I had sport again during the term that I haven't been used to having it, the third term. In between one also had to exercise. The children enjoyed sport even though they were not the best, just to get that exposure and get out, they needed it. Well, yes, we'll have to see how it works out because they have just written their preliminary examination, Of course, there is still a lot of work, so we are again stressed to get them going next Monday when school starts. That is my quick summary of how I experienced the recent times.	
26.	SD	I know, at a stage the whole world was on a wave, when we had the goal to learn something new, from baking to gardening to learning new dancing steps. Is there anything new that you learnt to remain positive throughout this time?	
27.	P5.2	I have a husband who worked from home. We fixed a number of things at home, and built new things. I think the children really enjoyed their pets. The dogs had the chance to see that there actually are people in the house and they aren't away due to activities. And we got the garden sorted out. I could unpack all my cupboards, clean and arrange them the way I want them to be, but we were actually at ease. I am also a mom of primary school children. I enjoyed seeing how their primary school gave them tasks to do during the time to remain active. We also did things so that they could complete their tasks on time last year. This year we were at ease because they did not have to attend school full time, so it wasn't a problem.	1.1. KEEPING BUSY AND DOING TASKS (Stay busy, general tasks) 5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS (Dogs/pets)
28.	SD	Of course. and from you, P5.4, is there anything you would like to add? What did you do to get through this COVID-19 period?	
29.	EW	SD, I know P5.6 said he struggles a bit with the signal over there. We hope to hear from him. You are welcome to enter into the discussion at any time, P5.6.	
30.	SD	O, okay. P5.5 from your side? Or Miss P5.3, from your side?	
31.	P5.3	Hi SD, all of you. Thank you, I appreciate being included in the discussion. You know how we coped. Well, I had my second daughter slap-bang, in the second week of the hard lockdown. So, I missed much of the adaptation at school with being on maternity leave for three months. So, when I came back, the other people were already used to everything. But I must say, it was, as P5.1 also said, you take it day-by-day. One cannot plan weeks ahead. You decide, okay, today they say this and you just do it. Tomorrow, it changes. I think it was something that I realised was rather difficult for parents, they did not know how to handle it and were very panicky. "But how, I don't know and when am I going to know and how will I handle it ..." What they did not realise was that nobody knows. No one could give an answer. I think it's that – almost, one can say, a mentality – almost a "hurry-up-and-wait" type of thing. But, yes, just to relax and to know I don't have to and I cannot control everything. I am also not going to control everything. Just go with the flow. So, I think in a way it's just to let go and to be in the moment. When	2.1. TAKING THINGS ONE STEP AT A TIME 5.1. SEEKING ADVICE OR INFORMATION 2.2. MAINTAINING A ROUTINE 4.2. REMAINING CALM 2. PLANNING

		<p>everything works out, you take it and carry on. But at other times, you can't. I think it's that notion that you cannot control everything. Many people who are control freaks and who like to plan everything, I think they suffered. But then you just realise that you can't do anything about your situation, you just have to be, there, there. As soon as it changes, you carry on. So, I think it was almost, just, take it from day-to-day. One cannot plan ahead and I think what is unique about our teaching situation is, and you, P5.2 will agree - we are at the same school - you plan for plan A, but at the same time there is a plan B, C, D, E, A2, B2, because one has to consider all options. So, one has to bear all these things in mind. I think – one was forced to consider other situations and to work around them. Therefore, you did not ... - in a way, it was a very "narrow-minded" - environment, because you were only allowed to do a certain number of things. However, you were also forced to look at the situation in other ways, or, to handle situations differently, because you're not allowed to handle them as usual. You are forced to acquire a new way of thinking, doing and learning to use. So, I think it is –you had to think differently. You couldn't do it as usual. Yes.</p>	<p>1.2. ADAPTING TO CHANGED CIRCUMSTANCES 6.5. EXERCISING OPTIMISM (Positive reframing) 1.1. KEEPING BUSY AND DOING TASKS (General tasks)</p>
32.	EW	<p>Yes. Well, its valuable. I hear lots of – tell me if I'm wrong, but creativity, problem solving and planning, even if one cannot really plan.</p>	
33.	P5.3	<p>Yes, you plan for any possible situation. You plan for, the school that starts tomorrow. But then the school starts tomorrow, only for the boys, or the school starts tomorrow with all the children. The school starts tomorrow with only this grade. You really have to, yes. ...</p>	<p>2.2. MAINTAINING A ROUTINE (Predictable routine)</p>
34.	P5.3	<p>Adaptability.</p>	<p>1.2. ADAPTING TO CHANGED CIRCUMSTANCES</p>
35.	EW	<p>Adaptability Yes. And you had mentioned the relaxation and let go. Is there anything specific that you did in the moment? Because those are such valuable strategies. Is there anything specifically that you did to apply those strategies – your relaxation or let go or your 'be in the moment'?</p>	
36.	P5.3	<p>I really don't know. I think it is just when one realises, one has to realise you cannot control everything. You psychologists and psychiatrists will have a good word for it. But there are so many people who – and one hears it everywhere – but if you can't do anything about the situation, either leave it or just go with it. I do, however, think this was a way of saying, you know, you can do nothing now, so I am forcing you. It's as if the world said, I am forcing you to relax.</p>	<p>4.1. ACCEPTING THE SITUATION FOR THE TIME BEING</p>
37.	EW	<p>Okay.</p>	
38.	P5.3	<p>And to stay in the moment. But I cannot say I was in a situation and decided, okay P5,3, you can do nothing about it, just carry on. I think it is that resilience that you had mentioned. You are in this situation, what are you going to do to survive. And you just do it. I don't think there was something definite that I did, but I do think the fact that I was on maternity leave during the hardest lockdown also helped. Because you have this tiny person for whom you are responsible with an older sister who does not really understand. So, one needs to create normality for them because if they notice that mom and dad are tense, they become tense and afraid as well. So, I think the fact that</p>	<p>3.1. PRIORITISING WHAT IS IMPORTANT AT THE TIME 4.1. ACCEPTING THE SITUATION FOR THE TIME BEING</p>

		you are responsible for another little person contributed to the fact that you, despite everything, were the best person that you could be.	1.1. KEEPING BUSY AND DOING TASKS (Keep busy caring for kids 6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH (Best you can)
39.	EW	Thank you.	
40.	SD	I still have another question. P5.2, you can perhaps answer with P5.3, in this case. P5.5, I don't know if you have children, or P5.4, but did you find it difficult to distinguish between your role as a mother and that of a teacher at home? Even being a teacher, how did you maintain the balance to be at home all the time and to divide yourself in these different roles that are expected of you. As well as a partner and everything.	
41.	P5.4	The first day when the primary schools went online and I had to teach, I had to clean the house and I need to be quiet when my husband has meetings when he has to work, I cried that evening. He also decided that it wasn't working. I told my grade R child that I resign as his grade R miss, he is welcome to look for another grade R teacher, and he decided that he still wanted to pass grade R. We then decided to work together because no one was happy	5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS (Family work together)
42.	EW	Oh shame.	
43.	P5.4	It was rather rough and I could understand why many moms say on Facebook that they need alcohol to cope. I can understand why, it is rather difficult. I myself am a high school teacher, not a primary school teacher and now I have to make time for them someday or other and it was rather difficult. So, some days we saw what we could do and what not, other days we decided we could do those things that we have not yet felt able to handle. We just had to prioritise it differently, but it was rather a shock that first week to decide what the new normal was and how to handle it.	3.1. PRIORITISING WHAT IS IMPORTANT AT THE TIME
44.	EW	And how did the two of you handle it? How did you handle it? What did you do?	
45.	P5.4	My husband was very sweet, he realised that it wouldn't work. So, in the mornings we had to do primary school things. If it was Thursday, they had to spit and paste or bake and brew, we did that on Thursday and Friday. That was our measuring stick. And when I had to make video recordings and record lessons – so, in the evenings when they were quiet, I made my videos at night, to show that I am also academic and actually have a job	5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS (Family) 1.1. KEEPING BUSY AND DOING TASKS 1.2. ADAPTING TO CHANGED

			CIRCUMSTANCES (Flexibility) 6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH
46.	EW	So, it was a bit of an adaptation and perhaps a change of routine? To get everything done effectively, if I understand correctly.	
47.	P5.4	Yes. So, we decided – my husband was headmaster, there was no TV in the mornings. They were only allowed to watch TV after 14:00. Just to teach them a bit of – there's a time for work and a time for play. Just to put that routine in place	2.2. MAINTAINING A ROUTINE
48.	EW	Yes, boundaries and so. Okay.	
49.	SD	Nice. P5.5 we could.	
50.		Voices overlapping.	
51.	EW	Sorry, everybody is talking at the same time.	
52.	SD	It's my fault, sorry.	
53.	EW	P5.3, perhaps you should quickly and then we'll hear from P5.5. Apologies.	
54.	P5.3	My daughters are still young. The one turned 4 recently and the other one is 18 months old. So, we haven't yet had homework from nursery school. What was cute was, every third day, the nursery school had a zoom meeting for the children. So, we let our daughter sit here in the TV room with the computer and I kept the baby quiet. They could then see their friends. It was also nice, because, my daughters are dropped off at 7 am and I only fetch them at 16:00 – so one usually does not see the other parents and now one could see the parents as well because they had to make sure that their children were also there. They sent things like – we are going to learn about the egg today, so please make the little one a slice of toast with an egg inside. So, there were things we did and as I said, I was on maternity leave the first time. I did however have unbelievable colleagues who managed all those things. Luckily when we went back to school, the nursery schools also reopened, so it was easy. It wasn't like the primary schools that we had to have them at home. But I must say, if it weren't for my support system – my mom and dad and my sisters who lived so close to us, I would really have suffered in that hard lockdown. My husband was on leave for the first week and it was okay then because he could keep elder sister occupied. He started working from home, then we were the villains – approximately 9:00, my dad would drive in, load the children and myself in the car and drive to their house. We would then spend the day with them. My husband would then fetch us around 16:00 when he had finished working. So, there was that support to help with elder sister and the tiny baby. So, we were definitely villains who drove around when we not allowed to I think that support of my parents and my family helped me a lot.	5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS (Colleagues / family) 2.2. MAINTAINING A ROUTINE 2.3. STAYING IN CONTROL OF WHAT IS POSSIBLE

55.	EW	It is a very valuable strategy, definitely. Parental and family support and that socio-emotional connection that SD had mentioned earlier. P5.5, we would like to hear what you want to say. We missed you earlier.	
56.	P5.5	Hello. I did not hear the last teacher at all, so please excuse me if I perhaps say what she has already said.	
57.	EW	No not at all. We want to hear from all of you.	
58.	P5.5	<p>I think my situation differs from that of all of you. I teach at a small school, a small private school here in the East of Pretoria. There are approximately 55 children in the whole school and we are 8 teachers. Initially last year, when the president announced the lockdown, I personally was very excited. To think we have a slightly longer holiday and with our children who had already left home – but we were almost lost in the beginning. We went nowhere. We just wandered through the house and looked around for something to eat. That was just about what we did. When we could not go back to school, the first week when it should have opened, we started teaching online. It was very difficult in the beginning because one had no interaction with the children. You did not know if they could do the work and what you can or cannot send to them. We very soon discovered that Zoom did not work for small children. I am in the fundamental phase, so we made PowerPoints and videos so that they could see us. It was hard work. To me it was much harder work than standing in front of a class. I had contact with my colleagues and previous colleagues and they sometimes phoned me and asked; “where should we begin with this video”, because when one stands in a class you know exactly what to say and where to begin with the work. However, one is unsure about a video, where to start and what your first words should be. But our children did the work, all of them did their work and brought work cards back to school. I do however think there was no practicing or fixation during that phase. The parents just made sure that the children did the work and I do not blame them because they are not teachers, they did not necessarily know what to do and how to do it. The third term when schools had to reopen according to the old timetable, we went back to school, everybody went back, except I, because I have comorbidities. I told our principal that I won’t be coming back yet. We were very, very afraid that one of us would contract the virus and infect others, and we did not know that the consequences might be. The principal appointed a tutor to take my class, although I still did the work and sent the videos. I only went back to school at the end of September last year (2021). I had a long holiday, but I worked very hard during the long holiday to get everything in order, make the videos and so on. And since we went back, I was just back for two weeks when one of the children in my class contracted COVID, which caused myself and the rest of the class to be in isolation. After that, everything went well and we never had to isolate. Till today, every morning we screen the children to make sure that they are healthy, we take their temperature and so on. It is done very quickly because there are not many children. In the classes it is very difficult to keep social distance because our classrooms are small. Even if you have six children in your class it remains difficult to keep that social distance. The children – I am absolutely amazed at our children who wear their masks faithfully and never remove them. Perhaps now and then you have to tell a child to cover his or her nose, but they never remove those masks, except when they are eating. They played during playtimes; initially they sat in blocks, which we soon notices weren’t working either. So, play times,</p>	<p>1.1. KEEPING BUSY AND DOING TASKS 1.2. ADAPTING TO CHANGED CIRCUMSTANCES (Flexibility) 1.1. KEEPING BUSY AND DOING TASKS (Work activities) 5.1. SEEKING ADVICE OR INFORMATION 5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS 1.2. ADAPTING TO CHANGED CIRCUMSTANCES (Do what is needed)</p>

		and I mention it in this small group, there was no social distance at all. Children played normally and they are still doing it. To us, as from the beginning of the year – everything is completely back to normal at school and at home.	
59.	EW	Oh, that's wonderful, yes. I would like to ask something that you mentioned P5.5, thank you for your participation. I can hear it was a challenge for many teachers to get used to the technology you had to use. You mentioned that you had discussed it with colleagues. Was it a general strategy or was it specifically about the technology? I am trying to see what you did to get through it that helped you to become resilient. What did you do to help you in this time?	
60.	P5.5	Yes, I taught myself to put a reasonably decent PowerPoint together. The times that we as colleagues spoke to each other it was more about, I would almost say, how to start this, what to put in and what to leave out. For a small child you can also not make it too long, but you can also not say too little, because then they don't know what to do. We tried very hard to make it for the children in such a way that they could do the work on their own. Because we were aware that the parents also had to work from home and would not necessarily have time to help the children. So, we tried hard to do the work so that the children could do it themselves. When there were new concepts and so on, we tried to explain via a video or a PowerPoint, or a video within a PowerPoint. And the children rather enjoyed seeing our faces. If we now make a video, just so they feel – I've seen my teacher again. Yes, so, further, I read a lot ..., that I thoroughly enjoyed.	1.3. ACQUIRING NEW SKILLS 1.1. KEEPING BUSY AND DOING TASKS (Work activities) 5.1. SEEKING ADVICE OR INFORMATION 6.3. MAINTAINING SELF-CARE
61.	EW	Did you do any recreation activities?	
62.	P5.5	Yes.	
63.	EW	Okay. Thanks a lot.	
64.	SD	Is there any teacher who perhaps would like to tell us about, I mean, there are always things that are important to us as people that we feel are part of our lives, and then the pandemic came. Is there something that you realised you really need, to be able to cope, or to have positive thoughts about an unknown situation or life circumstances of which you were not so aware before COVID-19, but became aware of in COVID-19 and still today are trying to make part of your daily activities because it is important to you?	
65.	P5.6	SD. Good afternoon, all.	
66.	EW	Hello P5.6.	
67.	P5.6	Can you hear me?	
68.	SD	Yes, we can hear.	
69.	P5.6	It's a bit on and off, on and off, on, off. I will talk as fast as possible, before the sound goes off again. I am not going to answer your question SD, but I am just going say what I experienced with the uncertainty. The biggest challenge for the children was the uncertainty – whether they are up to date. So, there was never a determination of whether I was up to date or not up to date. We could only determine that after approximately 8 months. So, it was bad, and	

