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Relationships as a pathway of resilience over time among adolescents in a stressed environment

by

Krysten Ann Balshaw

Submitted in partial fulfilment of the requirements for the degree

MAGISTER EDUCATIONIS

(Educational Psychology)

Department of Educational Psychology
Faculty of Education
University of Pretoria

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AUGUST 2020

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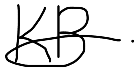

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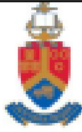

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Ethics statement

The author, whose name appears on the title page of this mini-dissertation, 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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Dedication

I dedicate this research to my supportive parents, Tony and Shirley Balshaw, who gave me the courage to pursue my passion and who continue to champion my resilience.

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Acknowledgements

Upon achieving this momentous milestone in my life, I would like to express my sincere gratitude to the following people:

- A special note of thanks to my family who galvanised my resilience in a multitude of ways as I completed this study. To my Mom for always considering my well-being and for being willing to help wherever she could. Her drive to serve others in unparalleled. To my Dad for encouraging me to take on the task of a Master's degree and for making it all possible. My siblings, Lloyd and Robyn, for their support, unconditional love and understanding throughout my studies. Without the prayers and encouragement from my family and the balance they provide in my life, I would not have been able to realise this goal.
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- Susan Swanepoel, the language and technical editor of this dissertation, for sharing her excellent editing skills and for being willing to go the extra mile.
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Abstract

My study is a sub-study of the Resilient Youth in Stressed Environments (RYSE) Project. RYSE aims to better understand the resilience of youth who live in environments that are stressed by the petrochemical industry and associated risks. In particular, the purpose of my study of limited scope was to describe the relational resources that enable the resilience of a group of adolescents (15-24 years old) living in the petrochemical-affected community of eMbalenhle, a township in Mpumalanga, and to describe how these relational resilience enablers compare with their 2017 explanations about relationships and resilience. I used a qualitative approach and followed a phenomenological research design to achieve this purpose. The participants included 10 adolescents who lived in eMbalenhle, were comfortable speaking English, and had participated in the 2017 data generation. The primary data were generated by the participants using the same arts-based activities as in 2017. The primary data were analysed using inductive thematic content analysis and the secondary (2017) data were analysed using deductive thematic content analysis. The main relationships which enabled the resilience of these adolescents were family, others, and trustworthy friends. These relationships enabled the resilience of the adolescents over time by extending emotional comfort and affective caring, broadening perspectives and inspiring solutions, encouraging grit and perseverance, and promoting physical health or fulfilling basic needs. My study highlights the social-ecological nature of resilience and contributes insights into how relationships support adolescent resilience over time.

Key terms: adolescents, over time, petrochemical-affected community, relationships, relational resilience enablers, resilience, structural disadvantage.

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LANGUAGE EDITING CERTIFICATE

I, the undersigned, hereby certify that I have conducted the language and technical editing of the dissertation of Krysten Ann Balshaw

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Lexico: Dictionary & thesaurus. 2020. Oxford University Press. https://www.lexico.com/

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List of Abbreviations

RYSE	Resilient Youth in Stressed Environments
HIV	Human Immunodeficiency Virus
AIDS	Acquired Immunodeficiency Syndrome
SERT	Social Ecology of Resilience Theory
ITCA	Inductive Thematic Content Analysis
DTCA	Deductive Thematic Content Analysis
CAP	Community Advisory Panel
FET	Further Education and Training

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CHAPTER 1
INTRODUCTION

1.1 INTRODUCTION AND RATIONALE OF THE STUDY

My study contributes to the larger Resilient Youth in Stressed Environments (RYSE) Project. The RYSE Project aims to identify the protective factors that enhance the capacity of young people to adapt constructively when their communities are experiencing multiple challenges (RYSE Project, n.d.). Essentially, my study is interested in describing the relationships that facilitate resilience over time for adolescents living in eMbalenhle, a community challenged by structural disadvantage and the detrimental effects of the petrochemical industry. Through my study of limited scope, I intend to contribute to the ongoing efforts of resilience researchers to further illuminate the understanding of adolescent relational resilience enablers in at-risk South African communities.

For many of the South African population being "at-risk" is a fundamental part of life and adolescents are no exception (Bantjes et al., 2019; Cameron et al., 2013; Miller et al., 2017; Smit et al., 2015; Wong et al., 2008). This risk includes being challenged by structural disadvantage (Mampane & Bouwer, 2011; Mosavel et al., 2015; Scorgie et al., 2017), disease, i.e. HIV/AIDS (Ebersöhn et al., 2012; Woollett et al., 2016), crime (Mathews & Benvenuti, 2014; Pelser, 2008), gender-based violence (Dunkle et al., 2004; Moletsane et al., 2015; Steyn & Van Zyl, 2009), climate change (Chersich et al., 2019; El Zoghbi & El Ansari, 2014; Wright et al., 2019), pollution (Nkosi et al., 2015; Pauw et al., 2011; Pretorius, 2015; Shezi & Wright, 2018) or cumulative combinations of these (Cluver & Orkin, 2009; Sommer et al., 2017). The accumulation of multiple risks highlights the complexity of the adversity adolescents face (Burns & Snow, 2012; Evans & Kim, 2007; Masten, 2001; Ostazewski & Zimmerman, 2006). My study engages with adolescents challenged by living in a township within proximity to a petrochemical production facility, i.e. they live in an environment with multiple physical, psychological and economic stressors.

The dynamic process in which an individual achieves better than expected outcomes, by demonstrating the capacity for positive adaptation in the face of adversity or risk, is referred to as resilience (Luthar, 2006; Luthar et al., 2000; Masten, 2004, 2011, 2018; Skovdal & Daniel, 2015). A key feature of resilience is that promotive and protective factors buffer adolescents from the negative effects of exposure to multiple risks (Cicchetti, 2013; Luthar,

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2006; Ungar, 2013; Werner, 2013). These may include personal, relational and/or community factors (Van Breda & Dickens, 2017). However, research in the field of resilience has been critiqued for over-emphasising personal resilience-enabling factors (Garrett, 2016; Van Breda, 2018). In particular, studies considering the relational factors that enable resilience are important to support practitioners (like educational psychologists) to identify, understand and promote these enablers in context and galvanise the resilience of “at-risk” adolescents (Fergus & Zimmerman, 2005; Masten, 2018; Ungar, 2013).

Resilience is contextually specific; therefore, what enables the resilience of adolescents in one context may not enable the resilience of adolescents in another context (Ungar, 2011, 2012a, 2012b). Although there are a number of studies reporting on the protective and promotive factors that enable resilience, there is a need for further investigation into the relational resilience enablers that enable adolescent resilience in the South African context (Van Breda, 2017; Van Breda & Theron, 2018). Similarly, although there are a variety of studies on the resilience of adolescents living in townships (Dass-Brailsford, 2005; Govender & Killian, 2001; Lethale & Pillay, 2013; Mampane, 2014; Mampane & Bouwer, 2011; Theron, 2007), none of these are specific to the context of adolescents living in a township affected by the petrochemical industry over time. It is possible that relationships will support the resilience of adolescents in the latter context in ways that match the ways documented in the existing studies; however, this should not be assumed because resilience is a complex process, which is sensitive to context (Masten, 2014).