		I think, the grade R's and 1's were a bit, not behind, but there are activities that they did not do. And we can see clearly in our grade 4's, who did not write exams in grade 3, they are struggling with the tests. We can see it and it does cause stress for them at this stage. And socially, it was very bad for the children. The boys were separate, and the girls were separate. Some of the girls rather enjoyed it, because the boys could not bother them as much at school. And yes, I think we have...-there is a big misperception that the parents were very involved with the children during COVID. That is not so. Parents themselves worked, so there was a short period, if parents were involved, it was only an hour or two that they were involved with the children. The children did not have 7- or 6-hours' teaching, that they are used to now. I also noticed with reading; children have fallen behind and they don't have that routine with reading any more. I further noticed with discipline - it took them some time to get used to that routine. Schools did not decide on another disciplinary system, those were the COVID rules. What came out positive however, was that many children have learnt to work independently, they had to put shoulder to the wheel. The discipline at schools – I have spoken to many teachers who are discipline-heads at other schools; they claimed that the discipline was much better, because we had followed the COVID protocols. Something that I have noticed with children and staff members, our children are visually oriented, everything is on television, on their tablets, on their phones. They learn much faster visually which put them light years ahead of us, which helped those that had lagged behind, to see it two or three times and did not only hear it from the teacher in class. I myself have twins who are still young; there were challenges but in the end of COVID they said, they were much happier to see their teacher in class again as me at home.	
70.	EW	Then we'd like to hear from you, what you did to cope. We'd like to know.	
71.	P5.6	No, worked out lessons. I am very adaptable , so it did not really ...going out, that one couldn't go anywhere, that was bad. The sport training that we couldn't do, many of our boys suffered, so did our daughter who could not practise sport. We also notice with the sport that now begins again. They are three years behind and remember, the grade 4's did not have an under-9 year in grade 3, so the last time they had sport was in grade 2. One can notice it on their bodies as well, small, big, strength-wise. There will have to be CDA programmes to get those children back on track. We could see it with our boys, with those six weeks' rugby practice, one match and COVID was back. So, yes, to them it was a big frustration, many of them, for instance, depended on bursaries, which did not materialise. Financially wise, many of the parents were also looking forward to the bursaries, it comes down to a few rand which could have contributed to their school funds. The schools cannot decide to whom the bursaries will go, at high schools, money is not allocated to bursaries, salaries must be paid which adds up to 30 percent of the budget. So, yes, we coped. I did not enjoy being a teacher at home because having twins, presents its own challenges. [unclear] – my daughters are now at that age where they are extremely clever. So, yes, it was a challenge, but we made it.	1.1. KEEPING BUSY AND DOING TASKS (Work activities) 1.2. ADAPTING TO CHANGED CIRCUMSTANCES
72.	EW	Okay. Thank you, Thank you very much.	
73.	SD	Thank you P5.6. I would like to repeat my question.	

74.	P5.6	Sorry SD I would like to say quickly, I think one of the most important skills that our children learnt, that we will only notice 15 years from now, is the fact that they learnt adaptability. They adapted much easier than the adults.	
75.	EW	Okay. Thank you.	
76.	P5.6	Thank you, all. If I switch off now it is not due to bad manners.	
77.	EW & SD	That's fine, thank you P5.6.	
78.	SD	I am going to repeat my question quickly. What did you realise was valuable or necessary for you, as a human being to be positive, that you enjoy doing, that you would like to include in your daily activities, now that we are kind of back to normal? Uhm, things that you perhaps did previously, before the COVID-19 period and perhaps did not realise is important to you. Something that with COVID-19 you realised, gee, I really need it and now, still in your daily activities or planning, include it to remain positive.	
79.	P5.1	I really need my friends and family in my life. I never realised how valuable it is to arrange a <i>braai</i> for a weekend.	5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS
80.	EW	Oh, yes.	
81.	P5.1	...[unclear]...we make pizza, are you coming to visit tonight. My husband and I, think I still suffer from it, I feel so guilty, because I haven't seen these people in ages. Then I realise, I could not see them and I have friends that – we are not yet back where we were. Uhm, the... the...- it's strange, because it's as if one has forgotten to get back into the routine of seeing each other on weekends or having a quick coffee. And now it's almost as if you don't take the trouble because people are still afraid of COVID so they don't leave their homes. One doesn't even pick up the phone to ask, because you don't think of them anymore. It's because you expect them to say no, they are too scared, or they don't feel comfortable with it and so on. So, it was important to me to say, I can at least phone my loved ones and say, let's meet for a coffee, come for a visit, let's see each other. The most important was that I realised, what I need in my life is to see my friends. Something I realised this week – P5.3 spoke about people who are control freaks. I've never thought of myself as a control freak, but I am and I think it is the fate of every teacher. I don't know about your schools but at our school they expect one to be 'on it'. The parents must receive the correct info the first at time and not be confused by different messages of plans that have changed. That matter of, we don't know, we can't tell you what is going on – was difficult for me. I don't think I never really switched off, P5.3, I am super proud of you because you said, listen here, I have to stop now, I cannot anymore. I constantly think, how I myself...-and that is what I've learnt about myself, that I've never realised – I had really thought I am a very chilled, laid-back person, remember, I am a music person, we are supposed to just, go with the flow. I did however realise that I need to feel safe and relaxed because of who I am and the type of teacher I am. I wanted	5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS 3.2. CONSCIOUS DISENGAGEMENT 6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH 1.1. KEEPING BUSY AND DOING TASKS (Studies) 2.1. TAKING THINGS ONE STEP AT A TIME

		to have control and it had been taken away totally. I am currently studying, I am busy with my HOD and it has actually saved me, because there was some routine. One still had to submit tasks, you still had to make sure that everything was up to date. I never thought I would say it, but thank heaven for my studies during that time. But yes, it is...we spoke this week, my husband and I I struggle to communicate. In the sense of, (gosh, we are going in deep).	
82.	EW	We want to learn from you, you are the experts.	
83.	P5.1	I struggle to say when I do not cope. Because it was expected from us as teachers to cope. The children are watching you, when you walk into the class when they come into the class, you are supposed to show them – it's okay. Even when things are not okay. They looked at you and made sure, you know.... And children are wonderful, especially the little ones. I don't really know what things are like at the high schools, I spent three days there last week when I had to practical and I just realised that the two schools are worlds apart. The smaller children just glance at you and they can judge whether you are feeling well or if there is something amiss, it's actually crazy how they do it. We had to learn how to be actors and actresses and I am still struggling to get out of it, due to my inability to show my feelings of uncertainty about what is happening. To be able to say, I am worried, I am not okay. It's a strange feeling, especially, I don't know if one expects things to be easier if you are over 30 years of age and then the pandemic happened and we are uncertain again. The other thing is, we love travelling and we had planned our second overseas trip, we would have gone to Iceland. I miss that tremendously, just to see those people and to break away. Yes, it's difficult if you want to see the world but you're not allowed to and have to stay home. Well, that was a mouth full and I am not sure whether I've answered your question, did I? Sorry.	6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH (Based on social expectation identity development / role change) 4.1. ACCEPTING THE SITUATION FOR THE TIME BEING 5.1 SEEKING ADVICE OR INFORMATION
84.	SD	Definitely. Thank you.	
85.	EW	It's very valuable, it's amazing to hear, and thank you for sharing with us so. It tells of tremendous growth and self-reflection in your being, that so much positive emerged from it. It is so valuable to be aware of oneself. So, thanks very much for that. Does anyone want to deal something related to SD's question with us?	
86.	P5.5	I can also say, I did – I think, previously one took so many things for granted and the pandemic has jerked us back. It jerked us back and showed us the important things in our lives. I also realised that I definitely need people, I get my energy from people, from interaction with them. it still is bad for me, as P5.1 has said, that many people are still scared of going out and I miss phoning friends on a Saturday afternoon and saying, let's go out tonight for something to eat. It was terrible not being allowed to see our children and grandchildren. One could not escape anywhere, because it was everywhere. You could not say, let's go here or there, because it was not safe. The most important thing for me is that we need people, the interaction with them. And I think P5.6 mentioned finances., I would like to respond to that. At our school we are dependent upon school fees because it is a private school. We also feel the effect of COVID now because parents fell behind with payments and could not pay the full amount. No one can be forced to pay school fees if they do not have the finances to do it. So, we lived off the school's reserves for quite some time. We know now that it is very difficult because we are now struggling to make ends meet. Something that he said that I have to agree with is that the children are behind with their work. I refer to what	6.4. NURTURING SPIRITUALITY (Value orientation) 5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS 5.1. SEEKING ADVICE OR INFORMATION

		I said earlier that the work has not been inculcated in the children's minds. In school one teaches and the last part is the independent work that they have to do. Now, they only did the independent work, they either had no or very little teaching and they are definitely behind, compared to where they should have been.	
87.	EW	Thank you P5.5. P5.2, you also wanted to say something?	
88.	P5.2	Sorry, I press buttons on the phone and then I lose you then I can't see who is speaking.	
89.	EW	That's fine, thanks.	
90.	P5.2	My youngest son had his birthday during lockdown, and he turned 7 years of age. It was rather bad for him, because with his brother whose birthday was in March, the family could come and visit, and he couldn't understand why no one visited him on his birthday. Then it was again bad for him this year, because it was level 3 or 4 on his birthday and we could again not arrange a birthday party for him. So, it is now his greatest wish, for his 8 th birthday, to invite all his friends to his birthday party. I also realised that there is a real need, in our family life to include our loved ones who are near to our hearts, to make time for them again, because this illness has taken us away from our loved ones, who are far away from us. We are not near to a grandmother or grandfather, they are in another town, another province, which makes it difficult to see them	5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS 6.5. EXERCISING OPTIMISM (Hope for restoring social interaction)
91.	EW	Thank you P5.2. P5.3, is there anything you would like to add?	
92.	P5.3	Yes, I would just like to say, I have never seen myself as a person who wants to touch or needs contact. I was half [unclear] and, uhm, when I realised with this pandemic, I do want to be able to touch people, I do want to hug them, I want to, if a child is in class and I can see this child is not coping, I want to hold that child's hand and say, do you know what, be sure, you are okay. That is what I miss at this stage, to take a child's hand or to touch a child's shoulder and say, it's okay, I see you, I understand. Or, you will come through this. It is something that I miss terribly, and I am sure the children also miss it because they possibly do not always have it at home. That is why they often get it at school. So, I have, a few times, when I noticed that a child was not coping at all, hugged him or her because it is the only thing that helps. So, I realised I am really a person who enjoys touching – (touching people sounds very weird) – but, just to, yes – that physical nearness. I was never like that. I never thought I was, but just to be close to people, I realised is really a human need. And I mean, it is known as being 'skin hungry' and I mean, I've experienced it – that skin hunger.	6.1. ENGAGING IN SELF-DISCOVERY AND PERSONAL GROWTH (Self-discovery, physical touch) 5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS 6.2. DRAWING ON REFLECTIVE PRACTICES
93.	EW	I think one sometimes realises things about yourself that you didn't know.	

94.	P5.1	I totally agree with that, well, it was difficult at the primary school. That first instinct when a child falls and gets hurt is, you pick up, hold and wipe tears and not to have been able to do it was very difficult. I see the children don't bother anymore. I had to laugh - last week, just before schools closed down, we had a car racing day - a piece of normality in this crazy era – it was totally different from what it used to be in the past when country sport was included. Then, in the end, they enjoyed it more than the previous sports days. I realised there – when one of the classes realised that they had won, well, protocol, social distance was totally out the door. They grabbed and hugged each other – and it was just - and one could see, the children, especially the little ones – don't have any inhibitions. So, if they feel like hugging teacher, how can one say, "no my darling, Miss is not allowed?" No, I totally agree P5.3, it was difficult in the beginning. Especially when they feel sad and you're not allowed to touch them – because there is always a child in class whose mother is very strict about things like that; so, if they go home and say, "there were hugs in class today" ...Oh, my word. It seems as if we are over the worst because children are saying things are better at home. That is what's nice about a primary school child, I don't know how things are at high school but in primary school they quickly come and tell you if something interesting has happened at home over the weekend.	5.2. RELYING ON RELATIONSHIPS WITH SIGNIFICANT OTHERS
95.	EW	Thank you P5.1. SD, would you like to add anything, or do you have any questions? He is our main host today,	
96.	SD	Yes. From my side, EW, I think we've received valuable information from the teachers today, I don't have any specific questions anymore. Before we conclude I will just go around and hear if there is anything more that you would like to add to our study. Anything more that you would like to mention, P5.5, from your side?	
97.	P5.5	I can't think of anything now, SD, but you have my email address, if you would like to ask anything or are wondering about or think I can still add anything, I will gladly try.	
98.	SD & EW	Thank you P5.5.	
99.	SD	Miss P5.2.	
100.	P5.2	Okay. All I'd like to say, I wish the masks would go away. It makes it very difficult for them to read my mouth while I am wearing the mask, to explain sums or if they need to read my emotions when I joke or am serious. So, if there is one thing I feel can just go away and make our task easier, it is that the mask must not be part of our education.	
101.	EW & SD	Great. We agree.	
102.	SD	Miss P5.3	
103.	P5.3	I agree with P5.2. These masks I fee – gee – the day they say we are not allowed to wear it I am going to make a bonfire like... [unclear].	
104.	SD	We are with you on that one.	

105.	P5.3	Because it's so bad, you only know the child's eyes. In the beginning I found it difficult to read the children; you don't know if they understand or not. What I found rather interesting with us who teach languages – when the children do oral exams or speeches, they come to class one-by-one. Then I would say, listen, stand one step back and remove your mask, I will keep my mask on then I can assess you easier. Sometimes those children look completely different than what you had thought, and I think, just to be able to see facial expressions – as P5.2 said, that children can see when one means something as a joke. There is so much that can be read in a teacher's facial expression when new work is explained. For our languages – when Language resources need to be explained, but the child cannot hear if you are saying a “t” or a “d”. So, often that mask slips off then I quickly tell them the word so that they can see how my mouth is formed. Vocals, diphthongs, then we just carry on again. So, those masks, when they go, I am going to have a huge party, [unclear].	
106.	EW	We agree.	
107.	SD	Miss P5.1, is there anything more you would like to add?	
108.	P5.1	I think I was too honest today. No, I totally agree [unclear]...is rather important, but I think we will only see a few years from now what had happened, what the pandemic has caused, for the teachers and for the children. Uhm, I rather wonder what it would be like in the future, to see how everybody have been affected in the end.	
109.	SD	Well, we've seen in today's session how adaptable you were and what problem-solving skills you used, and how you used your creativity to spend time with your family; the relaxation techniques and routines you followed to get through this strange and unknown period. All these aspects are going to make a valuable contribution to our study together with our findings in the previous sessions that link up to it perfectly. So, I would really like to, from my and EW, many, many thanks for your time and the contribution to our study. It is great and exciting. Possibly in a few months' time, we will send you an email, when we have written up all of it in our chapter, just to check that it is what you have written and meant. You can just reply by email and tell us, yes, it is in fact what you meant, or not. It's just a research process that we call member checking, where we, just after having written up this data, check in if it is what you had said and if we have written it down correctly in this chapter. So, you can expect another email from us, but it won't be an online session again. If you'll just respond to it, it will be great.	
110.	EW	Yes. It's also voluntary.	
111.	SD & EW	Thanking and goodbye.	



APPENDIX Q: MEMBER CHECKING (LETTER TO PARTICIPANTS)

Dear Participant

I trust that you are well. Thank you again for your participation in the online participatory focus groups during 2021. The purpose of this email is to grant you as a research participant the opportunity to verify the preliminary research results. The aim is to determine the truthfulness of the interpretations regarding the themes and conclusions in order to verify your views on the representations of the following thematic analysis.

Kindly provide your input, if any, regarding the themes and associated subthemes related to the cognitive strategies that were employed in response to dealing with challenges associated with COVID-19. These themes and sub-themes are broadly indicated hereafter. You are welcome to do so by replying to this email on or before the 22nd of July 2022.

The thematic analysis indicated the following broad themes and sub-themes:

Theme 1: Active Coping

- Sub-theme 1.1: Task engagement – initiating direct action, staying busy or doing general tasks.
- Sub-theme 1.2: Adapting – being flexible in response to challenges as a result of not having an immediate choice but to adapt to the presenting situation and associated challenges.
- Sub-theme 1.3: Skills acquisition – engaged in activities related to acquiring new skills, making use of online platforms and developing new technological skills, the acquisition of skills as a personal accomplishment and viewing skills acquisition as beneficial for long-term coping.

Theme 2: Planning

- Sub-theme 2.1: Chunking – planned to handle difficulties in a stepwise fashion and might have been overwhelmed should this strategy not be available.
- Sub-theme 2.2: Predictable routine – being structured and being aware of how to manage challenges apparently assisted with planning and effective coping. A predictable routine reportedly included time, activity and resource management.

Participants were aware of contextual factors influencing their routine. Planning also seemed to involve the implementation of other coping strategies, for example, planning to spend time with family.

- Sub-theme 2.3: Organisation and structured control – attempting to remain in control of that which participants were able to control, by making use of structure. Being aware of the importance of managing what they were able to manage, not only for themselves but also for those around them. Participants executed structured control and remained organised (also included the use of effective time and space management). External protocols seemed to alleviate the stress for participants and assisted in their coping.

Theme 3: Suppression of competing activities

- Sub-theme 3.1: Prioritising – focus on what the priority of participants were at the time of the presenting challenges. Prioritising as a coping strategy remained a method of future coping and appeared to also take place by means of suppressing the opinions of and debates with others.
- Sub-theme 3.2: Conscious disengagement – consciously chose to disengage from activities and/or thought processes that competed with their ability to manage the stressors. Other activities, delegation of tasks and/or thought processes appeared to assist with this.
- Sub-theme 3.3: Conscious denial – to seemingly minimise stress in order to facilitate coping.

Theme 4: Restraint coping

- Sub-theme 4.1: Acceptance – acceptance and accommodation of changes related to COVID-19 and to deal with it when ready (appeared to occur not only for themselves but also for the sake of others).
- Sub-theme 4.2: Remain calm – during the time of presenting challenge(s).

Theme 5: Seeking of instrumental support

- Sub-theme 5.1: Instrumental social support – participants endeavoured to reach out to others, or had a need to do so for advice and to gauge regarding work as well as wellbeing. Participants gave the impression that a need for a platform to voice and discuss their frustrations, concerns and opinions existed. Participants planned scheduled meetings and sought trusted advice. A sense of coherence seemed to have emerged from the instrumental support among participants.

- Sub-theme 5.2: Tap in on relationships – tapping in on the relationships of others as a source of energy as well as to be comforted. It seemed important for participants to be selective about whom to spend time with.

Theme 6: Growth mindset

- Sub-theme 6.1: Identity development – personal growth (the development of various personal coping skills), independence and self-discovery formed part of identity development coping strategy. Participants developed coping, interpersonal and intrapersonal as well as professional skills that they previously might not have had. They gained self-knowledge and became aware of their resilience in response to adversities.
- Sub-theme 6.2: Reflectiveness – willingness for vulnerability of participants appeared to support their coping and resulted in new perspectives. Participants felt a necessity positively to adapt through reflectiveness for the benefit of others and to be cognisant of using acquired skills in the future.
- Sub-theme 6.3: Self-care – setting healthy boundaries, developing life-skills, partaking in hobbies, recreational activities and maintaining healthy lifestyle habits were indicated to form part of the participants' coping. It additionally seemed as if participants realised the need for the continuous maintenance hereof.
- Sub-theme 6.4: Spiritual – relied on religious practices and strategies, family values, value orientation, resilience in heritage/cultural identity, purpose and meaning making contributed to the spiritual dimension of their coping. Meaning within the adversities was discovered.
- Sub-theme 6.5: Optimism – reframed the challenges that participants were faced with to support positive or realistic perspective-taking. Humour was used in coping. Hope also formed part of the cognitive strategies that supported the optimism and growth mindset of participants.

Thank you for your consideration in providing feedback on the above-mentioned themes.

Kind regards

Elisma Williams



APPENDIX R: TABLE OF INTEGRATION OF THE RESULTS

RESULTS (QUANTITATIVE) COPE INVENTORY CARVER	RESULTS (QUANTITATIVE) ARM-R	SPEARMAN (ADDITIONAL SCALES)	RESULTS (QUALITATIVE) NEW INSIGHT	LIT REVIEW & CONCEPTUAL FRAMEWORK CORRELATION, CONTRADICTION, SILENCES (phrases)
<p>ACTIVE COPING Active steps that were taken in an attempt to alleviate, remove or lessen the effects of the stressor(s)</p> <ul style="list-style-type: none"> • I concentrate my efforts on doing something about it. (43,75%) • I take additional action to try to get rid of the problem. (47,5%) • I take direct action to get around the problem. (48.33%) • I do what has to be done, one step at a time. (45,42%) 	<p>(Percentages of “a lot” is indicated)</p> <p>PERSONAL Getting and improving qualifications or skills is important to me (47,5%)</p> <p>I have opportunities to apply my abilities in life (like skills, a job, caring for others) (69,17%)</p> <p>RELATIVE If I am hungry, I can get food to eat (78,75%)</p>	<p>ACTIVE COPING</p> <p>Correlation value: 0.29 (Positive, weak correlation)</p> <p>P-value: <0.001</p> <p>Significant</p>	<ul style="list-style-type: none"> • Keeping busy and doing tasks <ul style="list-style-type: none"> - initiating direct action, staying busy (household chores) or doing general tasks - eating more than usual • Adapting to changed circumstances <ul style="list-style-type: none"> - being flexible in their response to challenges and as a result of not having an immediate choice but to adapt to the presenting situation and associated challenges - made a conscious and positive choice as a result of limited availability of other options - reflection: It appeared as if the participants viewed adaptation as coping strategy in a positive way more often than not • Acquiring new skills <ul style="list-style-type: none"> - engaged in activities related to acquiring new skills - online platform and new technological skills - the acquisition of skills as a personal accomplishment - beneficial for long-term coping 	<p>Resilience may therefore have presented differently as, for example ... actively solving problems (PeConga et al., 2020; Bonanno et al., 2015).</p> <p>Teachers furthermore had to adapt and adjust to new health regulations and manage uncertainties within the new normal reality, also in terms of curriculum implementation (Brooks et al., 2022; Padmanabhanunni et al., 2022).</p> <p>In support, Carver et al. (1989, p. 267) describe problem-focused coping as “tending to predominate when people feel that something constructive can be done”.</p> <p>Resilient teachers seem to experience a belief in their ability (self-efficacy), assign pride to their achievements and competence, and have strong interpersonal connections (Howard & Johnson, 2004).</p> <p>In support, Maslach and Leiter (2016) report that emotional capacity, personal achievement and involvement are associated with individuals that appear not to experience burn-out.</p> <p>Thus, by engaging in adaptive behaviours in the midst of fear, grief and anxiety can effectively be</p>

RESULTS (QUANTITATIVE) COPE INVENTORY CARVER	RESULTS (QUANTITATIVE) ARM-R	SPEARMAN (ADDITIONAL SCALES)	RESULTS (QUALITATIVE) NEW INSIGHT	LIT REVIEW & CONCEPTUAL FRAMEWORK CORRELATION, CONTRADICTION, SILENCES (phrases)
				<p>described as acting with resilience (PeConga et al., 2020).</p> <p>Protective factors are described to predict the adjustment potential of individuals who experience adversity (Hamby et al., 2018).</p> <p>Adaptive coping mediates adversity, which, in turn, progressively leads to the positive adaptation of individuals, supporting their resilience processes (Jonker, 2021; Skinner & Zimmer-Gembeck, 2011) Tait, 2008; Gu & Day, 2007).</p> <p>Robles-Bello et al. (2020) report that the confluence of self-efficacy and optimism within the context of COVID-19 encourages coping by adaptive and flexible behaviour.</p> <p>Resilient individuals consequently display the ability to continue executing and fulfilling social and personal responsibilities while also embracing new experiences and tasks (Bonanno et al., 2007).</p> <p>...have preservation skills, are able to ... experience work satisfaction, and have a high level of self-efficacy (Guy, 2022; Wuest & Subramaniam, 2021; Tait, 2008; Gu & Day, 2007).</p> <p>...more effortlessly adapt to a changing environment (Yıldırım & Arslan, 2020).</p> <p>Resilience furthermore involves complex processes associated with the adaptive reactions</p>

RESULTS (QUANTITATIVE) COPE INVENTORY CARVER	RESULTS (QUANTITATIVE) ARM-R	SPEARMAN (ADDITIONAL SCALES)	RESULTS (QUALITATIVE) NEW INSIGHT	LIT REVIEW & CONCEPTUAL FRAMEWORK CORRELATION, CONTRADICTION, SILENCES (phrases)
				<p>of individuals on an emotional, behavioural and cognitive level (Masten & Cicchetti, 2016; Masten, 2014).</p> <p>Bonanno (2020) proposes that individuals should try different ways of coping with stress in order to determine what works best for them. (Adapt).</p> <p>Essentially, Benight and Bandura (2004) suggest that individuals with a high sense of coping self-efficacy make use of actions and strategies that are designed to adjust a threatening environment to a more manageable environment.</p> <p>A highly pragmatic approach to coping is viewed as doing whatever it takes and might be necessary for individuals who are reported to be goal-directed (Bonanno & Mancini, 2008)</p> <p>Brooks et al. (2022) argue that teacher job efficacy and self-concept play a critical role in learning to cope and adapt to change.</p> <p>Sokal et al. (2020) state that the attitude of teachers towards remote learning, their use of technology and their sense of self-efficacy plays a significant role in personal resources and their experience of burnout. (Skills development)</p> <p>Protective factors may include employing cognitive strategies such as cognitive appraisal, locus of control, learning motivation and self-efficacy, as mentioned (Staal et al., 2008).</p>

RESULTS (QUANTITATIVE) COPE INVENTORY CARVER	RESULTS (QUANTITATIVE) ARM-R	SPEARMAN (ADDITIONAL SCALES)	RESULTS (QUALITATIVE) NEW INSIGHT	LIT REVIEW & CONCEPTUAL FRAMEWORK CORRELATION, CONTRADICTION, SILENCES (phrases)
				<p>Chen and Bonanno (2020) argue that flexibility remain imperative when responding to adversities posed by COVID-19.</p> <p>On the contrary, it should also be taken into account that individuals might adopt potentially harmful behaviours in coping with COVID-19. Some of these behaviours include exercising less often, increased alcohol consumption, smoking and overeating (Pappa et al., 2021; Lee et al., 2021). (One participant)</p> <p>Attention is therefore focused on actions where an individual is able to affect an outcome or a process (Wuest & Subramaniam, 2021).</p> <p>Self-enhancement is also reported to be linked to resilience since it promotes well-being (Bonanno, 2004).</p> <p>...new knowledge and acquired skills as part of self-enhancement formed part of the coping strategies that teachers employed in response to the challenges posed by COVID-19 (Brooks et al., 2022).</p> <p>Active coping and thereby taking direct action and is a cognitive strategy that enhance resilience (Naidu, 2021; Wuest & Subramaniam, 2021).</p> <p>Optimists tend to seek information about challenges, plan accordingly and actively cope when faced with adversities (Mens et al., 2021). (ADAPTING)</p>

RESULTS (QUANTITATIVE) COPE INVENTORY CARVER	RESULTS (QUANTITATIVE) ARM-R	SPEARMAN (ADDITIONAL SCALES)	RESULTS (QUALITATIVE) NEW INSIGHT	LIT REVIEW & CONCEPTUAL FRAMEWORK CORRELATION, CONTRADICTION, SILENCES (phrases)
				<p>In support, Bonanno et al. (2015) propose that coping and resilience encompass positive adjustment and adaptation.</p> <p>During the challenging times that COVID-19 presented, teachers were challenged positively to adapt and be flexible in order to achieve their goals (Brooks et al, 2022; Wuest & Subramaniam, 2021).</p> <p>Adaptation was, for example, seen in how teachers accelerated education innovations and made use of novel digital technologies to accommodate online-learning platforms for continued education (Ebersöhn, 2020).</p> <p>Bonanno and Mancini (2008, p. 372): "Adaptive flexibility can be regarded as a healthy coping strategy which increases resilience to adverse events."</p> <p>Resilience can therefore be viewed to include adaptability and flexibility and is consequently not static (Chang & Bonanno, 2020).</p> <p>A salient factor within the context of COVID-19, as argued by Chen and Bonanno (2020), appears to be a need for flexibility in promoting and maintaining resilience.</p> <p>In support, Masten (2014) propose that ... self-regulation ... cognitive attributes are associated with resilience and support wellbeing.</p> <p>In addition, Theron et al. (2021) found that individuals kept busy by engaging in activities so</p>