Resilience is also a complex process since enablers of resilience could vary over time (Masten, 2015; Panter-Brick, 2015). Insight into relational resilience enablers over time is important, given the understanding that relational resilience enablers are probably the most important protective resource (Luthar, 2006). Studies of the resilience of African adolescents over time – including South African adolescents – are limited, as researchers have generally not attended to how time affects the resilience processes of these adolescents (Theron, 2019; Van Breda & Theron, 2018). The complexity of resilience highlights the limitations of the existing studies of adolescent resilience, as only four of these studies address adolescent resilience over time, i.e. Bachman DeSilva et al. (2012), Collishaw et al. (2016), Theron and Van Rensburg (2018) and Van Breda and Dickens (2017). For this reason, resilience research can benefit from insights into the resilience of

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adolescents over time, so that adolescent resilience may be fully understood (Li et al., 2017; Masten, 2001).

My reason for undertaking to address the current limited insights into the relational resilience enablers, as described by South African adolescents over time, was fundamentally based on an awareness of the need for longitudinal research in the area of adolescent resilience, my personal and para-professional experience, as well as an invitation to participate in the RYSE Project. My study's focus has resonated with my experience as a teacher and as a community helper. While teaching in Cape Town, I observed that the learners were negatively affected when they experienced the challenges they were facing as overwhelming. While observing learners facing daily challenges, it became important for me to understand how some learners were able to "rise to the occasion" whereas others could not cope. Over time, it became apparent to me that learners with relational support were more inclined to adjust well to adversity. During my experience assisting at an orphanage for children orphaned by HIV/AIDS in Bloemfontein, I observed that it was often the young people who had access to relational support from extended family relationships, albeit intermittently, who were able to succeed during adolescence, despite the challenge of living in an under-resourced orphanage. Currently, as an educational psychologist in training, I have fully realised the value relational supports bring to adapting to the challenges that adolescents face in a variety of different spheres of their lives. These experiences culminated in a curiosity about the phenomenon of adolescents' relationships over time and the influence they have on an adolescent's resilience; therefore, I endeavoured to understand it further. As I investigated this phenomenon in the literature, I discovered that my observations were similar to both national (Collishaw et al., 2016; Ebersöhn, 2013; Jefferis & Theron, 2017; Van Breda, 2018; Woollett et al., 2016) and international resilience literature (Ellis et al., 2017; Masten, 2018; Ungar et al., 2019). More specifically, my observations were similar to the literature relating to the value of relationships in enabling school success (Kamper, 2008), meaningful personal and career development (Maree, 2013; Patton & McMahon, 2014; Semrud-Clikeman & Ellison, 2009) and enhancing subjective well-being (Cluver & Gardner, 2006; Van Schalkwyk & Wissing, 2010; Visser & Routledge, 2007). However, I also discovered that there was limited knowledge about which relationships enable adolescent resilience and how they do so over time in South African contexts where adolescents are challenged by multiple combinations of risk.

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1.2 PROBLEM STATEMENT

My study addresses the limited insight reported in the resilience literature regarding which relationships enable South African adolescents' resilience and how they do so in context over time. This gap is a concern because it suggests that there is a constraint to the information provided to those working with and supporting South African adolescents, which may limit the understanding of these service practitioners and their effectiveness in championing adolescent resilience (Theron, 2012). My study therefore aims to make a positive contribution to the knowledge of those working with and supporting South African adolescents, in that I endeavour to describe the relational resilience enablers over time, as reported by adolescents living in a township context, who are further challenged by their proximity to a petrochemical production facility.

In South Africa, adolescents (i.e. young people aged 10 to 19) make up 18.5% of the total population (Statistics South Africa, 2018). Furthermore, in South Africa adolescents are challenged by disease, i.e. tuberculosis and HIV, increasing numbers of teenage pregnancies, a high mortality rate and migration, among other risks (Statistics South Africa, 2018). Casey et al. (2010) state that the developmental stage of adolescence is associated with heightened turmoil and stress. As a result, adolescents become increasingly vulnerable to challenges in their context, which substantiates the need to champion their resilience.

Practitioners, such as educational psychologists, have a key role to play in bolstering South African adolescents' resilience through building relationships with adolescents and through training other key role players, i.e. teachers, parents and peers, to foster adolescents' resilience processes (Liebenberg et al., 2015; Pillay, 2014). It is a necessity for educational psychologists in South Africa to be open-minded and willing to learn about the lived experiences of adolescents. Educational psychologists should decentre themselves and focus their attention on the "evolving, interactive, ecologically-embedded negotiations crucial to the process of resilience" in order to understand adolescents' resilience processes and the relationships that enable them effectively (Theron & Donald, 2012, p. 62). In the absence of a comprehensive understanding of relational resilience in context and over time, practitioners may implement interventions which are based on outdated information, deeming them irrelevant and inappropriate for the current adolescent experience (Pillay, 2014; Van Breda & Theron, 2018). Therefore, not addressing limitations in the available

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resilience literature is problematic for adolescents and the professionals who provide intervention to this population group.

South Africa is portrayed as a country whose people are too often overwhelmed by hardship and adversity (Ebersöhn, 2019). My study seeks to address the lack of longitudinal research on the relational resilience enablers of adolescents living in a community or in a township within proximity to a petrochemical plant, and add to the voices of resilience researchers in order to adapt the aforementioned portrayal. It is my hope that this will shift the understanding of South African adolescents from being problem-focused, towards a more constructive view of the relational resources that support adolescents' capacity to flourish in the face of adversity.

1.3 PURPOSE OF THE STUDY

The purpose of my study is to describe how relational resources enable the resilience of a group of adolescents (15-24 years old) living in the township of eMbalenhle and to describe the consistency of these relational resilience enablers over time. In effect this means that the study aims to describe how the relational resilience enablers that were reported by this group of adolescents in 2019 compared with what the same group reported in 2017. In my study, I used primary data, i.e. data generated by the same group of adolescents in 2019 and secondary data, i.e. data generated by the group of adolescents in 2017, to fully understand the relational resources that enable their resilience over time. These adolescents face risks associated with structural disadvantage as well as proximity to a petrochemical production facility, given their location in relation to a large petrochemical plant, namely Sasol.

1.4 RESEARCH QUESTION

My study is informed by the following research question: How do relationships enable the resilience of a group of adolescents living in eMbalenhle, a community stressed by petrochemical pollution and structural disadvantage, and how consistent are these relational resilience enablers over time? In other words, how do the relational resilience enablers, reported by this group of adolescents in 2019, compare with what they reported in 2017?

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1.5 THEORETICAL FRAMEWORK

The theoretical framework that I selected for this study was the Social Ecology of Resilience Theory (SERT) proposed by Ungar (2011). This theoretical framework (SERT) aligns well with the biopsychosocial perspective of resilience adopted by the RYSE study (RYSE, n.d.). SERT is a systemic approach to understanding the concept of resilience, which has been used in previous South African studies of adolescent resilience, to understand how adolescents navigate through challenges in their lives (Ebersöhn, 2007; George, 2017; Hage & Pillay, 2017; Jefferis, 2016; Malindi, 2014; Mampane & Bouwer, 2011; Rosenbaum, 2017; Soji et al., 2015; Van Breda, 2018; Van Breda & Dickens, 2017; Van Rensburg & Barnard, 2005; Wills & Hofmeyr, 2019). It is for these reasons that the SERT approach is apposite for the context of this study of limited scope.

According to Ungar (2011), there are four principles in conceptualising the social ecology of resilience, i.e. decentrality, complexity, atypicality and cultural relativity. These are applicable to my study. Firstly, decentrality is relevant in my study's context as research of resilience focuses simultaneously on the individual and the protective factors outside of the individual that foster an ability to adapt well to hardship (Ungar, 2011). This principle is closely linked to Bronfenbrenner's bio-ecological model, which emphasises the influence of the multifaceted interactions between the individual and the social ecological systems around them (Swart & Pettipher, 2016). Thus, SERT removes the focus of resilience from within the individual to within their social ecology.