RESULTS (QUANTITATIVE) COPE INVENTORY CARVER	RESULTS (QUANTITATIVE) ARM-R	SPEARMAN (ADDITIONAL SCALES)	RESULTS (QUALITATIVE) NEW INSIGHT	LIT REVIEW & CONCEPTUAL FRAMEWORK CORRELATION, CONTRADICTION, SILENCES (phrases)
				as to facilitate coping during the COVID-19 pandemic.
<p>PLANNING It is thinking about how to cope with a stressor. Planning involves coming up with action strategies, thinking about what steps to take and how best to handle the problem.</p> <ul style="list-style-type: none"> • I make a plan of action. (55,83%) • I try to come up with a strategy about what to do. (45,83%) • I think about how I might best handle the problem. (47,92%) • I think hard about what steps to take. (45%) 		<p>PLANNING</p> <p>Correlation value: 0.31 (Positive, weak correlation)</p> <p>P-value: <0.001</p> <p>Significant</p>	<p>Keeping routines and remaining organised</p> <ul style="list-style-type: none"> • Taking things one step at a time <ul style="list-style-type: none"> - planned to handle difficulties in a stepwise fashion - may have felt overwhelmed should this strategy not be available to them • Maintaining a routine <ul style="list-style-type: none"> - being structured and being aware of how to manage challenges apparently assisted with their planning and effective coping - predictable routine reportedly included time, activity and resource management - aware of contextual factors influencing their routine - personal preferences and situational circumstances seemed to influence the planning and routines of participants - planning also seemed to involve the implementation of other coping strategies (planning to spend time with family – rely on relationships, and planning for self-care) • Staying in control of what is possible <ul style="list-style-type: none"> - attempting to remain in control of that which they could by making use of structure 	<p>Resilience may therefore have presented differently as ... copied day-by-day or creating hope for the future (PeConga et al., 2020; Bonanno et al., 2015).</p> <p>Self-care was found to be the most significant individual protector of teachers' wellbeing; however, a reasonable workload, the support of management and a positive school culture seems to be fundamental when support is provided (Ainsworth & Oldfield, 2019).</p> <p>In support, time-efficient practices and strategies are seen as protective mechanisms that assist teachers to enhance their coping capacity and effectively enhance their wellbeing (Mansfield et al., 2016; Wosnitza et al., 2014; Thieman et al., 2012).</p> <p>Optimists tend to seek information about challenges, plan accordingly and actively cope when faced with adversities (Mens et al., 2021).</p> <p>Coping self-efficacy can therefore be described "an active, crucial cognitive component that can facilitate a sense of control to influence essential social and personal resources that are relevant to maintaining, regaining, or enhancing well-being" (Benight & Cieslak, 2011, p. 49).</p> <p>They approach potential stressors or threats with assurance that they can exercise some control over them (Bandura, 1989b).</p>

RESULTS (QUANTITATIVE) COPE INVENTORY CARVER	RESULTS (QUANTITATIVE) ARM-R	SPEARMAN (ADDITIONAL SCALES)	RESULTS (QUALITATIVE) NEW INSIGHT	LIT REVIEW & CONCEPTUAL FRAMEWORK CORRELATION, CONTRADICTION, SILENCES (phrases)
			<ul style="list-style-type: none"> - be aware of the importance of managing what they were able to manage, not only for themselves but also for those around them - executing structured control and remaining organised appeared to also include the use of effective time and space management - organisation of their physical environment and working demands appeared to act as means of planning and effectively, coping - external protocols seemed to alleviate the stress for participants and assisted in their coping 	<p>Protective factors may include employing cognitive strategies such as cognitive appraisal, locus of control, learning, motivation and self-efficacy, as mentioned (Staal et al., 2008). (Belief in their ability to remain in control, and not be controlled by external factors).</p> <p>... having functional problem-solving skills, having confidence in one's abilities and skills and being able to develop and carry out realistic plans are aspects that contribute to resilience (Riopel, 2020).</p> <p>In elaboration, problem-solving abilities have been positively correlated with resilience (Masten, 2019; Bonanno et al., 2015).</p> <p>The efficient allocation of time to protect their wellbeing is seen as critical (Brooks et al., 2022) in coping with stressors.</p> <p>Increasing a sense of control over the situation aids in the facilitation of coping (Thompson, 2021; Luceño-Moreno et al., 2020).</p> <p>Thompson (2021) propose that in an attempt to maintain control, individuals might create new avenues for such control in a situation.</p> <p>Teachers also adhered to keeping to a routine so as to maintain a sense of order within the uncertainty of the time (Brooks et al., 2022).</p> <p>... ability to plan alternative routes when an individual is faced with adversities, as well as the belief that a situation and its related difficulties</p>

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				<p>can be controlled and consequently overcome is linked to high dispositional hope (Yıldırım & Arslan, 2020).</p> <p>In addition, such teachers seem to demonstrate planning and organisational skills (Brooks et al., 2022; Hewitt et al., 2017).</p>
<p>SUPPRESSION OF COMPETING ACTIVITIES Suppression of competing activities means putting other projects aside, trying to avoid becoming distracted by other events, even letting other things slide, if necessary, in Order to deal with the stressor.</p> <ul style="list-style-type: none"> I keep myself from getting distracted by other thoughts or activities. (46,25%) I focus on dealing with this problem, and if necessary, let other things slide a little. (49,58%) I try hard to prevent other things from interfering with my efforts at dealing with this. (45,83%) I put aside other activities in order to concentrate on this. (32,5%) 		<p>SUPPRESSION OF COMPETING ACTIVITIES</p> <p>Correlation value: 0.13 (Positive, weak correlation)</p> <p>P-value: 0.048</p> <p>Significant</p> <hr/> <p>MENTAL DISENGAGEMENT</p> <p>Correlation value: -0.23 (Negative, weak correlation)</p> <p>P-value: <0.001</p> <p>Significant</p> <hr/> <p>BEHAVIOURAL DISENGAGEMENT</p> <p>Correlation value: -0.23 (Negative, weak correlation)</p> <p>P-value: <0.001</p>	<p>Participants seemed to suppress activities that may have competed with coping</p> <ul style="list-style-type: none"> The avoidance of distractions, being aware of what is controllable (to focus on) and focussing on what is urgent seemed to be utilised by participants <ul style="list-style-type: none"> Prioritising what is important at the time <ul style="list-style-type: none"> focused on what their priority was at the time of the presented challenges and to also concentrate on the positive some disclosed that it was a difficult strategy to employ prioritising as a coping strategy remained a method of future coping enabled the participants to attend to important situations prior to working on less important ones, and this strategy helped them realise the value of prioritisation, and helped them concentrate their effort and energy on a presenting challenge Conscious disengagement <ul style="list-style-type: none"> conscious decisions to disengage from activities and/or thought 	<p>... repressive copers since they tend to avoid emotional experiences that are unpleasant (Bonanno & Mancini, 2008).</p> <p>... repressive copers may also make use of avoiding unpleasant emotions or thoughts to nurture adaptation in response to extreme adversity (Bonanno, 2004).</p> <p>Tools for resilience, according to Bonanno (2020) include ..., distracting oneself, not overindulging in media but remaining informed.</p> <p>Additional strategies were identified to include..., staying actualised ... avoiding information overload (Chen & Bonanno, 2020; Liang et al., 2020; Robles-Bello et al. 2020; Staal et al., 2008).</p> <p>Individuals are therefore aware of what is controllable in the situation, and what not (Wuest & Subramaniam, 2021) is.</p> <p>They prioritise what is important and urgent and focus energy on what can be changed and/or controlled and reduce their workload where possible (Brooks et al., 2022; Wuest & Subramaniam, 2021).</p>

RESULTS (QUANTITATIVE) COPE INVENTORY CARVER	RESULTS (QUANTITATIVE) ARM-R	SPEARMAN (ADDITIONAL SCALES)	RESULTS (QUALITATIVE) NEW INSIGHT	LIT REVIEW & CONCEPTUAL FRAMEWORK CORRELATION, CONTRADICTION, SILENCES (phrases)
		<p>Significant</p> <p>_____</p> <p>DENIAL</p> <p>Correlation value: -0.19 (Negative, weak correlation)</p> <p>P-value: 0.003</p> <p>Significant</p>	<p>processes that could compete with their ability to or focus on the effective management of stress and adversity</p> <ul style="list-style-type: none"> - other activities, delegation of tasks and/or thought processes appeared to assist with this - cognitively focused their efforts “to get through this day, “see past the negative things” - filter what they listened to - to focus on only using technology when needed (radio) - to minimise stress in order to facilitate coping - disengaging from added responsibilities - suppressing the opinions of and debates with others - reflection: deliberately deny adverse thought processes, but chose to focus on constructive mental engagements 	<p>Lin et al. (2020) explain that this strategy involves to how individuals prepare in an attempt avoid obstacles, barriers or potentially competing behaviours that may derail planned behaviour.</p>
<p>RESTRAINT COPING</p> <p>Restraint coping is waiting until an appropriate opportunity to act presents itself, holding oneself back, and not acting prematurely. This is an active coping strategy in the sense that the person's behaviour is focused on dealing effectively with the stressor, but it is also a passive strategy in a sense.</p>		<p>RESTRAINT COPING</p> <p>Correlation value: 0.13 (Positive, weak correlation)</p> <p>P-value: 0.044</p> <p>Significant</p> <p>_____</p> <p>ACCEPTANCE</p> <p>Correlation value: 0.21</p>	<p>Participants indicated that they waited until the appropriate opportunity to deal with the stressors and adversities posed by COVID-19. They held back in dealing with challenges initially since circumstances often seemed to be out of their control</p> <ul style="list-style-type: none"> • Accepting the situation for the time being - acceptance of changes 	<p>Resilience may therefore have presented differently as, for example, seeking social support, tolerating uncertainty, optimism, actively solving problems, coping day-by-day or creating hope for the future (PeConga et al., 2020; Bonanno et al., 2015).</p> <p>Bottiani et al. (2019) similarly report that teachers with an affiliation with colleagues, teachers with more self-efficacy and teachers who have a learner-emphasis had lower burnout and stress levels.</p>

RESULTS (QUANTITATIVE) COPE INVENTORY CARVER	RESULTS (QUANTITATIVE) ARM-R	SPEARMAN (ADDITIONAL SCALES)	RESULTS (QUALITATIVE) NEW INSIGHT	LIT REVIEW & CONCEPTUAL FRAMEWORK CORRELATION, CONTRADICTION, SILENCES (phrases)
<p>Using restraint means not acting.</p> <ul style="list-style-type: none"> I restrain myself from doing anything too quickly. (33,75%) I hold off doing anything about it until the situation permits. (28,75%) I make sure not to make matters worse by acting too soon. (38,75%) I force myself to wait for the right time to do something. (47,92%) 		<p>(Positive, weak correlation)</p> <p>P-value: 0.001</p> <p>Significant</p>	<p>- accommodated the changes related to COVID-19 within their lives and dealt with them when they were ready</p> <p>- appeared to occur not only for themselves but also for others</p> <p>- made use of their own time as a resource for resilience</p> <p>- the outcomes will be exactly the same</p> <p>- participants seemed also to accept challenges for the sake of others</p> <p>- the participants appeared to experience a sense of relief and comfort, allowing them to use the added time in other ways in support of their coping</p> <ul style="list-style-type: none"> Remaining calm <p>- remaining calm within a situation that they were not able to execute control over</p> <p>Reflection: it occurred that participants indicated not to deflect or deny having to cope, but to learn how to do so within an appropriate timeline and by remaining calm, which had seemingly resulted in positive adaptation and growth.</p>	<p>As part of this strategy, individuals accept what cannot be changed since change is a constant in life (Wuest & Subramaniam, 2021).</p> <p>Thompson (2021) as well as Yong and Yue (2007) concur in their remark that accepting change can assist in coping with a situation where one does not have control and may experience stress.</p> <p>Acceptance can be achieved by, for example finding meaning within the situation (Thompson, 2021).</p> <p>...the attitude of teachers to change is deemed as a significant resource in response to challenges posed by the pandemic (Sokal et al., 2020).</p> <p>Ebersöhn (2014) argues that teacher resilience involves the process of the teachers' appraisal (Skinner & Zimmer-Gembeck, 2007) of the risk factor (based on context awareness and self-perception) and the adaptive outcome (by coping behaviour) within the teacher's ecological system and in response to the stressor.</p>
<p>SEEKING OF INSTRUMENTAL SUPPORT</p> <p>Seeking social support for Instrumental reasons is seeking advice, assistance, or information:</p>	<p>(A LOT - %, except for item 3)</p> <p>PERSONAL</p>	<p>SEEKING OF INSTRUMENTAL SUPPORT</p> <p>Correlation value: 0.36</p> <p>(Positive, weak correlation)</p>	<p>- participants endeavoured to reach out to others, or had a need to do so, for advice and to gauge with them regarding work as well as wellbeing</p>	<p>Policies should, therefore, accommodate for the organisation, peer group support as well as reliable management strategies and leadership to support teachers in emergency and everyday situations with personal and professional</p>

RESULTS (QUANTITATIVE) COPE INVENTORY CARVER	RESULTS (QUANTITATIVE) ARM-R	SPEARMAN (ADDITIONAL SCALES)	RESULTS (QUALITATIVE) NEW INSIGHT	LIT REVIEW & CONCEPTUAL FRAMEWORK CORRELATION, CONTRADICTION, SILENCES (phrases)
<ul style="list-style-type: none"> I try to get advice from someone about what to do. (42,92%) I talk to someone to find out more about the situation. (51,25%) I talk to someone who could do something concrete about the problem. (43,75%) I ask people who have had similar experiences what they did. (40,42%) 	<p>I cooperate with people around me (55,42%)</p> <p>I know how to behave in different social situations (55%)</p> <p>People like to spend time with me (38,75%) (Quite a bit)</p> <p>I feel supported by my friends (50,83%)</p> <p>My friends stand by me during difficult times (57,5%)</p> <p>I have opportunities to show others that I can act responsibly (65,83%)</p> <p>RELATIVE: My family have usually supported me through life (68,75%)</p> <p>My family knows a lot about me (60%)</p> <p>I talk to my family/partner about how I feel (56,67%)</p> <p>My family/partner stands by me during difficult times (77,92%)</p>	<p>P-value: <0.001</p> <p>Significant</p> <hr/> <p>USE OF EMOTIONAL SOCIAL SUPPORT</p> <p>Correlation value: 0.46 (Positive, moderate correlation)</p> <p>P-value: <0.001</p> <p>Significant</p> <hr/> <p>FOCUS ON VENTING OF EMOTIONS</p> <p>Correlation value: 0.06 (Positive, negligible correlation)</p> <p>P-value: 0.338</p> <p>Not significant</p>	<ul style="list-style-type: none"> Seeking advice or information <ul style="list-style-type: none"> relied on the strategy of seeking trusted advice and guidance from others to cope they planned scheduled meetings made use of online platforms to share ideas as well as working arrangements and plans relied on interaction with peers (both in person and/or virtual) to deal with the teaching-related challenges sound-board important for participants to experience the progress of the group Relying on relationships of significant others <ul style="list-style-type: none"> tapping in on the relationships of others as a source of energy as well as to be comforted significant relationships they relied on included those with family members, life partners and colleagues important for participants to be selective for who to spend time with a sense of coherence seemed to have emerged from the instrumental support among participants even learners reflection: cognisance and the importance of interpersonal relationships appeared to be paramount to the participants. It 	<p>challenges (Ainsworth & Oldfield 2019; Howard & Johnson, 2004).</p> <p>Other cognitive strategies that can support coping include social support and continued online communication... (Chen & Bonanno, 2020; Robles-Bello et al. 2020)</p> <p>Resilience may therefore have presented differently as, for example, seeking social support ... (PeConga et al., 2020; Bonanno et al., 2015).</p> <p>Dinu et al. (2021) argue that the COVID-19 pandemic led to an increased team spirit and a sense of collegiality, acting as motivation that supported teacher wellbeing.</p> <p>Bottiani et al. (2019) similarly report that teachers with an affiliation with colleagues, teachers with more self-efficacy and teachers who have a learner-emphasis had lower burnout and stress levels.</p> <p>Resilient teachers seem to experience a belief in their ability (self-efficacy), assign pride to their achievements and competence, and have strong interpersonal connections (Howard & Johnson, 2004).</p> <p>Resilient individuals consequently display the ability to continue executing and fulfilling social and personal responsibilities while also embracing new experiences and tasks (Bonanno et al., 2007).</p>

RESULTS (QUANTITATIVE) COPE INVENTORY CARVER	RESULTS (QUANTITATIVE) ARM-R	SPEARMAN (ADDITIONAL SCALES)	RESULTS (QUALITATIVE) NEW INSIGHT	LIT REVIEW & CONCEPTUAL FRAMEWORK CORRELATION, CONTRADICTION, SILENCES (phrases)
	I feel secure when I am with my family/partner (77,5%)		<p>seemed as if not only the existence of these relationships was important, but that deep and meaningful connections were illuminated for the participants and that awareness took place on a cognitive level</p> <p>Possible insight:</p> <ul style="list-style-type: none"> - participants gave the impression that a need for a platform to voice and discuss their frustrations, concerns, challenges and opinions were required. not as a strategy that participants employed, but as deduced from their responses within the online participatory focus groups. - the participants seemed to make use of this platform to voice their frustrations, concerns, challenges and opinions that they experienced in response to the adversities posed by COVID-19. - participants made use of the online participatory focus group discussion as a platform to voice their frustrations, concerns, challenges and opinions. Participants emphasised a need for such an opportunity or platform when they are faced with adversities they did not expect 	<p>Self-care was found to be the most significant individual protector of teachers' wellbeing; however, a reasonable workload, the support of management and a positive school culture seems to be fundamental when support is provided (Ainsworth & Oldfield, 2019).</p> <p>Tools for resilience, according to Bonanno (2020) include remaining optimistic, bonding with individuals close to us, relying on the support of other individuals, distracting oneself, not overindulging in media but remaining informed, finding ways to minimise isolation and finding ways to have fun and laugh.</p> <p>Additional strategies were identified to include social support and continued online communication, staying actualised, optimism and avoiding information overload (Chen & Bonanno, 2020; Liang et al., 2020; Robles-Bello et al. 2020; Staal et al., 2008).</p> <p>Meaningful connections with others (Brooks et al., 2022; Padmanabhanunni et al., 2022; Juliana et al., 2021; Wuest & Subramaniam, 2021; Wu et al., 2013).</p> <p>Attributes that seem to serve as protective factors associated with resilience, include attachment ... (Theron, 2020; Masten 2014).</p> <p>Wuest and Subramaniam (2021); Brooks et al. (2022) ... seeking out professional guidance and making use of teamwork to provide individuals with support in navigating challenges.</p>

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				<p>Bonanno et al. (2015) state that the instrumental support with tasks of daily living as well as the provision of information that can facilitate coping is linked to positive psychological adjustment.</p> <p>Juliana et al. (2021) concur with this view by adding that information sharing and supervisory support promoted the engagement of teachers and mediated burnout.</p> <p>Social relationships were also found to be enhanced by sharing useful information and knowledge, which can be fostered through the use of technology (Bonanno et al., 2015).</p> <p>In response to the challenges posed by COVID-19, teachers and education support staff should be provided with continuous psychosocial support to facilitate resilience.</p> <p>Bonanno and Mancini (2008) as well as Bonanno et al. (2007) ... social support.</p> <p>... one of the most critical aspects to strengthen resilience is by means of connecting in meaningful ways with others (Padmanabhanunni et al., 2022; Wuest & Subramaniam, 2021; Wu et al., 2013).</p> <p>Connections like this contribute to not feeling isolated when facing challenges posed by COVID-19 and offer opportunities for insight and varying perspectives about similar challenges (Wuest & Subramaniam, 2021) by individuals such as mentors (Brooks et al., 2022).</p>

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				<p>...seeking social support, tolerating uncertainty, relying on optimism, actively solving problems, coping on a daily basis or creating hope for the future (Bonanno et al., 2015; PeConga et al., 2020).</p> <p>... practical help or sharing information (for example how one should modify online lessons) (Brooks et al., 2022; Wuest & Subramaniam, 2021).</p> <p>...social support can play an important role to provide help and buffer the effect of stress, while helping to manage challenges that teachers face (Wuest & Subramaniam, 2021).</p> <p>Social support as well as social and community cohesion were suggested to act as protective factors against adverse consequences of stressors (Mandavia & Bonanno, 2019). The protective factor found in social support alleviates stress, depression and enhances health, while it provides an enabling function of enhancing self-efficacy (Benight & Bandura, 2004).</p> <p>... meaning-making strengths (reflective of cultural and faith-based processes), regulatory strengths, as well as peer, adult, community and immediate family social support (Ungar & Theron, 2020; Hamby et al., 2018).</p>
It seemed as if participants' cognitive coping was aimed at the management of distress emotions.	(A LOT - %) PERSONAL	POSITIVE REINTREPRE- TATION AND GROWTH Correlation value: 0.34 (Positive, weak correlation)	GROWTH MINDSET • Engaging in self-discovery and personal development - personal growth (the development of various personal coping skills),	In the South African context, it therefore appears as if researchers of resilience should take collectivist cultures' ... values, practices, perspectives and philosophies into account Collective coping behaviours of individuals from

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	<p>I feel that I belong in my community (47,92%)</p> <p>I am treated fairly in my community (47,92%)</p> <p>RELATIVE I enjoy my family's/partner's cultural and family traditions (70,83%)</p>	<p>P-value: <0.001</p> <p>Significant</p> <p>RELIGIOUS COPING</p> <p>Correlation value: 0.25 (Positive, weak correlation)</p> <p>P-value: <0.001</p> <p>Significant</p> <hr/> <p>HUMOUR</p> <p>Correlation value: -0.14 (Negative, weak correlation)</p> <p>P-value: 0.028</p> <p>Significant</p> <hr/> <p>SUBSTANCE USE</p> <p>Correlation value: -0.10 (Negative, negligible correlation)</p> <p>P-value: 0.143</p> <p>Not significant</p>	<p>independence and self-discovery formed part of their identity development coping strategy</p> <ul style="list-style-type: none"> - identity has deepened in who they already believed themselves - developed coping, interpersonal and intrapersonal as well as professional skills (e.g., interpersonal and delegation, compassion) that they previously may not have had - metacognitively endeavoured to present their best self for the support of others as well, which appeared to resulted in their own personal growth -gained self-knowledge - participants' self-discovery and independent learning guided a process of personal growth and identity development - became aware of resilience that might be associated with adversities <p>• Drawing on reflective practices</p> <ul style="list-style-type: none"> - willingness for vulnerability of participants appeared to support their coping, bringing new perspective - feel a necessity to positively adapt through reflectiveness for the benefit of others and to be cognisant of using acquired skills in the future - participants reported that reflection assisted positive adaptation to work related processes - a participant realised that self-reflection added to the importance of the learners in her own life 	<p>these cultural groups may therefore be viewed as a product of the relational and communal values and norms (Kuo, 2013).</p> <p>... opportunities for growth and development within the teaching occupation may be a result of their response to challenges (Peixoto e al., 2018).</p> <p>... teachers' conviction in the purpose of their vocation and by applying this role to be better able to manage uncertainties and challenges seem to influence their resilience (Guy, 2022; Gu, 2018; Day & Gu, 2010; Sammons et al., 2007; Brunetti, 2006).</p> <p>... resilience within a world pandemic can be seen as the ability to maintain a course of good mental health; minimising worry, depression and anxiety and keeping spirits high (Bonanno, 2020)</p> <p>Resilience may therefore have presented differently as, for example... optimism... or creating hope for the future (PeConga et al., 2020; Bonanno et al., 2015).</p> <p>Being resilient does not, however, imply that individuals do not experience stress or adversities, but it means that individuals should be able to harness strengths in order effectively to manage challenges and ultimately learn and grow from them (Wuest & Subramaniam, 2021).</p> <p>Aspects such as self-regulation, personal coping resources, meaning, optimism, hope and significance (Masten, 2019; Baum et al., 2018)</p>

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			<ul style="list-style-type: none"> • Maintaining self-care -setting healthy boundaries, developing life-skills, partaking in hobbies, recreational activities and maintaining healthy lifestyle habits were indicated to form part of the participants' coping. It additionally seemed as if participants realised the continued maintenance hereof, e.g. exercise, reading, cooking, gardening, supplements (B-complex) • Nurturing spirituality - relied on religious practices and strategies - family value, value orientation, resilience in heritage/cultural identity, purpose and meaning making contributed to the spiritual dimension of their coping - found meaning within the adversities and meaning to others (transfer resilience to learners) - find meaning in her work, there for a reason, for learners also -value orientation - another participant appeared to have found value by means of thankfulness • Exercising optimism - reframed the challenges that they were faced with to support positive or realistic perspective-taking. - have to remain positive 	<p>seem to relate to occupational wellbeing and resilience.</p> <p>In the context of COVID-19, resilience is modulated by both optimism and self-efficacy, (Robles-Bello et al. (2020); Liu et al. (2018); Pathak & Lata (2018); Li et al. (2018); Tan-Kristanto & Kiropoulos, 2015).</p> <p>Robles-Bello et al. (2020) report that the confluence of self-efficacy and optimism in the context of COVID1-19 encourages coping by adaptive and flexible behaviour.</p> <p>Similarly, Masten (2019) and Benight and Bandura (2004) argue that the self-regulation of individuals' thought processes plays a significant role in the maintenance of their emotional well-being in response to a traumatic experience.</p> <p>Additionally, hope seems to moderate the relationship between psychological adjustment and stressors (Rand & Touza, 2021). Yıldırım and Arslan (2020).</p> <p>In alignment, Masten (2019) associates the resilience with the belief of individuals that life has meaning.</p> <p>Positive adjustment relates to the capacity of teachers to stay motivated and create environments conducive to learning while an interaction between the environment and personal resources are established (Luceño-Moreno et al., 2020; Ainsworth & Oldfield 2019).</p>

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			<ul style="list-style-type: none"> - viewed themselves as optimists - humour as well as hope also formed part of the cognitive strategies that supported the optimism and growth mindset of teachers - hope 	<p>Bottiani et al. (2019) similarly report that teachers with an affiliation with colleagues, teachers with more self-efficacy and teachers who have a learner-emphasis had lower burnout and stress levels. <i>(Personal development)</i></p> <p>Resilient teachers seem to experience a belief in their ability (self-efficacy), assign pride to their achievements and competence, and have strong interpersonal connections (Howard & Johnson, 2004).</p> <p>Self-care was found to be the most significant individual protector of teachers' wellbeing (Ainsworth & Oldfield, 2019).</p> <p>The optimisation of brain performance by implementing healthy lifestyle habits may increase cognitive functioning (Neuro-link, 2019).</p> <p>One's beliefs, and therefore cognition, on self-efficacy affect motivation in the face of challenges and resilience to adversity (Benight & Bandura, 2004).</p> <p>Such an efficacious outlook enhances the level of cognitive functioning (Bandura, 1989b).</p> <p>An individual's knowledge of his or her own thought processes is therefore an important aspect of metacognition (Bandura, 1989b).</p> <p>Resilient individuals are likely to experience lowered levels of depression, and are significantly less likely to engage in health</p>

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				<p>compromising activities such as smoking cigarettes (Bonanno et al., 2007).</p> <p>In the study of Padmanabhanunni et al. (2022), it was suggested that resilience played a health-sustaining role for the teachers in South Africa during the COVID-19 pandemic and can be seen as a protective resource in managing COVID-19 related anxiety, burnout and distress.</p> <p>Tools for resilience, according to Bonanno (2020) include remaining optimistic ... finding ways to have fun and laugh.</p> <p>Additional strategies were identified to include ... optimism ... (Chen & Bonanno, 2020; Liang et al., 2020; Robles-Bello et al. 2020; Staal et al., 2008).</p> <p>In addition, positive psychology resources such as hope and resilience can facilitate the promotion of psychological health and well-being (Snyder et al., 2021).</p> <p>Individuals with higher levels of hope are able to generate more strategies effectively to cope with adversities, have greater cognitive flexibility to find alternatives and express a greater probability to use these strategies (Rand & Touza, 2021).</p> <p>cognitive flexibility is suggested to foresee greater resilience levels in response to stress and adverse life events (Genet & Siemer, 2011).</p>

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				<p>Genet and Siemer (2011) propose that greater cognitive flexibility predicts higher levels of resilience to adverse life events and stress. The optimisation of neurophysiological components that facilitate flexibility in thinking, creativity, learning and solving problems efficiently can be described as neuro-agility (Neuro-link, 2019).</p> <p>In support, Bonanno et al. (2015) report that a positive self-image and self-esteem are linked to resilience.</p> <p>Protective factors may include employing cognitive strategies such as cognitive appraisal, locus of control, learning, motivation and self-efficacy, as mentioned (Staal et al., 2008).</p> <p>Mobilising and sustaining cognitive coping efforts include the mediation of cognitive challenges by means of creative engagement, mindfulness techniques and healthy sleeping patterns (Denkova et al., 2020; Howarth et al., 2019; Jha et al., 2017; Banks et al., 2015; Mrazek et al., 2013; Jha et al., 2010; Yogo & Fujihara, 2008; Klein & Boals, 2001).</p> <p>Self-efficacy, self-care, a positive attitude, a growth mindset, mindfulness, religiousness and optimism (Brooks et al., 2022; Wuest & Subramaniam, 2021; Riopel, 2020; Howarth et al., 2019; Johansen et al., 2019; Collie et al., 2018; Jha et al., 2017; Wang et al., 2016; Banks et al., 2015; Bonanno et al., 2015; Jacka & Berk, 2013; Mrazek et al., 2013; Wu et al., 2013; Conversano et al., 2010; Jha et al., 2010; Benight & Bandura, 2004; Dweck, 2000).</p>

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				<p>Wuest and Subramaniam (2021) explain that cognitive strategies can assist individuals to view circumstances from different viewpoints, achieve a more positive outlook</p> <p>Brooks et al. (2022) describe that accepting the situation surrounding COVID-19 resulted in viewing the threat thereof as a challenge to overcome and a potential for growth or gain</p> <p>Individuals can therefore achieve personal growth following and adverse experience (Masten, 2019).</p> <p>By “adopting a growth rather than a fixed mindset contributes to resilience”, as explained by (Wuest & Subramaniam, 2021, p. 9).</p> <p>An individual with a growth mindset views challenges and experiences as opportunities to grow and learn (Wuest & Subramaniam, 2021; Dweck, 2000).</p> <p>Similarly, as part of the theory of positive psychology and a growth mindset concept, Post-Traumatic Growth (PTG) that occurs after an aversive or traumatic event typically results in closer relationships with others and a greater sense of personal strength (Matos et al., 2021; Masten, 2019).</p> <p>This belief of an individual that he or she can grow and learn from both negative and positive life experiences is seen to act as a pathway to resilience (Bonanno, 2004).</p>