Secondly, complexity implies that resilience is dynamic and changeable. The protective resources that are reported as facilitative of resilience may be different over time (Béné et al., 2014; Theron, 2020; Theron & Theron, 2014). As adolescents mature, they are reported to prioritise different social ecological resources (Theron & Van Rensburg, 2018). This highlights the need for longitudinal studies internationally (Ungar, 2011) and in the South African context (Theron, 2018; Van Breda & Theron, 2018). Furthermore, Masten (2014) states that longitudinal research accommodates the complex nature of resilience research. The principle of complexity is considered in this study as I made use of data generated during the first wave of data generation for the RYSE Project (i.e., 2017), with as many of the same participants as possible, using identical research methods to explore how similar or different the relational resilience enablers that they report are over time.

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The third principle is the concept of atypicality in resilience research. This principle suggests that the context of the individual will determine which resources the individual experiences as protective. These resources will not necessarily concur with the mainstream understanding of resilience-enabling resources (Ungar, 2011). Ungar (2004) refers to this phenomenon as "hidden resilience". This is demonstrated in a study by Malindi and Theron (2010), which shows how society's bias towards street-connected youths' behaviour as antisocial misses the mark. Malindi and Theron (2010) showed that some unconventional behaviours are street-connected youths' attempts to access the resources around them (e.g. vandalising public telephones to take the coins). Throughout the research process of this study, I was attentive to the potential for relational enablers that could be considered atypical, e.g. gang membership (Hills et al., 2016).

The fourth principle refers to the cultural relativity of resilience. Ungar (2011) explains how cultural relativity is relevant in the identification and development of resilience. Therefore, resilience and the associated adjustment to difficulties cannot be viewed as processes that are uniform across all cultures; they are embedded within a given cultural group (Panter-Brick & Eggerman, 2011). For example, Phasha (2010) reported on the valuable role that African cultural heritage played in galvanising the resilience of the adolescents in her study.

1.6 CONCEPT CLARIFICATION

The concepts of *adolescence*, *adversity*, *petrochemical pollution*, *resilience*, *resilience enablers* and *townships* are central for the purposes of this study, and are therefore explained below.

1.6.1 Adolescence

Recent reviews of the stage of adolescence recognise that our current definition of adolescence is "overly restricted" and recommends that the ages of 10 to 24 years are more appropriate for adolescents nowadays (Sawyer et al., 2018, p. 5). In this study, I refer to the participants as adolescents between 15 and 24 years old, which is the age range of the participants in the RYSE Project. The adolescent stage of development has specific developmental tasks (Cobb, 2010). Some of the most critical developmental tasks performed by adolescents typically include socialisation, finding their place in society, developing tolerance for personal and cultural differences and developing self-confidence (Rice & Dolgin, 2005; Woolfolk & Perry, 2014). As adolescents explore their identity,

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develop their self-concept and increasingly pursue independence and autonomy, they continue to value relationships with those around them; however, the nature of their relationships is altered (Nurmi, 2004). This includes the parent-child relationship, which is redefined through a shift away from the authoritative aspect of their relationships with their parents (Collins & Laursen, 2004; Lionetti et al., 2019). Notably, a secure relationship with their parents, with appropriate parental monitoring and supervision, continues to enable adolescent resilience (Woolfolk & Perry, 2014). The adolescent's relationships with their siblings also adjusts as they become more distant and less emotionally intense and as adolescents' approach to their siblings becomes more rational, conflict with their siblings reduces (Rice & Dolgin, 2005). Relationships with grandparents can contribute positively to the adolescent's identity development (Wild, 2018). For example, grandparents may act as confidants (Ebersöhn et al., 2015). Adolescents spend an increasing amount of time with their peers and friendships with their peers deepen and become more complex (Brown, 2004; Woolfolk & Perry, 2014). Relationships with significant adults outside of the family, such as teachers and religious leaders, also become increasingly important since adolescents seek mentors who provide guidance as they navigate into emerging adulthood (Eccles, 2004; Mota & Matos, 2015). Linked to the increasing closeness in relationships with clergy, i.e. religious leaders, is an increased awareness of the adolescent's spirituality as they explore their spiritual identity, as well as their purpose and the meaning of life (Kim & Esquivel, 2011; King & Roeser, 2009). This growing awareness may result in adolescents developing a deeper, more meaningful connection with a spiritual being (Arndt & Naudé, 2016). This connection could provide a sense of belonging (Arndt & Naudé, 2016; Benson et al., 2003) and may protect adolescents from potential risks such as using drugs (Hodge et al., 2001), suicide (Greening & Stoppelbein, 2002), depression (Pearce et al., 2003), gang involvement (Harley & Hunn, 2015) and premature voluntary sexual activity (Holder et al., 2000).

1.6.2 Adversity

Also referred to as risk, adversity typically encompasses negative life circumstances that are known to be statistically linked to adjustment difficulties (Luthar et al., 2000). The data generation for my study was completed in eMbalenhle, which is home to a community stressed by structural disadvantage, due to living in a township, and exposure to petrochemical pollution (Thabethe et al., 2014). The adolescents in the RYSE study have

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previously reported being stressed by the context in which they live (Malakou, 2019; Matlali, 2019; Sithole, 2019; Theron & Ungar, 2019; Van Aswegen, 2019).

1.6.3 Petrochemical pollution

The manufacturing of petrochemicals produces a series of toxic gases and chemicals. Individually, these gases and chemicals are harmful to people exposed to them. When combined, the harmful effect is compounded (Cox et al., 2017). The effect may have an impact on the biological, psychosocial and economic facets of the exposed individual, family or community (Thabethe et al., 2014). Petrochemical pollution is one of the adversities experienced by the adolescent participants in the RYSE study (Malakou, 2019; Matlali, 2019; Sithole, 2019; Theron & Ungar, 2019; Van Aswegen, 2019).

1.6.4 Township

Townships were implemented as part of the apartheid system of government, which violated the rights of black South Africans (Ndobo & Sekhampu, 2013). More specifically, it refers to a structurally inferior or low-income residential area, similar to a favela (Mampane, 2014; Pretorius & Theron, 2019). These areas are associated with structural disadvantages including poverty, increased violence, and limited access to opportunities and sociocultural capital (Johnson & Kane, 2016). Township-related risks are a form of adversity experienced by the adolescent participants in the RYSE study (Matlali, 2019; Sithole, 2019; Theron & Ungar, 2019; Van Aswegen, 2019).

1.6.5 Resilience

This term refers to a system's (e.g. an adolescent) capacity to adapt successfully to adversity or significant risk (Luthar et al., 2015; Masten, 2014, 2018). Furthermore, this capacity is a multifaceted, dynamic process affected by context and the passing of time (Ungar, 2012a). The resilience demonstrated by an individual is affected by the interaction of the systems within which they function. Relationships with others are an important feature of these systems (Masten & Cicchetti, 2016; Theron et al., 2013). Resources and assets on a personal and structural level also play a role in galvanising an individual's resilience (Panter-Brick et al., 2018).