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				<p>Wuest and Subramaniam (2021) argue that self-care should be a priority as it strengthens resilience. Taking the time to practise and engage in hobbies and fun activities can facilitate the management of stressors and enables individuals to recharge and relax (Wuest & Subramaniam, 2021).</p> <p>... healthy eating and sleeping habits as well as sufficient physical exercise are proposed to promote resilience (Jarka & Berk, 2013).</p> <p>Furthermore, reflectiveness and setting boundaries may enable individuals promote wellbeing (Wuest & Subramaniam, 2021).</p> <p>Examples of stress management techniques consequently include exercise, mindfulness, meditation, yoga and progressive relaxation (Brooks et al., 2022; Langer & Ngnoumen, 2021; Wuest & Subramaniam, 2021).</p> <p>Individuals are advised to engage in mindful awareness and acknowledge emotions and thoughts in a non-judgemental manner (Wuest & Subramaniam, 2021) but can also be noticed in the peaceful reactions to situations around them (Langer & Ngnoumen, 2021).</p> <p>A more positive outlook can be cultivated by employing cognitive strategies in which mental health is nurtured (Wuest & Subramaniam, 2021).</p>

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				<p>Pathak and Lata (2018) and Galatzer-Levy and Bonanno (2014) reported that optimism can be seen as a predisposition or advantage towards one's future and is associated to forecast positive health outcomes.</p> <p>Higher levels of subjective well-being, improved physical health and increased quality of social relationships are linked to optimism (Mens et al., 2021).</p> <p>... optimistic individuals tend to cope with adversity in an active manner, accepting the challenges that they are unable to resolve and focus on the positive and meaningful aspects of the experience (Mens et al., 2021).</p> <p>Conversano et al. (2010): optimism is positively correlated with adaptive behaviours and cognitive strategies that welcome problem-solving behaviour and flexibility.</p> <p>Future oriented and goal directed cognition are linked to optimism (Masten, 2019).</p> <p>Optimists</p> <ul style="list-style-type: none"> - inclined to seek the benefits in adversity, - anticipate favourable outcomes, - use humour, - positively reframe stressful situations when coping with adversities (Mens et al., 2021; Masten, 2019). <p>... the use of positive emotions and laughter is associated with resilience (Bonanno, 2004).</p>

RESULTS (QUANTITATIVE) COPE INVENTORY CARVER	RESULTS (QUANTITATIVE) ARM-R	SPEARMAN (ADDITIONAL SCALES)	RESULTS (QUALITATIVE) NEW INSIGHT	LIT REVIEW & CONCEPTUAL FRAMEWORK CORRELATION, CONTRADICTION, SILENCES (phrases)
				<p>Wu et al. (2013) argue that embracing a positive outlook while acknowledging the situation realistically can contribute to the resilience of such individuals.</p> <p>... confidence (coping self-efficacy) to manage stress and adapting to demands increase motivation, offers intrinsic sense of control, assist in the management of emotions, and assist in effective decision making and increases resilience (Benight & Cieslak, 2011; Carver, 1998; Bandura 1997).</p> <p>Hope may be viewed to increase the creativity of individuals to demonstrate a greater resolve in seeking their goals, resulting in increased levels of subjective well-being (Snyder et al., 2021; Yildirim & Arslan, 2020).</p> <p>Hope can be conceptualised as a cognitive construct since it is seen as a pattern of thinking, closely related to the construct of optimism (Masten, 2019).</p> <p>As such, cognitive (positive and hopeful) reframing "is a useful skill to transform negative thinking and self-talk to a more positive focus, modifying the nature and intensity of the stress experienced" (Wuest & Subramaniam, 2021, p. 10).</p> <p>Brooks et al. (2022) found that effective coping can be managed through reframing difficult experiences related to COVID-19.</p>

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				<p>By reframing the situation, Brooks et al. (2022) reported that the confidence of teachers grew since they reappraised the pressure of the uncontrollable situation</p> <p>Buckingham and Richardson (2021) and Robles-Bello et al. (2020) point out that making meaning of a challenging situation and viewing it in a more positive light involve the engagement with emotions associated with this situation.</p> <p>Subsequently, effective coping within a stressful situation may mobilise individuals to achieve more than that which they perceived possible and lead to greater gratefulness for life (Lazarus, 2006).</p> <p>... religious or spiritual practices were reported to strengthen the resilience of individuals (Wuest & Subramanian, 2021; Masten, 2019).</p> <p>These practices may include prayer and meditation, mindfulness exercises (as mentioned), singing, participating in a faith community and other similar practices (Guy, 2022).</p> <p>Kimhi et al. (2021) reported that a resilience trajectory was associated with individuals identifying as religious within the context of COVID-19 and its related challenges.</p> <p>Nurturing spirituality was indicated to strengthen resilience.</p>

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				An individual's ability "to make sense of their spiritual experience in relation to his or her own spiritual framework" has been found to promote hope associated with resilience and a growth mindset (Du Plessis, 2016, p. 227).



APPENDIX S: REFLECTIVE JOURNAL



UNIVERSITEIT VAN PRETORIA
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Cognitive strategies that supported teacher resilience during the COVID-19 pandemic

REFLECTIVE JOURNAL

by

Elisma Williams

Submitted in partial fulfilment of the requirements for the degree

Philosophiae Doctor

in

Educational Psychology

in the

Faculty of Education
University of Pretoria

Supervisor: Prof. R. Ferreira

INTRODUCTION

The following constitutes my reflections during the data collection and generation processes of my research as the research process unfolded. It provides insight into my thought processes, which impacted on research decisions and the crystallisation of the data into verifiable results as presented within the data generation and analysis processes. I was able to provide a rich context, strengthening the data for analysis and focused on exploring the connections between the contributions of the participants, my own observations, knowledge and the results.

These sections in some ways act to triangulate data and verify my interpretation of the presented findings in a way that adds to the substantiation thereof as part of an audit trail.

Some of the reflections were made in retrospect of the events and some dated in scripts are provided as on the day.

PHASE 1 – QUANTITATIVE

The preparation for quantitative data collection entailed much more preparation than I initially thought it was going to. After obtaining ethics clearance from the University on 23 October 2020 and permission from the Department of Education, I am now preparing the final steps prior to proceed with sending out the quantitative questionnaire. I had to follow a timeous structure due to the specifically allowed timeframe of data collection (first part of the school year) as determined by the Department of Education (consent obtained 26 November 2020).

For me, this timeline became a deadline and was a motivator to proceed with my research. It placed more urgency and focus into my research decisions. After various discussions with my supervisor, I started to contact the principals of the schools in the districts that I was allowed to conduct research in. I therefore made purposeful contact to initiate consideration of participation in the research. I found that, while some of the principals were extremely helpful and willing to support my research through participation and promoting participation at their schools, others were more reluctant. Upon reflection I realised that principals may be reluctant as teachers already had so many responsibilities as a result of adaptations that had to be made in response to challenges associated by the COVID-19 pandemic. I explained to the principals that the completion of the online questionnaire could be done any

time at the teachers' convenience and that it would not take time during formal school hours. In addition, I sent out all the necessary documentation, explaining the purpose of the study, the ethics clearance (from the University of Pretoria as well as the Department of Education) that I obtained, and I communicated the voluntary nature of participation and that the teachers could withdraw at any time.

Some of the school principals/management even requested that I meet with them (online) to discuss the nature of the research, even though I had explained this during initial telephonic conversation. It was something that in itself might be an interesting topic for research one day. The nature of my research data collection/generation stipulations was to remain in contact electronically and avoid personal contact and the possible spread of the COVID-19 disease and I adhered to them.

After obtaining permission from the principals, I continued with contacting the potential participants. In some cases, the principals preferred to send the link to the questionnaire out to the teachers. In any case, I made sure that all of the participants were adequately informed of the research process and voluntary participation, as contained in the description of the questionnaire. The participants that provided informed consent were included in the first phase of the study. I was grateful to realise how many participants completed the questionnaire, even though they had many other responsibilities during the time.

The questionnaires were sent to the teachers (possible respondents) and remained available for completion from 28 February 2021 until 12 April 2021. I was excited and thankful for the response rate and anticipated that data analysis and results would be robust, as indicated in the excerpts below.

18 March 2021

I am finding this period very exciting. Almost every day, I am reviewing the number of respondents how have participated. As the numbers are rising, so is my awareness of the task ahead. I am a bit concerned about the low participation from semi-urban schools as I was under the impression that this virtual way of data collection would make it easier for them to participate. From my understanding they should have had access to technology to do so. I am at times wondering if load shedding that is implemented by ESCOM might have had some impact on this, yet at the same time I reason that it should then have had an effect

on urban school participation as well. In any case, I regard the response rate from the semi-urban schools as a possible area of research for future studies.

In the end, 240 fully completed questionnaires by respondents from urban schools were obtained, while four fully completed questionnaires by respondents from semi-urban school were received. After discussions with the statistician and my supervisor, I realised I could not use the four semi-urban questionnaires for inferential statistical analysis, although I was able to review the descriptive components of the analysis for these schools.

30 May 2021

I truly enjoy the quantitative part of my research. I seem to have a natural preference for statistically verifiable data as based in a post-positivist paradigm. It is as if the numbers behind the research give me a better grip on what I am doing and are perhaps more compatible with my preference for conducting research at this time.

PHASE 2 – QUALITATIVE

4 June 2021

The number of participants who provided their email addresses during Phase 1 of the study were 61 (59 from urban schools and two from semi-urban schools). Contact was made with the 59 participants from the urban schools and with the two individuals from the semi-urban schools. Only individuals from urban schools were included during Phase 2 of my research as no responses had been obtained from the participants from the semi-urban schools (they remained unresponsive, even through numerous attempts were made for them to participate). I reflected on this occurrence and contemplated whether the low response rate may be due to electronic or internet connection challenges.

In this regard, I reviewed the descriptive statistics from the semi-urban schools, as analysed during Phase 1 of my study. All of the respondents working at these schools did, however, indicate that they had internet connection. Still, these were only four respondents. It might be that connection challenges for other teachers in working at these schools might have resulted in a low response rate and may in itself be an area of research. **It remains important that teachers working in all types of school have the technological facilities and the know-how to support continued education, as was required during the COVID-19 lockdown (Sub-theme 1.3: Acquiring new skills).** This might not have been the case for teachers working at

semi-urban schools, as evident from the results of my study. Further research and support from the Department of Education may be necessary to facilitate ongoing education during similar challenging times. I am, however, grateful that my research could continue.

15 August 2021

I am testing the online platform (*Kumospace*) that we will be using for the interviews. I think it is useful and a creative platform. I could amend the *research setting* and make it inviting by including flowers, for example, in the virtual meeting room. Various virtual communication tools are available during this time, as the world had to adapt to continue with work duties and to stay in touch with loved ones. It might be an area of discussion during the focus groups that are scheduled to take place.

22 September 2021

I feel a bit nervous before the start of the first online focus group session and, despite having preliminary questions that I prepared for the session, I am unsure what to expect. I made thorough preparations (meeting with my supervisor for guidance and reading up extensively on qualitative data generation) for this qualitative data generation opportunity, but this will be first of its nature for me as I have conducted only quantitative research in the past. I rely on the preparations that I made and the training received as educational psychologist. I therefore trust that the session will go well. To make sure that I can conduct thematic analysis later on, I am making audio recordings.

What I feel helped this session is the fact that my supervisor, who is very experienced at conducting focus groups, assisted in steering the nature of the conversation away from rigid question and answer type of situation to that of relying and relating to the experiences during COVID-19. I believe that this has helped the participants in sharing. I am happy about today. I believe that the example set today will not only benefit the sessions scheduled for my current study, but that it contributed to my research skills as qualitative researcher.

It appears as if a comfortable and relaxed setting provides for open sharing and spontaneous participation. Jokes are even made about their experiences during lockdown. Participants remained engaged in the session and shared their views. In elaboration, the participants appeared spontaneous, in sharing their views and ideas. Minimal prompting was necessary for contributions, specifically in terms of their daily routines kept during the lockdown, which implies the importance of such routine and structure to cope with the

challenging times (Sub-theme 2.2: Maintaining a routine). I reflected on this and think that teachers probably have not had the opportunity to share their story until now.

The discussions appeared to touch on different ways in which the participants attempted to cope with the challenges at the time. While some participants raised the topic of prioritising during today's focus group, many others seemingly agreed with P1.4 when referring to the fact that she focused mainly on things that were most important to her at a given time (Sub-theme 3.1: Prioritising what is important at the time). This implies that the participants' focus was apparently directed towards their priorities at the time, and not on the priorities of others, indicating their attempt to cope by not using their energy on less important activities.

During this focus group, P1.3 used a term that I have not heard of in the past. I made a note thereof and had to read up on what it means to *ghost* people. When reflecting on her comments, I realise that researchers should be alert and attentive during the research process to pick up the specific words and phrases used by the participants that may not fall into the regular use of language of the researchers themselves. In this regard, I could elaborate on my understanding of terms and expressions used in the technological domain. From what I can gather, P1.3 seems to have avoided the further emotional drain of being on her phone to improve her coping with the already exhausting challenges associated with the pandemic (Sub-theme 3.2: Conscious disengagement). This may then have led her to make a decision to focus on other areas in support of her coping. In addition, it appears to me that participants not only realised that prioritisation might assist their coping to channel their energy to managing situations of more importance at the time, but that they also had the opportunity to use this coping strategy in future, which might add to their ability effectively to conduct work-related tasks (Sub-theme 3.1: Prioritising what is important at the time).

28 September 2021

I already feel more confident in conducting this second session; I have closely observed my supervisor and tried to create an environment conducive to conversation and participation. I expected that more than four participants would participate in today's session. I think that various factors are playing a role to keep teachers from participating. One of these reasons might be the nature of their demanding work environment, which may have increased due to challenges associated with COVID-19. I have picked up from my informal discussions with some of my teacher colleagues that the demands since the initial COVID-19 lockdown period are still high. Even though challenges may vary from school to school, teaching still

needs to occur (Sub-theme 1.2: Adapting to changed circumstances). During this uncertain time and in the context of COVID-19, routines seem to be providing a sense of predictability in the background of an otherwise disrupted and unpredictable environment (Sub-theme 2.2: Maintaining a routine). In this regard, I view the manner in which the participants handled these challenges and their willingness to share them as admirable. In the South African context, I contemplate that sharing such experiences and strategies within a broader forum may strengthen the capacity and willingness of teachers to grow in themselves on a personal and professional level.

Apart from this, I think that the similar views on their coping strategies were confirming the contributions from the participants from the first focus group. For example, P2.2 shared her preference to find a person with whom she did not discuss school matters. In this regard, participant P2.2 indicated her tendency to engage in conversations that allowed her to disengage from work-related conversations in an effort to cope better (Sub-theme 3.2: Conscious disengagement). This might imply that individuals chose to conserve their energy not only to cope, but also to channel such energy into areas where they might grow and experience positivity during this challenging time.