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1.6.6 Relational resilience enablers

This refers to the social relationships in an individual's environment which foster resilience (Luthar, 2006; Malindi, 2014). These social relationships are resources protecting individuals from the risks associated with adversity. Examples of these resources are relationships within a consistently supportive family (Collishaw et al., 2016; Wild et al., 2011), relationships that foster a sense of belonging (Brittian et al., 2013; Malindi, 2014), and relationships with others who play a mentoring role (Dass-Brailsford, 2015; Hage & Pillay, 2017; Soji et al., 2015).

1.7 ASSUMPTIONS

For the purpose of this study, I formulated the following working assumptions before I began the research process. Firstly, that the interviews and discussions conducted during this study will facilitate an understanding of the resilience-enabling relationships of adolescents living in eMbalenhle. The use of narratives of resilience, derived from interviews and discussions with adolescents, is favoured in the literature I reviewed (Burman et al., 2017; Fielding-Miller et al., 2015; Goliath & Pretorius, 2016; Hage & Pillay, 2017; Hauser & Allen, 2007; Pienaar et al., 2011; Van Breda & Theron, 2018; Woollett et al., 2016). Secondly, I assumed that the adolescents living in eMbalenhle will be willing to share their lived experiences of relational resilience enablers. This was based on my previous experience with at-risk adolescents living in a township, with whom I had worked in community projects in the Eastern Cape, the Western Cape and the Free State. However, it is also recorded in the resilience literature (Ebersöhn et al., 2015; Landau, 2007; Walsh, 2007). In fact, it has been suggested that adolescent resilience can be promoted through sharing stories of resilience (Denham 2008; East et al., 2010; Theron & Engelbrecht, 2012; Zautra, 2014). Thirdly, I assumed that the comparison between the themes developed in 2017 and the themes developed in 2019 will be useful in identifying relational resilience enablers, which are consistent over time among adolescents living in eMbalenhle. This assumption is based on reflecting on my own experience of adolescence and the experiences of those I am closest to. I realised that many of the relationships that enabled my resilience as an adolescent continued to play a key role into young adulthood, which is an experience similar to that of my peers. Although many studies using this approach have been conducted internationally (Masten & Tellegen, 2012; Werner, 2013), there is limited evidence of the effectiveness of this approach in the South African resilience literature (Collishaw et al.,

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2016). Finally, based on my observations as a teacher, I anticipated that the adolescents living in eMbalenhle would report friendships with peers as resilience-enabling and that these friendships would remain constant over time. My assumption, that adolescents' relationships with their friends will be resilience-enabling, appears to be confirmed in the literature (Bachman DeSilva et al, 2012; Criss et al., 2002; Graber et al., 2016; Lethale & Pillay, 2013; Theron & Van Rensburg, 2018).

1.8 METHODOLOGY

The methodology for this study is further detailed in Chapter 3. What follows below is a summary of the methodology applied in this study.

1.8.1 Epistemological paradigm

I elected to use the social constructivism paradigm in my study. According to the social constructivism paradigm, there are multiple, fluid realities, which are co-constructed as a collective, and therefore perceived subjectively by individuals (Holstein & Gubrium, 2011; Yin, 2016). The aim of research in this paradigm is to understand and interpret the subjective, multifaceted meaning of phenomena (Lincoln et al., 2011). In Chapter 3, I have reported on the reasons for selecting social constructivism as the epistemological paradigm for my study, as well as the advantages and disadvantages of using this approach (see Section 3.4.1).

1.8.2 Methodological paradigm

Qualitative research was the most suitable methodological paradigm for this study. Qualitative research refers to research that aims to describe a broad range of topics in context by studying the meaning of people's lives in context through their descriptions of their roles in real-life scenarios (Dakwa, 2016; Denzin & Lincoln, 2018; Silverman, 2014). My reasons for choosing the aforementioned paradigm, as well as its advantages and disadvantages, are reported in Chapter 3 (see Section 3.4.2).

1.8.3 Research design

I elected to use phenomenology for my research design. This design involves describing the essence of the lived experiences of individuals and of the meaning of a specific phenomenon (Creswell & Poth, 2018; Nieuwenhuis, 2016; Polit & Beck, 2014). The reasons

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for me choosing the aforementioned design, as well as its advantages and disadvantages, are reported in Chapter 3 (Section 3.5.1).

1.8.4 Participants

In summary, 10 participants generated data in my study. The same participants also generated data in 2017. All 10 were recruited using purposeful sampling, which involves deciding on specific criteria that guide the selection of participants, prior to beginning recruitment of participants (Charmaz, 2011; Strydom, 2014). Purposive sampling ensures the participants contributing data to the study are most likely to present descriptions relevant to the processes being studied (Lumadi, 2016; Silverman, 2014). The reasons for choosing purposive sampling as the approach to recruitment, the criteria used, as well as the advantages and disadvantages of this approach, are discussed in Chapter 3 (see Section 3.5.3). Additionally, I have tabulated participant details in Chapter 3 (see Table 2, Section 3.5.3).

1.8.5 Data generation

To generate the primary and secondary data, arts-based approaches were used. Arts-based approaches involve using creative ways to understand an individual's lived experiences so their lived experiences can be fully understood (Austin & Forinash, 2005; Finley, 2008). There is a large variety of different artistic methods which can be adopted as part of the research process (Coemans et al., 2015). I adopted body mapping and draw-write-talk to generate the primary data for my study. The reasons for choosing arts-based approaches as the primary data generation method, as well as the advantages and disadvantages of this approach, are discussed fully in Chapter 3 (see Section 3.5.4.1).

I also accessed secondary data, generated in preceding years of the RYSE study. These data were also generated by using body mapping and draw-write-talk, as explained in Chapter 3 (see Section 3.5.4.2).

1.8.6 Data analysis and interpretation

The primary data for my study were analysed using inductive thematic content analysis (ITCA). This involves the interpretation of complex phenomena in order to develop or revise an understanding of these phenomena by systematically coding, deriving meaning and describing data through the creation of prominent themes, which address the research

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question (Braun & Clarke, 2006; Feza, 2015; Vaismoradi et al., 2016). My reasons for choosing ITCA, as well as the advantages and disadvantages for this analytic approach, are discussed in Chapter 3 (see Section 3.5.5.1).

I made use of deductive thematic content analysis (DTCA) for the secondary data analysis. DTCA is used when analysis is conducted, based on previous knowledge, and moves from general ideas to the specifics of the data in order to add to the researcher's understanding of the data (Elo & Kyngäs, 2008; Vaismoradi et al., 2013). The reasons for selecting DTCA, as well as the advantages and disadvantages for this analytic approach, are discussed in Chapter 3 (see Section 3.5.5.2).

1.9 QUALITY CRITERIA

Lincoln and Guba (1994) note that to establish trustworthiness in research, a variety of quality criteria must be adhered to. These criteria include: credibility, dependability, transferability, confirmability and authenticity. In Chapter 3 (see Section 3.6), these criteria are discussed in detail and are therefore not considered in this chapter.

1.10 ETHICAL CONSIDERATIONS

My study formed part of the broader RYSE Project. The RYSE Project received ethical clearance from the Ethics Committee, Faculty of Education [UP 17/05/01]. A copy of the ethics clearance certificate for my study can be found in Addendum E. When I interacted with the participants, I was careful to work ethically, as explained in Chapter 3 (see Section 3.7).

1.11 CONCLUSIONS

This chapter introduced my study, which focuses on how relationships enable the resilience of adolescents living in a community challenged by structural disadvantages and proximity to a petrochemical production facility, namely eMbalenhle, over time. Details of the methodology that was adopted for this study are provided in Chapter 3. In the subsequent chapter I will elaborate on the South African literature relevant to the risks faced and resilience shown by adolescents in South Africa and how relationships champion this resilience.