30 September 2021

Today is the third focus group and I am hoping that we have improved participation in terms of the number of participants. From the initial responses, I realise that there should be between four and seven participants today. I feel that I am more comfortable and ready for the focus group session today, based on my experiences with the previous ones.

I am grateful that five participants joined and took part in today's session. I think that the facilitation of the focus went well and resulted in valuable contributions made by the participants. During the session, the participants were engaged and built on each other's feedback. As examples, it seemed as if participants not only acquired new skills as part of their cognitive coping strategies, but that they found meaning in the acquisition and long-term value therein. Participants also appeared to be creative in the process of coping by endeavouring to acquire skills in novel activities (Sub-theme 1.3: Acquiring new skills). In addition, the participants seem to take pride in the accomplishment of learning new skills (Sub-theme 1.3: Acquiring new skills). It also appears as if the participants endeavoured to create a structured environment during this uncertain time, which might imply that they attempted to remain in control of at least some areas of their lives. In this regard, the action

of planning seemed to provide the participants with some sense of control and structure over the daunting environment brought about by the pandemic (Sub-theme 2.3: Staying in control of what is possible). Mention was also made of the importance of relationships during coping. As such, it appeared as if the participants portrayed a sense of coherence among themselves and that they shared experiences, not only on a concrete level of coping, but also on a deeper meaningful one (Sub-theme 5.2: Relying on relationships with significant others), supported their coping. I realise that a reliance on others during difficult times was one of the strategies that appear to be a focus for participants. I contemplated the value thereof following the pandemic, and whether the participants may hold to this coping strategy and endeavour to strengthen relationships as a result. It might be insightful to research each of the strategies identified up until now to inform support programmes for teachers in schools.

In this regard, P3.5 elaborated on the importance of not only the present value of having to cope with the pandemic, but also the future value it may hold, especially for future generations. I perceived a sense of pride, passion and conviction from P3.5 while she was speaking. It appeared as if she was speaking from the heart and from a belief in the importance of teaching children how to demonstrate resilience (Sub-theme 6.4: Nurturing spirituality). During this focus group, P3.1 also commented about peacefulness that she experienced during lockdown. The participants seemingly felt at peace with the acceptance of the challenging situation for the time being (Sub-theme 4.1: Accepting the situation for the time being). I also noted that it seemed that remaining calm in a situation might be the physical and emotional response to the cognitive process of accepting what cannot be changed (Sub-theme 4.2: Remaining calm). This might have added to their apparent ability to be relaxed, even though they were faced with many stressors.

4 October 2021

I am appreciative about the time that the four teacher-participants set out today, but I realise that generating rich data is not solely dependent on the number of participants, but on the quality of the interaction and discussion during the focus group. I aimed to make this online participatory focus group another opportunity to generate rich data and add value to my research findings.

During the focus group, the impression was that an emphasis was placed on the value of religion and spirituality of and among participants. Coherence among participants' significant others seemed conspicuous and a sense of cultural identity appeared to support the value

they experienced and placed on their spirituality (Sub-theme 6.4: Nurturing spirituality). Not only did they discuss their reliance on spiritual resources, but they also commented on the potential of people themselves being adaptable during adverse experiences. Participants also seemed to have realised a renewed sense of their value within the teaching profession, with an implied sense of purpose therein. I reflected on the participants' indication of their reliance on spiritual resources and a sense of purpose to cope during the pandemic and came to the realisation that spiritual resources imply different meanings to different individuals. This might in itself be an area of research. Also, the purpose that teachers perceive in their careers should be supported by programmes that enrich their sense of self within their profession. My experience of the session today gave rise to a hunch that **that some participants seem to be positively influenced by a sense of support brought about by each other during the focus groups (Sub-theme 5.2: Relying on relationships with significant others)**

7 October 2021

I am grateful that six teachers participated today, the largest number of all the sessions. During the discussion, **I was at first surprised to find that most of the participants expressed the need to stay busy. Contrary to what I initially anticipated, uncertainty associated with COVID-19 seems to have forced people to use productive actions as a means to cope and continue with work-related activities. This highly stressful time with its novel challenges brought about a need to stay productive in many teachers (Sub-theme 1.1: Keeping busy and doing tasks).** In line with this, **I experienced some confusion at first about the participants' need to come to terms with, in other words to accept the situation, as opposed to their urge to control their environment through, for example, planning and maintaining a routine. Yet, as I closely reviewed what was said, I became aware of the likelihood that they merely attempted to maintain some level of control over that which they could, while they additionally made use of acceptance as a way of coping with that which were out of their control (Sub-theme 4.1: Accepting the situation for the time being).** In addition, participants seemed deliberately to deny adverse thought processes, but chose to focus on constructive mental engagement **(Sub-theme 3.2: Conscious disengagement)**. I realise that the coping strategies that the participants made use of may overlap and even complement one another

To this end, **it seems as if the participants value not only the capacity personally to regulate factors that they are able to have control over, but also external support and the provision of protocols to guide structure. This provides an indication of the value they seemingly**

placed on procedures and directives from the management team in the school system (Sub-theme 2.3: Staying in control of what is possible). Also, I find it intriguing that for the participants to be able to adapt to the challenges associated with COVID-19 implied rapid changes in the way that they were used to do things. It seems as if the pandemic accelerated the tempo of change for most of the participants due to the fact that no option was given to them in terms of the way they needed to respond. The path of change and managing COVID-19 was greatly dictated by National Government and school management structures. Instead of resisting this change, the participants were mostly able to adapt quickly and, in some cases, even appeared to embrace change. Their ability to do this seems to help them to cope with the pandemic in an improved way (Sub-theme 1.2: Adapting to changed circumstances).

They also appeared to have had to remain engaged in activities within this turbulent environment, while they attempted to exert some sort of regulation on the possible aspects. I realised that the participants also made use of the opportunity during the focus groups to voice some of the challenges that they had experienced during the COVID-19 pandemic and the lockdown. Even though it appeared as if their contributions indicated various cognitive coping strategies, it might have been a need for the participants, and therefore possibly of teachers, to be provided with a platform to voice their concerns and frustrations during the time of the pandemic. It was a revelation that almost all participants displayed the need to talk about what happened to them during COVID-19. It appeared as a debrief session for the participants following the *trauma* that they seemed to associate with the COVID-19 pandemic. Similarly, participants' seeking social support, in many cases, was driven by the need for clarity (advice and information) as opposed to mere social interaction. Although some participants appeared to value social interaction, others indicated to avoid such interaction. After analysing this, I realised that the social interactions that they avoided were those that were perceived in a negative light; drawing from their energy to cope within a situation that already required of them to cope (Subtheme 5.1: Seeking advice or information). I feel that a focus of today's discussion was emphasising the importance of a relational component during coping with challenges implied by COVID-19 (Sub-theme 5.2: Relying on relationships with significant others). Cognisance of and the importance of interpersonal relationships appeared to be paramount to the participants. It seemed as if not only the existence of these relationships was important, but that deep and meaningful connections were illuminated for the participants and that awareness took place on a cognitive level (Sub-theme 5.2: Relying on relationships with significant others).

During this session, the participants painted a picture for me that, even though the unprecedented challenges appeared continuous, they endeavoured to find ways on a mindful and cognitive level, and decided to remain optimistic about their perspectives and general outlook on life. It appeared as if participants made conscious decisions to employ cognitive strategies to promote resilience and to flourish, not only as teachers, but as individuals with a positive role to fulfil within the systems that they function in (Sub-theme 6.5: Exercising optimism). I was surprised at the level of growth experienced by the participants, which they related to their having to cope with challenges associated with the pandemic. I was especially in awe of the demonstration that the participants were to a great extent able to create meaning in relation to how they viewed themselves (Sub-theme 6.1: Engaging in self-discovery and personal growth).

The willingness of the participants to demonstrate vulnerability was refreshing in an uncertain time where individuals aimed to overcome COVID-19-related challenges. The ability of the teachers to be open to their own reflective processes not only during the online participatory focus groups, but also during their personal cognitive coping processes was admirable (Sub-theme 6.2: Drawing on reflective practices).

8 October 2021

The number of participants that took part in the research process during Phase 2 of my study was 24 (teacher-participants from urban schools). Despite the fact that these 24 participants volunteered to continue their participation, I did have to remind some of them and had to provide several opportunities so that all of them could participate. Even though the ethics clearance stipulated that research could take place online only, I wonder if participation would have been higher if face-to-face interaction was possible. I further ponder on the prospect of whether providing the possibility of online and face-to-face research would support a higher response rate, as both of these methods provide advantages to participation in research.

30 October 2021

During the past few weeks, I was able to read through the transcribed focus groups discussions multiple times. It appeared as if the participants viewed adaptation as coping strategy in a positive way more often than not (Sub-theme 1.2: Adapting to changed circumstances). The participants indicated not to deflect or deny having to cope, but to learn

how to do so within an appropriate timeline and by remaining calm, which had seemingly resulted in positive adaptation and growth (Sub-theme 4.2: Remaining calm). It was interesting to me how my knowledge of literature related to cognitive coping strategies (and resilience) assisted me to recognise the possible strategies used by the participants to cope during the time of the pandemic. Not only did the deductive process of thematic analysis seem to align with the strategies that they discussed, but it additionally made sense to me that I also needed to work inductively to identify theme(s) and sub-themes that might not have been related to the *a-priori* assumptions (as derived from the literature associated with the assessment tool used). The explanation and depth that the analysis of the qualitative data added to the quantitative data analysis appears extremely valuable. Prior to commencing my study, I had conducted only quantitative research. During the current research process, I have come to realise the additional value that qualitative data can add to explaining and enriching quantitative data in a mixed methods approach.



APPENDIX T: FIELD NOTES



UNIVERSITEIT VAN PRETORIA
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YUNIBESITHI YA PRETORIA

Cognitive strategies that supported teacher resilience during the COVID-19 pandemic

FIELD NOTES

by

Elisma Williams

Submitted in partial fulfilment of the requirements for the degree

Philosophiae Doctor

in

Educational Psychology

in the

Faculty of Education

University of Pretoria

Supervisor: Prof. R. Ferreira

INTRODUCTION

The following document includes my field notes during the data generation phase of my research. Like my reflective journal, it provides insight into the focus group sessions facilitated. The field notes provide contextual information on these sessions, including the dates, the number of participants as well as the discussions that took place. I could therefore document my observations and keep record of what participants had contributed. During the process of data generation and analysis, the use of field notes supported the authenticity, verification and trustworthiness of the results.

I include the notes that I made during the sessions as inserted images with the translation below these images. In addition, I include field notes that I made following the focus group sessions.

22 September 2021

There were five teacher-participants in today's session. My supervisor assisted in guiding the first online focus group. The following contributions indicate the field notes that I made during the focus group discussion.

rekenaar + technologie
aangepasbaarheid
communicatie
interpersoonlike verhoudings

22 September 2021

Computer and technology (Sub-theme 1.3: Acquiring new skills)

Adaptability (Sub-theme 1.2: Adapting to changed circumstances)

Communication (Sub-theme 5.1: Seeking advice or information)

Interpersonal relationships (Sub-theme 5.2: Relying on relationships with significant others)

NB^{ste} ⊕ Bly.

Most important is to remain positive (Sub-theme 6.5: Exercising optimism)

22 Sept 2021

1 keer in week vergadering

Once a week meeting (Sub-theme 5.1: Seeking advice or information)

⊕ gaming
tegnologie

Gaming (Sub-theme 1.1: Keeping busy and doing tasks)

Technology (Sub-theme 1.3: Acquiring new skills)

emosioneel. -> geloof -> gronding.

• Leiding

Aanpassing: verwagtinge bestuur.

• doel (waar ek is?). -> groter.

• besig gebly. (gesinslyd). -> goeie iets (familie).

Emotional – religion – grounding (Sub-theme 6.4: Nurturing spirituality)

Guidance

Adjustment: manage expectations (Sub-theme 1.2: Adapting to changed circumstances)

Purpose (where am I?) – Bigger (Sub-theme 6.2: Drawing on reflective practices)

Remain busy (family time) – something good (family) (Sub-theme 1.1: Keeping busy and doing tasks) and (Sub-theme 5.2: Relying on relationships with significant others)

refleksie
nuwe goed.

⊕ bly.

brein aangesta
te hou.

- besig bly.

Reflection (Sub-theme 6.2: Drawing on reflective practices)

New things (Sub-theme 1.3: Acquiring new skills)

Staying positive (+) (Sub-theme 6.5: Exercising optimism)

Keep brain *switched on* (Sub-theme 1.1: Keeping busy and doing tasks)

Remain busy (Sub-theme 1.1: Keeping busy and doing tasks)

*gest steed gemaak op wat vir hulle
belangrik is*

Relied on what was important to them (Sub-theme 3.1: Prioritising what is important at the time)

*delegate -
kommunikeer*

*#prioritiseer
tydsbestuur*

#bestuur verwagtinge

Delegates (Sub-theme 1.3: Acquiring new skills)

Communicate (Sub-theme 1.3: Acquiring new skills)

Prioritise (Sub-theme 3.1: Prioritising what is important at the time)

Time management (Theme 2: Planning)

Manage expectations (Theme 1: Active coping)

(in the moment!).

planne met vriende uitgeken.

In the moment (Theme 3: Suppression of competing activities)

Plan with friends (Sub-theme 5.2: Relying on relationships with significant others)

- videos, saamgestel.

lb samewerking,

- nie buitemuurs, net skool.

Videos, sat together (Theme 5: Seeking out instrumental social support)

Worked together (Theme 5: Seeking out instrumental social support)

No extramural activities, just school (Theme 3: Suppression of competing activities)

In addition to the field notes made during the focus group, I noted that it appeared as if many of the participants experienced that they were forced to stay busy by using various means to cope (Sub-theme 1.1: Keeping busy and doing tasks). Following a comment by P1.1 regarding colleagues sitting together while doing tasks and speaking about what needed to be done, most of the participants seemed to concur with this contribution. In addition, the participants discussed jogging as a coping strategy (Sub-theme 6.3: Maintaining self-care). Some participants relied on self-care; one in particular seemed to have made progress in terms of physical health by starting to jog and making the local news (Sub-theme 6.3: Maintaining self-care).

28 September 2021

Four teacher-participants took part in the focus group today. I made the following field notes during the focus group:

28 September - Data insameling fokusgroep.

- interpersoonlik (familie kontak).

- lewensmaat. -> praat, gevoelens deel

- graadgroep. (sosiaal verkeer).

- Nuwe tegnologie (steeds protokolle).

Interpersonal (family contact) (Sub-theme 5.2: Relying on relationships with significant others)

Life partner – talk, share (Sub-theme 5.2: Relying on relationships with significant others)

Grade group (social interaction) (Sub-theme 5.2: Relying on relationships with significant others)

New technology (protocols still used) (Theme 1: Active coping)

* Bydsbeplanning? (⊕) "koel hart"
- Logistieke gesprekke.

• Aanpasbaarheid, nuwe vaardighede aaleer.
- Baie kursusse.