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CHAPTER 2
LITERATURE REVIEW

2.1 INTRODUCTION

The hallmarks of resilience, also in South African studies, are risk and positive outcomes (Kuo et al., 2019; Van Breda & Theron, 2018). Subsequently, I have divided this chapter into two sections. The first section is brief and speaks to the risks that typically threaten the positive development of adolescents growing up in eMbalenhle. In the second section I focus on the relational aspects of the resilience literature as this pertains to my research question. However, I am aware that resilience, particularly from a social-ecological perspective (Ungar, 2011), includes personal and structural resilience enablers. I have summarised some of these in Table 1. Although multiple publications document what enables resilience (Masten, 2018), Chapter 2 draws mostly on South African publications as resilience is a contextually sensitive process (Ungar, 2011).

Table 1

Summary of resilience enablers excluding the relational protective resources of the current study

Personal resilience enablers	
Cognitive competencies, i.e. an individual's intellectual ability to achieve goals and dreams (Kumpfer, 1999). These competencies include factors such as intelligence, academic achievement, creativity, interpersonal awareness, reading skills and moral reasoning (Kumpfer, 1999).	E.g. Agasisti et al, 2018; Bouwer & Mampane, 2011; Cappella & Weinstein, 2001; Fielding-Miller et al., 2015; Gizir & Aydin, 2009; Hage & Pillay, 2017; Hlatshwayo & Vally, 2014; Lethale & Pillay, 2013; Mampane, 2014; Mosavel et al., 2015; Theron, 2016b; Wills & Hofmeyr, 2019.
Spiritual and motivational characteristics, i.e. resilience characteristics which include belief systems and cognitive capabilities that motivate an individual and create or develop a sense of direction (Kumpfer, 1999).	E.g. Brittian et al., 2013; Dowling et al., 2004; Harley & Hunn, 2015; Raftopoulos & Bates, 2011; Hall & Theron, 2016b.

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Physical well-being and characteristics, i.e. the adolescent's effort to keep physically fit, look physically attractive and maintain a healthy lifestyle (Kumpfer, 1999).	E.g. Fraser-Thomas & Côté, 2009; Holt et al., 2017; Silverman & Deuster, 2014; Southerland et al., 2016.
Emotional stability, i.e. characteristics that promote resilience in adolescents. These include emotions such as happiness, humour, hopefulness, anger management and also the ability to recognise feelings (Kumpfer, 1999).	E.g., Carr, 2011; Cohn et al., 2009; Collishaw et al., 2016; Ebersohn & Bouwer, 2013; Fredrickson & Joiner, 2002; Heunis et al., 2011; Hills et al., 2016; Kruger et al., 2016; Malindi & Theron, 2010; Mohangi et al., 2014.
Behavioural and social skills, i.e. skills that build on cognitive competencies; however, these skills require actions and are not purely based on thoughts. Factors that can be associated with these skills include problem solving, communication skills, social skills, and street smarts (Kumpfer, 1999).	E.g. Compton, 2005; Johnston & Krettenauer, 2011; Kocayörük, 2010; Seligman, 2002; Van Breda, 2018; Yendork & Somhlaba, 2014.
Community or structural resilience enablers	
Protective community institutions, e.g. religious establishments, libraries, hospitals, sports fields.	E.g. Hlatshwayo & Vally, 2014; Mampane 2014; Mosavel et al., 2015; Pienaar et al., 2011; Theron & Phasha, 2015.
Community representatives, e.g. elders, prosocial teachers, mentorships and social workers.	E.g. Dass-Brailsford, 2005; Kumpulainen et al., 2016; Malindi, 2014; Scorgie et al., 2017; Theron, 2016b; Theron et al., 2013; Van Breda, 2010; Wild et al., 2011.
Safe schools and neighbourhoods and quality schooling.	E.g. Bhana & Bachoo, 2011; Ebersöhn, 2008; Hall & Theron, 2016a; Jefferis & Theron, 2017; Malindi & Machenjedze, 2012; Theron & Jefferis, 2015.
Extra-mural activity, e.g. sport and cultural activities.	E.g. Ebersöhn, 2008; Mampane & Bouwer, 2011; Theron, 2007; Theron & Dunn, 2010; Van Breda & Dickens, 2017.
Community initiatives, e.g. agricultural endeavours, marches and festivals, positive relationships, NGOs.	E.g. Ebersöhn, 2012; Ebersöhn & Ferreira, 2011; Hills et al., 2016; Odendaal & Moletsane, 2011; Skovdal et al., 2009; Van Breda, 2018.

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2.2 RISKS OF BEING AN ADOLESCENT IN EMBALENHLE

Seidman and Pedersen (2003) explain how the presence of "multiple risk or vulnerability factors increase the likelihood that an individual or a population will manifest negative developmental outcomes" (p. 318). Sameroff et al. (2003) summarise the effects of multiple risk in the phrase "the more risks, the worse the outcomes" (p. 386). My study involves the generation of data from a group of adolescents in eMbalenhle who are at risk due to living in a township stressed by structural disadvantages within proximity of a petrochemical plant.

2.2.1 Risks in the context of a township

Although the quality of life in South African townships varies (Mosavel et al., 2015), living in a township is generally associated with a number of different risk factors. These typically include poverty (Mampane & Bouwer, 2011; Sekhampu, 2013; Tshishonga, 2019), structural disadvantage (Kane, 2011; Mchunu & Nkambule, 2019; Theron & Van Rensburg, 2018), crime and violence (Choe et al., 2012; Christodoulou et al., 2019; Hatcher et al., 2019; Mathews & Benvenuti, 2014) and a high prevalence of communicable diseases (Mendelsohn et al., 2018; Miller et al., 2017; Wood et al., 2010). I discuss each of the co-existing risks associated with living in an area challenged by structural disadvantage next.

Sekhampu (2013) describes how communities living in townships are typically "caught in a poverty trap" (p. 146). This "poverty trap" is underpinned by the legacy of racialised injustice through the segregation and marginalisation of the black majority of South Africans during the apartheid-era (Mathews & Benvenuti, 2014; Sekhampu, 2013; Swartz et al., 2012). Many of these injustices continue to perpetuate poverty as many people living in townships are challenged by risk factors such as low parental education (Seidman & Pedersen, 2003). Furthermore, poverty increases the likelihood of adolescent involvement in risk-taking behaviour, delinquency and violence (Breen et al., 2019; Mathews & Benvenuti, 2014). According to Sekhampu (2013), the age, education level and gender of the head of the household are some of the most important factors contributing to the level of poverty in township households. To this end, a study by Biyase and Zwane (2018) on poverty in South Africa determined that female-headed households were more likely to be poor than male-headed households and that female-headed households were more prevalent in poor communities. Characteristics of poverty are evident in eMbalenhle. For example, the census of 2011 (Statistics South Africa, 2011) reported that a mere 5.6% of the community

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over the age of 20 have attained higher education qualifications. This suggests that there is a low level of parental education, previously identified as a risk factor of living in a township. Additionally, in eMbalenhle there is a high level of unemployment as 19.1% of households report having no source of income; among those who are employed, 61.6% earn below the annual minimum wage for a South African worker (Statistics South Africa, 2011). Furthermore, 37.2% of the households in eMbalenhle are female-headed households (Statistics South Africa, 2011).