Time management (Sub-theme 2.2: Maintaining a routine) keeping cool (Sub-theme 4.2: Remaining calm)

Logistics discussions (Theme 2: Planning)

Adaptability (Sub-theme 1.2: Adapting to changed circumstances), new skills acquired (Sub-theme 1.3: Acquiring new skills)

Many courses (Sub-theme 1.1: Keeping busy and doing tasks)

① Stiltetyd ; doel. ; dag vir dag.
② Gesonde angewing. Man & kinders.
Fokus op positiewe,
Oefen
Self-talk - perspektief. Leer self ken

Quiet time (Sub-theme 6.4: Nurturing spirituality), purpose (Sub-theme 6.1: Engaging in self-discovery and personal growth), day for day (Sub-theme 2.1: Taking things one step at a time)

Healthy environment, husband and children (Sub-theme 5.2: Relying on relationships with significant others)

Focus on the positive (Sub-theme 6.5: Exercising optimism)

Exercise (Sub-theme 6.3: Maintaining self-care)

Self-talk - perspective. Learn to know the self (Sub-theme 6.2: Drawing on reflective practices)

Self-care.

* Bestuur : sterker mens as self-care.
- Gebuelsewe.

- Ekstra ure met werk.

- Vit-B kompleks (lewenstyl).

- Mense, vriende → wie voeg by; Boundaries

- Refleksie.

Self-care (Sub-theme 6.3: Maintaining self-care)

Management: stronger person if self-care is practised (Sub-theme 6.3: Maintaining self-care)

Prayer life (Sub-theme 6.4: Nurturing spirituality)

Extra hours with work (Sub-theme 1.1: Keeping busy and doing tasks)

Vitamin-B complex (lifestyle) (Sub-theme 6.3: Maintaining self-care)

People, friends, who has been added; boundaries (Sub-theme 6.3: Maintaining self-care)

Reflection (Sub-theme 6.2: Drawing on reflective practices)

Self-verbaas.

Tydperk van groei

- Selfregulering.

Surprised self (Sub-theme 6.1: Engaging in self-discovery and personal growth)

Period of growth (Sub-theme 6.1: Engaging in self-discovery and personal growth)

Self-regulation (Sub-theme 4.2: Remaining calm)

. Meer leer met wie om wat te deel. (vertroue).

- Hulp vra

- Organiserings (*), Beplanning (tyd)

- Energie & tap van kinders (motivering).

↳ Doelgerig.

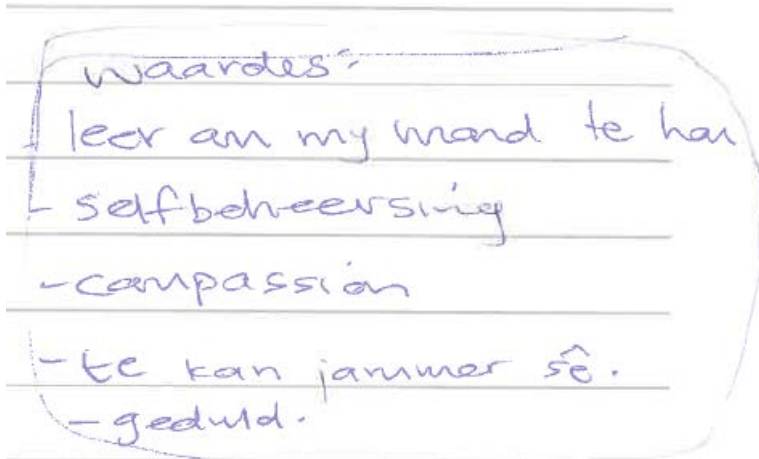
Had to learn with whom to share what (trust) (Sub-theme 6.3: Maintaining self-care) (boundaries)

Asking help (Sub-theme 5.1: Seeking advice or information)

Organisation, planning (time) Theme 2: Planning

Energy from children (motivation) (Sub-theme 5.2: Relying on relationships with significant others)

Goal oriented (Theme 1: Active coping)



Values:

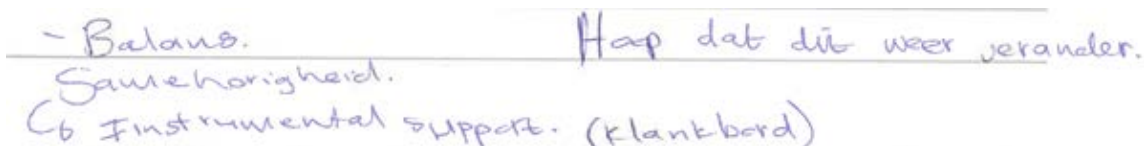
Learn to keep my mouth shut (Sub-theme 3.2: Conscious disengagement)

Self-control (Theme 4: Restraint coping)

Compassion (Sub-theme 6.1: Engaging in self-discovery and personal growth)

To be able to say sorry (Sub-theme 6.1: Engaging in self-discovery and personal growth)

Patience (Sub-theme 6.1: Engaging in self-discovery and personal growth)



Balance (Sub-theme 3.1: Prioritising what is important at the time)

Hope that it will change again (Sub-theme 6.5: Exercising optimism)

Coherence (Sub-theme 5.2: Relying on relationships with significant others)

Instrumental support (sound board) (Sub-theme 5.1: Seeking advice or information)

Field notes made following the session:

During the focus group, it appeared as if the participants had the need to voice their challenges during COVID-19. However, the participants easily engaged in this session by discussing ways in which they coped with the challenges during COVID-19. While P2.3 discussed the step-by-step approach as coping strategy and the importance of planning,

she (P2.3) indicated that she had followed a stepwise manner to handle the situation (Sub-theme 2.1: Taking things one step at a time)

30 September 2021

During today's focus group, five teachers participated, which is an increase in the number of participants from the previous session. My field notes during this session follow hereafter:

30 September Fokus groep

- Doelgerig
- Mekaar vir betekenis. - kollegas.
↳ ervarings
* Klankbord, samekoringheid.
- ondersteuningsgroepe by skool. (kommunikasie).

Goal oriented (Theme 1: Active coping)

Meaning to for one another (colleagues) (Theme 5: Seeking out instrumental social support)

Experiences (Sub-theme 5.2: Relying on relationships with significant others)

Sound board (Sub-theme 5.1: Seeking advice or information) coherence (Sub-theme 5.2: Relying on relationships with significant others)

Support groups at school (communication) (Sub-theme 5.2: Relying on relationships with significant others)

* familie (man thuis).

Family (husband at home) (Sub-theme 5.2: Relying on relationships with significant others)

- planning -

Planning (Theme 2: Planning)

- Oefen, ^(v.c) draft, (hardloopklub) - challenge
- roetine. (struktuur).
- fisies (step), pilates.
- beheer → sorteer huis uit, tyd.
- tuin, resepte.
- ↳ familie tyd.
- man.
- Dankbaarheid.

Exercise, jogging (X 2), (running club) – challenge (Sub-theme 6.3: Maintaining self-care)

Routine (structure) (Sub-theme 2.2: Maintaining a routine)

Physical (walking), Pilates (Sub-theme 6.3: Maintaining self-care)

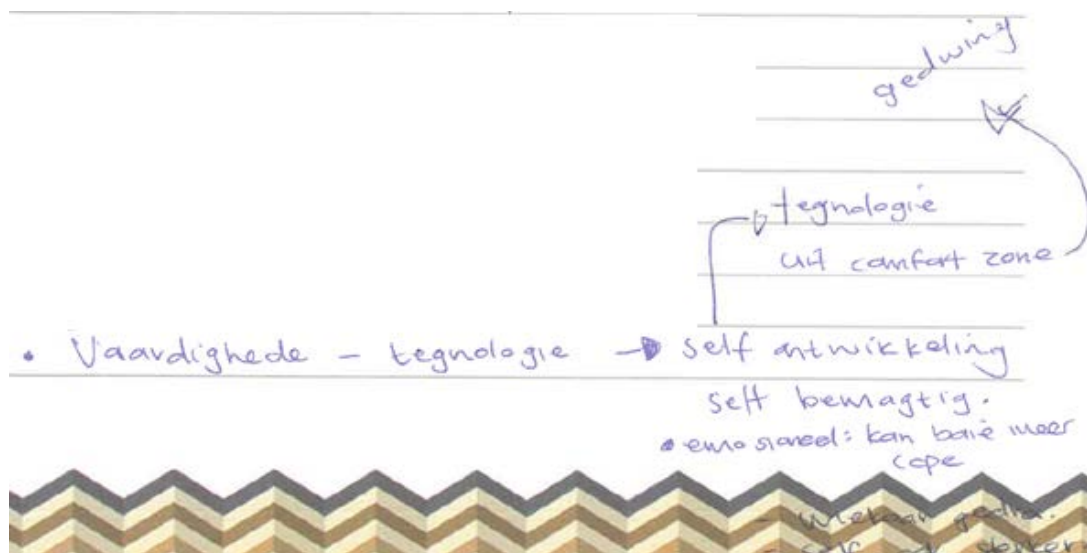
Control – sorting things out at home, time (Sub-theme 2.3: Staying in control of what is possible)

Gardening, recipes (Sub-theme 6.3: Maintaining self-care)

Family time (Sub-theme 5.2: Relying on relationships with significant others)

Husband (Sub-theme 5.2: Relying on relationships with significant others)

Thankfulness (Sub-theme 6.2: Drawing on reflective practices)



Skills – technology – self-development (Sub-theme 1.3: Acquiring new skills)

Out of comfort zone (forced) (Sub-theme 1.2: Adapting to changed circumstances)

Self-empowerment (Sub-theme 6.1: Engaging in self-discovery and personal growth)

Emotional – can cope much better (Sub-theme 6.1: Engaging in self-discovery and personal growth)

Carried one another (Sub-theme 5.2: Relying on relationships with significant others)

Self is also stronger (Sub-theme 6.1: Engaging in self-discovery and personal growth)

Waardes

- Tijd samen geleefdes.

- Prioritiseer. Opwustheid vir goeie tyd, ~~steperdjie~~
—verf, naaldwerk).

Optimis (⊕ denke) —aan te pas.

Values:

Time with loved ones (Sub-theme 5.2: Relying on relationships with significant others)

Prioritise (Sub-theme 3.1: Prioritising what is important at the time)

(Awareness of the good time [Sub-theme 6.2: Drawing on reflective practices], hobbies – painting, sewing [Sub-theme 6.3: Maintaining self-care])

Optimist (positive thinking) (Sub-theme 6.5: Exercising optimism) – to adapt (Sub-theme 1.2: Adapting to changed circumstances)

Field notes made following the session:

The participants indicated the use of various coping strategies, such as employing a positive mindset (Sub-theme 6.5: Exercising optimism), being creative during their processes of coping and relying on others during this difficult time. Additionally, mention was made of the importance of planning and of keeping control of that which was possible.

4 October 2021

Four participants formed part of the online focus group today. The following contributions indicate the field notes that I made during the focus group discussion.

4 Oktober 2021 - Fokus groep.

- Moes net cope

Had to cope (Sub-theme 1.2: Adapting to changed circumstances)

- Rechte navorsing, fokus op waarheid en ⊕
- Kies ⊕, fokus op dit wat goed is.
- Bewus van ⊖, maar nie fokus.
- Kollegas ondersteun.
- Doel in lewe.
- Gronding

The right research, (Sub-theme 3.2: Conscious disengagement), focus on the truth and the positive (Sub-theme 6.5: Exercising optimism)

Choose the positive, focus on what is good (Sub-theme 6.5: Exercising optimism)

Being aware of the negative, but do not focus on it (Sub-theme 3.2: Conscious disengagement)

Colleagues support (Sub-theme 5.2: Relying on relationships with significant others)

Purpose in life (Sub-theme 6.4: Nurturing spirituality)

Grounding (Sub-theme 6.4: Nurturing spirituality)

Field notes made following the session:

Participants elaborated on the realisation of supportive relationships both in terms of planning to handle challenges and the value of sound-boarding with colleagues, friends and family (Sub-theme 5.1: Seeking advice or information). Also, it stood out for me that an emphasis on spiritual resources in coping was present in today's group (Sub-theme 6.4: Nurturing spirituality). In this regard, P4.3 communicated agreement on the statement made by P4.2, in terms of the realisation that she is a born teacher (Sub-theme 6.1: Engaging in self-discovery and personal growth). Upon comment of P4.4, the other participants nodded and agreed about the statement that human beings are adaptable (Sub-theme 1.2: Adapting to changed circumstances).

7 October 2021

Six teachers took part in the focus group today, during which I made the following field notes:

7 OKT : Fokus Groep.

Protocol; dag tot dag bestaan.

Cope; wag.

* Hoor. - "mensvoel het" → Routine, samenhangend.

- Huistories - goed gedaan.

Kinders → troeteldiere.

Dag vier dag.

Afrik (is gorseer)

* Ontspan. let go, wees in die oomblik, aanvaar
kan x alles beheer, kan x iets aan situasie kom.

Protocol, day-to-day existence (Sub-theme 2.1: Taking things one step at a time)

Cope (wait) (Sub-theme 4.1: Accepting the situation for the time being)

Choir (felt human) (Sub-theme 1.1: Keeping busy and doing tasks) – routine (Sub-theme 2.2: Maintaining a routine), coherence (Sub-theme 5.2: Relying on relationships with significant others)

Chores done at home (children, pets) (Sub-theme 1.1: Keeping busy and doing tasks)

Day-to-day (Sub-theme 2.2: Maintaining a routine)

Forced to relax (Sub-theme 1.2: Adapting to changed circumstances). Let go, be in the moment, accept (Sub-theme 4.1: Accepting the situation for the time being)

Cannot control everything, cannot do anything about the situation Theme 3: Suppression of competing activities

- ondersteuningstelsel - familie. (⊕).

- praat met kollegas. }

- Harede werk, videos.

aanpasbaarheid. → tegnologie.

- gelees. (ontspanningsaktiwiteite).

- aanpasbaar.

Support system (family) (Sub-theme 5.2: Relying on relationships with significant others)

Talk with colleagues (Sub-theme 5.1: Seeking advice or information)

Hard work, videos (Sub-theme 1.1: Keeping busy and doing tasks)

Adaptability – technology (Sub-theme 1.2: Adapting to changed circumstances)

Read (recreational activity) (Sub-theme 6.3: Maintaining self-care)

Adaptable (Sub-theme 1.2: Adapting to changed circumstances)

Waarde ...

* Familie, * vrienden.

- Verhandings

- Reflectie - "beheersvaart", routine.

Afhankelijk van mensen-

Mensen-gerichte.

Miss fysieke contact: → reflectie in self.

Values:

Family, friends

Relationships (Sub-theme 5.2: Relying on relationships with significant others)

Reflection (control freak) (Sub-theme 6.2: Drawing on reflective practices), routine (Sub-theme 2.2: Maintaining a routine)

Dependent on people (Sub-theme 5.2: Relying on relationships with significant others)

People – love (Sub-theme 5.2: Relying on relationships with significant others)

Miss physical contact – reflection into the self (Sub-theme 6.2: Drawing on reflective practices)

Field notes made following the session:

The participants appeared to value protocol, in addition to being able to adapt to changes. They focused on keeping busy, while maintaining a routine during a time in which they did not have control over many of the variables. To this end, it seems as if their ability to accept circumstances and remaining present within their lives supported their coping efforts.