The legacy of the apartheid government, which forced many of the black majority of South Africans into areas without adequate housing and resources, has had lasting detrimental effects on many of the communities of people living in these township areas (Aliber, 2001; Sekhampu, 2013). Twenty-six years after the first democratic election of a new South African government, many people living in these township communities continue to face the risks of structural disadvantage (Davis et al., 2017; Pritchett et al., 2013). These risks include a lack of social and economic resources in the form of inadequate provision of healthcare, overcrowded housing, limited employment opportunities and a lack of educational opportunities (Kane, 2011; Mosavel et al., 2015). Mampane (2014) and Mampane and Bouwer (2011) elaborate on the lack of educational opportunities having knock-on effects, which may increase the risks of unemployment, poverty and poor health. In addition to this, Johnson and Kane (2016) consider that isolation from structures that provide safe living environments, such as an effective police force, exacerbates issues such as the lack of opportunity for upward mobility and “social disorganisation” (p. 15). The community of eMbalenhle experiences inadequate provision of healthcare (Matumba, 2015), a lack of educational opportunities (Mathebula, 2019d), poor housing (Pienaar, 2014) and limited employment opportunities (Mathebula, 2018b).

Crime and violence are rife in many township communities in South Africa (Christodoulou et al., 2019; Maringira & Masiya, 2018; Sommer et al., 2017). Community violence includes “incidents of interpersonal violence including murder, shooting, physical assault, rape and robbery with physical assault that occur in neighbourhoods in which children and families live” (Gorman-Smith & Tolan, 2003, p. 393). From the literature it is clear that adolescents who have been exposed to violence are at risk of developing a variety of psychological, behavioural and academic problems (Barbarin & Richter, 2001; Barbarin et al., 2001; Birmaher et al., 2004; Ward et al., 2007). These risks may result in increased anxiety,

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depression, lower self-esteem and increased absenteeism, which may have a negative influence on the adolescent's school performance, development of social relationships and their general quality of life (Hurt et al., 2001). Sifiso Mathebula, a reporter for eMbalenhle's local newspaper, has reported numerous violent incidents in the vicinity of eMbalenhle, including violence against women, school children and the elderly. Additionally, social disorganisation is evident in the community. For example, community members demand that the police release their offending family members from their custody to avoid conviction (Mathebula, 2019a).

In their study, Wood et al. (2010) include the heightened risk of obtaining communicable diseases as a risk of living in a township. Research conducted by Cameron et al. (2013) details the negative impact of communicable diseases on the lives of community members living in a township, as the responsibility to care for the children and adolescents affected by parents infected or deceased from HIV is placed on neighbours or other locals (many of whom were already challenged by resource constraints). In eMbalenhle there are growing concerns over the prevalence of HIV/Aids, tuberculosis and other communicable diseases (Green, 2013a; Mathebula, 2019c).

2.2.2 Risks in the context of a petrochemical-affected community

The adverse effects of the petrochemical industry are not limited to extraction and emission processes of the factories. Cox et al. (2017) provide a comprehensive synthesis of these risks in the physical, psychosocial and economic domains of functioning. In this section I intend to integrate these risks and demonstrate a holistic perspective of these adverse effects on the community affected by the petrochemical industry. Furthermore, I relate these to the experiences of the community living in eMbalenhle.

Cox et al. (2017) describe how the extraction process and the emissions produced by the petrochemical industry affect the environment as it causes air, water and noise pollution. The most prominent form of pollution emitted by the petrochemical plant in eMbalenhle is air pollution (Thabethe et al., 2014). Air pollution in the form of dust, fumes, smoke and water containing particulate matter significantly increases the risk of physical ailments and reduces life expectancy (Chay & Greenstone, 2003; Petkova et al., 2009; Pope et al., 2009). The most common form of health-related risks resulting from the proximity of a petrochemical plant is respiratory illnesses such as asthma and bronchitis (Cox et al., 2017;

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Kampa & Castanas, 2008). Air pollution also affects the nervous system, causing symptoms including anger, blurry vision, fatigue and disturbances in memory (Kampa & Castanas, 2008).

One of the negative health-related risks of air pollution is that it can cause a decline in cognitive performance, poor cardiopulmonary health, neurotoxicity and cancer (Han et al., 2014; Kampa & Castanas, 2008; Lavy et al., 2014; Pope & Dockery, 2006; Schlenker & Walker, 2011). The effect on cognitive performance due to carbon monoxide inhibiting proper oxygenated blood flow to the brain is especially devastating for children and adolescents (Lavy et al., 2014). Calderón-Garcidueñas et al. (2008) explain how long-term exposure to carbon monoxide can result in neuroinflammation, neurodegeneration and white matter lesions in children and adolescents living in areas with high measures of air pollution. This is likely to negatively affect fluid cognition, memory and executive functions, resulting in the adolescent performing poorly in school, which is linked to lower economic achievement later in life (Calderón-Garcidueñas et al., 2008; Cox et al., 2017; Goldenberg et al., 2008; Goldenberg et al., 2010). Although children and adolescents are more susceptible to these health-related conditions in comparison to adults, the negative effects are not limited to these groups; the effect on cognition also results in a less productive workforce (Bateson & Schwartz, 2007; Chang et al., 2016; Cox et al., 2017; Lavy et al., 2014; Marcotte, 2016). Research on the air quality in eMbalenhle has indicated elevated levels of pollutants such as carbon monoxide, which pose health risks for the people living in the community (Thabethe et al., 2014).

According to Cox et al. (2017), “disadvantage and inequality underpin much of the evidence related to the impact of energy resource activities on children and youth, at individual, family and community levels” (p. 502). Resultantly, many young people from contexts of structural disadvantage are forced to start working before completing their schooling (Goldenberg et al., 2010; Theron & Theron, 2014). This increases the number of young people from communities affected by structural disadvantage who seek out temporary income from the petrochemical industry in order to contribute financially to their households during periods of economic boom (Branson et al., 2014; Goldenberg et al., 2010). These young people then return to school following their short-term employment in the petrochemical industry. Such an intermittent absence further exacerbates the risk of poor school performance as these learners miss out on key content and assessments in the classroom (Theron & Van

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Rensburg, 2018). The high rates of no-income households in eMbalenhle (Statistics South Africa, 2011), could result in many adolescents leaving school before matriculating, in order to provide financially for their families.

Psychological stress is evident in the lives of many young workers from areas challenged by structural disadvantage, who relocate to the communities surrounding a petrochemical production facility in order to find a job (Goldenberg et al., 2010). The opportunity of employment for skilled and unskilled labourers is highly attractive, especially in the South African context where there are high levels of unemployment (Statistics South Africa, 2011). This results in a high influx of (often temporary) workers who migrate to communities surrounding a petrochemical plant (Goldenberg et al., 2008, 2010). This influx may put strain on the already limited resources available to these communities (Cox et al., 2017). Due to the multiple risks associated with the petrochemical industry, young people in these communities can be at higher risk of developing harmful behaviours such as smoking and alcohol addiction (Mactaggart et al., 2016), drug use (Goldenberg et al., 2010), exposure to violence (Carrington et al., 2010) and STI/HIV infection (Goldenberg et al, 2008). Young people seeking opportunities for excitement and entertainment might increase their involvement in prostitution (Cox et al., 2017), which contributes to increased pregnancy and abortions in the community (Shandro et al., 2011). In eMbalenhle, youth in the local community have engaged in protests because of their frustration with the influx of workers who are not from the area (Mathebula, 2018d).

The irregular hours associated with shift work, a common occurrence in the petrochemical industry, may cause physical harm such as fatigue, gastrointestinal and musculoskeletal symptoms (Choobineh et al., 2012; Goldenberg et al., 2010; Petkova et al., 2009). In addition to the health risks, shift work brings further psychosocial strain in the form of job stress, thereby increasing the community's vulnerability to environmental hazards (Gee & Payne-Sturges, 2004; Petkova et al., 2009). The involvements of parents in shift work can have negative effects on family life, causing family stress and breakdown (Choobineh et al., 2012; Petkova et al., 2009). Following Goldenberg et al. (2010), I would imagine this is a result of the frequent absence of the family member, the changing of household roles, as well as the risky behaviour associated with this type of work. These factors also contribute to the negative health outcomes experienced by the broader communities surrounding a petrochemical production facility (Witter et al., 2010).

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Accidents on-site, such as explosions or the collapsing of structures, can result in physical injuries or death (Witter et al., 2010). These accidents are often the result of poor safety standards resulting in the presence of preventable hazards (Cox et al., 2017). It is probable that adolescents whose parents are injured or killed will experience intense grief reactions with feelings of anxiety, depression and social isolation, due to the destabilisation of the family structure and the lack of a developed sense of self (Melhem et al., 2011; Robin & Omar, 2014). Louw and Louw (2010) describe how problems with sleeping, behaving impulsively and losing interest in external activities are not unusual behaviours for adolescents experiencing sudden loss.

The economic system in a community affected by the petrochemical industry is usually challenged by boom-bust cycles. This involves boom periods characterised by ample job opportunities, high incomes and infrastructure improvements, which are contrasted by bust periods of economic hardship resulting in downsizing and a range of social problems, which have been mentioned above (Cox et al., 2017; Hajkowicz et al., 2011). Given the news reports about Sasol's concerning financial position (Burkhardt, 2019; Cairns, 2019; Sguazzin, 2019), I wonder if the jobs of many Sasol employees will be made redundant in this time of economic hardship.

2.2.3 Conclusion to risk section

My review shows that adolescents living in eMbalenhle are probably challenged by the multiple risks associated with living in a township as well as those associated with living in proximity to a petrochemical plant. While completing this review, I observed that the concept of multiple risks and the greater negative effects of cumulative risks on adolescents living in South Africa echoes the research of frequently cited international resilience researchers (Masten, 2011; Rutter, 2001). Through reviewing the literature for my study, I became curious about the effects that the abovementioned multiple risks have on the developing adolescent and how these effects penetrate the physical, emotional, behavioural and social domains of adolescent development. Despite the increased risks that adolescents living in townships and exposed to petrochemical pollution experience, there is a growing body of literature evidencing the presence of adolescents in these communities who manage to achieve better than expected outcomes (Mampane, 2014; Mampane & Bouwer, 2011; Schwartz et al., 2017; Theron, 2016b; Theron & Ungar, 2019; Wills & Hofmeyr, 2019). Based on my reading of Mampane (2014), there is a need for more social support in the

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form of positive relationships or relational resilience enablers for these vulnerable adolescents in order to promote positive development and resilience. In the following section, I outline the relational resilience enablers that are reported in the existing South African literature on resilience.

2.3 RESILIENCE: UNDERSTANDING RELATIONAL RESILIENCE ENABLERS

Adolescents' dynamic and interactive resilience processes are supported by resilience-enabling factors (Ungar, 2012a; Van Rensburg et al., 2018). Resilience-enabling factors are defined as "processes and/or resources that enable resilient outcomes" (Van Breda & Theron, 2018, p. 2). These protective factors occur across social settings and protect adolescents against adversity (Seidman & Pedersen, 2003; Theron & Ungar, 2019). These social settings represent social ecologies which contribute to an adolescent's resilience, possibly even more than an adolescent's personal factors do (Ungar, 2012b; Van Breda & Dickens, 2017; Van Rensburg et al., 2018). It is the relationships within these social ecologies that function as "lifelines for resilience" (Walsh, 2003, p. 53). Practitioners need to be mindful of the interactional relationships between adolescents and different resilience-enabling role-players to ensure that adolescents are robustly supported (Masten, 2018; Van Breda, 2018). Synergy and collaboration between the resilience-enabling role players whom adolescents relate to enhance the power of the support available to adolescents facing adversity (Theron et al., 2013). Importantly, an increased use of one resource typically results in an increase of use of other resources (Botha & Van den Berg, 2016; Theron & Theron, 2010; Van Rensburg & Barnard, 2005).

International researchers report on the influence of family relationships, relationships with peers, and relationships with other capable adults as key resilience enablers during adolescence (Li et al., 2015; Masten, 2018; Rutter, 2013; Zimmerman et al., 2013). These trends are echoed by South African researchers as relevant resilience enablers for South African adolescents, albeit shaped by their cultural context, emphasising the importance of a relational and transactional understanding of adolescent resilience (Lau & Van Niekerk, 2011; Theron, 2020; Williams et al., 2004).

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2.3.1 Close relationships with peers support the resilience of South African adolescents

Peer relationships become increasingly influential during adolescence (Goliath & Pretorius, 2016). This is especially pertinent in South Africa where it is common for an adolescent's peer group to provide care and mentorship (Hage & Pillay, 2017). A number of South African studies show how relationships with peers champion resilience by providing protective factors, including a sense of belonging (Vogel, 2001), peer mentoring and the provision of valuable advice and encouragement for development (Malindi & Theron, 2010), and the sharing of resources to meet basic needs (Hills et al., 2016).

A sense of belonging refers to the adolescent's personal experience of belonging in the community to which they are connected (Ebersöhn et al., 2017). This phenomenon was evident in Vogel's (2001) study of six street children aged between 10 and 15 years old, living in a temporary home in Johannesburg. Vogel's (2001) study shows how peer support promotes adolescents' ability to cope with adversity through meaningful connections with peer facilitators from a local school. Furthermore, in a study of 30 street-involved girls between 12 and 17 years old in the Free State, Malindi (2014) demonstrated how the resilience of adolescents living on the street is supported by their involvement in groups of street-involved peers. Belonging to these peer groups facilitated opportunities for the girls to be helpful, show empathy and feel valued (Malindi, 2014, p. 36). Likewise, the findings of Malindi and Theron's (2010) study with 20 street-connected participants between the ages of 10 and 17 from the Free State and Gauteng clearly show how these adolescents benefitted from the sense of belonging provided by their peers. These participants described how their peers helped them to adapt to their changing circumstances. Similarly, the participants in Lethale and Pillay's (2013) study of four adolescents, two male and two female, living in Sebokeng Township, an area challenged by structural disadvantage, shared how their peers provided them with a sense of belonging as they understood "the reality of their context" (p. 587). Notably, in a study of six adolescents from low-income areas in Gauteng, KwaZulu-Natal and the Eastern Cape who had sustained burn injuries, lacking a sense of belonging within their peer group, i.e. peer rejection, contributed to the realisation that they were different from those around them as well as their experiences of vulnerability (Lau & Van Niekerk, 2011). In eMbalenhle, adolescents solidify their sense of

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belonging by encouraging one another to unite against systemic issues such as gender-based violence (Mathebula, 2019j).

Importantly, the peer bonds that adolescents form should be with prosocial peers in order to promote the adolescent's resilience (Choe et al., 2012; Oldfield et al., 2018). The behaviour of prosocial peers is characterised by "standing up for others, encouraging others, helping others develop skills, including others who are left out, and being humorous", as well as facilitating the emotional regulation of others (Bergin et al., 2003, p. 13). The influence of peers is evidenced in Choe et al.'s (2012) study of 424 Zulu adolescents living in townships around Durban. The researchers in this study concluded that the violent behaviour of adolescents is more influenced by the negative actions of their peers than by their family. The longitudinal study conducted by Theron and Van Rensburg (2018) with 140 predominantly Sesotho-speaking adolescents (mean age = 15.8 years), living in a township in the Emfuleni municipality, highlights the importance of the peer support provided to adolescents being prosocial, which can enable resilience, instead of being anti-social, which can discourage resilience. Likewise, in their study of 615 learners in Grade 7, living in an area of low income and high violence in Cape Town, Humm et al. (2018) also point to the importance of prosocial peers. Although relationships with prosocial peers did not protect the adolescents in this study from exposure to violence, prosocial peers were an important source of perceived support in these adolescents' lives, thus enabling their resilience (Humm et al., 2018). The violence in eMbalenhle means that the value of support provided by prosocial peers is probably heightened for the adolescents living in this community.

Peer relationships also support the resilience of South African adolescents through peer mentoring and the provision of valuable advice and encouragement for resilience development. For example, adolescents in Soji et al.'s (2015) study of the narratives of adolescents living in six youth-headed households in the Port Elizabeth area reported on how their friends were a significant source of support as they provided peer mentoring. Peer mentoring involves the adolescent developing relationships with peers who model socially appropriate behaviour (Keating et al., 2002). Peer mentoring is linked to relationships that support adolescent resilience as prosocial involvement opens up the opportunity for adolescents to be exposed to peer mentors (Zimmerman et al., 2013). Malindi and Machenjedze's (2012) study of 17 male Sesotho- and isiZulu-speaking street children

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between 11 and 17 years old discussed how the participants' friends listened to them when they had problems and advised them accordingly. Furthermore, a study by Hage and Pillay (2017) of seven male participants between 12 and 14 years old, living in child- and youth-headed households in Soweto, found that the adolescents' peers provided them with encouragement to study hard at school and take care of themselves and their families. Importantly, adolescents must be discerning in internalising the advice from their peers. Goliath and Pretorius's (2016) study of 10 adolescent drug users in Port Elizabeth between 16 and 18 years old reported that resilient adolescents exercise their agency, thus are not passive in being affected by the influence of their peers.

Individual adolescents in eMbalenhle seek to alleviate some of the difficulties their peers are facing through school support initiatives and mentoring programmes. For example, a few of the unemployed adolescents living in eMbalenhle are using their spare time to help school-going adolescents by providing extra lessons during the school holiday (Mathebula, 2018f). Furthermore, the eMbalenhle community has begun initiatives to promote positive peer influence through a peer mentoring programme for female adolescents (Mathebula, 2016a). A few adolescents in eMbalenhle engage their friends to actively support them in their entrepreneurial endeavours, which they can use to assist their younger peers in the community. For example, a local entrepreneur mobilised his friends who supported him in establishing his business to provide academic assistance to school-going learners in his community and help him realise his "love and passion for teaching and learning" (Mathebula, 2019g).

Close relationships with peers also enable the resilience of South African adolescents through sharing resources to meet basic needs. In their study of 10 (six male and four female) adolescent participants from a drop-in centre in Durban, Hills et al. (2016) concluded that the participants' peers contributed substantially to their resilience by sharing their resources, such as clothing, with the participants. Peer relationships also buffer adolescents against the adversity associated with living in an area of structural disadvantage. The findings of Malindi and Theron's (2010) study of 17 male adolescents and three female adolescents, living on the streets in the Free State and Gauteng, revealed that the participants' peers provided support by sharing their meagre food supply with them. Theron et al.'s (2011) study included four participants, i.e. two Sesotho-speaking orphans in South Africa and two Mexican immigrants living in Canada. The South African

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participants reported on how their peers provided them with many items that they needed, such as food and clothes. A 17-year-old adolescent began a project to give basic resources to those in need in the area of eMzinoni, which is part of the broader eMbalenhle community. She depends on donations from her peers in order to continue to live out her passion to help the needy (Mathebula, 2016d).

2.3.2 Relationships with family members support the resilience of South African adolescents

Developmentally one would expect peers to be the central source of support for adolescents (Reitz et al., 2014; Schwarz et al., 2012; Seiffge-Krenke, 2013). However, local and international literature notes that family ties continue to matter in adolescence (Barber et al., 2005; Larson et al., 2002; Masten, 2018; Olsson et al., 2003; Van Breda & Theron, 2018; Zolkoski & Bullock, 2012). According to Bhana and Bachoo (2011), the fundamental social system influencing adolescent development in South Africa is the family system. The importance of family relationships in supporting resilience over time is reported in the longitudinal study by Collishaw et al. (2016). In their study of 944 orphaned adolescents between 10 and 19 years old who were living in and around townships in Cape Town, the researchers concluded that, over time, relationships with family members fostered the adolescents' resilience, which in turn encouraged further building of positive relationships. Similarly, the findings of Wild et al.'s (2011) study confirm the meaningful role of family during adolescence by pointing out that the risk of orphaned adolescents developing internalising problems was magnified when non-relatives were their primary caregivers. Their study included 159 youths between 10 and 19 years old in the Eastern Cape who were parentally bereaved due to HIV. Relationships with parents, siblings and the extended family (especially grandparents) enable the resilience of South African adolescents (Theron, 2020; Wild & Gaibie, 2014). I have detailed these relationships and the roles they play in enabling adolescent resilience in the sub-sections that follow.

I preface these sections by an acknowledgement that my focus on resilience-enabling relationships with various family members does not mean that all family relationships enable resilience. Relationships that are harmful or deconstructive can constrain resilience. For instance, in their study of 424 Zulu adolescents living in townships around Durban, Choe et al. (2012) found that, through socialisation of violence and discord in the home, adolescents'

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families may foster violent cognitions and attitudes, thereby increasing their risk of displaying violent behaviour when exposed to the negative influences of their peers.

2.3.2.1 Parents or caregivers enable the resilience of South African adolescents

Global research points to the key role parents or other role players play in enabling adolescent resilience (Masten, 2014; McNeely & Barber, 2010). In South Africa, this role includes instilling a deep belief in the value of education, modelling coping behaviours and providing adequate supervision, which contributes to and promotes adolescent resilience (Petersen et al., 2010; Phasha, 2010; Theron & Theron, 2010; Toska et al., 2017). Education is a basic human right which is valued around the world (UNESCO, 2000). For black South African families, in particular, education is a highly valued commodity (Gqola, 2011; Kumpulainen et al., 2016; Phasha, 2010). Parents advocating for educational achievement and providing support for adolescents to pursue educational aspirations shape the positive adjustment of these adolescents (Singh & Naicker, 2019; Theron & Liebenberg, 2015; Theron & Theron, 2014).

Evidence of parents or other caregivers endorsing their adolescent's education can be found in the findings of Phasha's (2010) study of 22, mostly female, participants between 16 and 23 years old who had been sexually abused during childhood. In Phasha's (2010) study, she found that, for these participants, the emphasis their parents or other caregivers placed on education socialised them to work hard at school and protected them from the risk of dropping out of school. Further evidence is reported in a study of 16 teenage mothers (16-18 years old) attending schools around KwaZulu-Natal, conducted by Singh and Naicker (2019). The school-going mothers in Singh and Naicker's (2019) study shared examples of how their mothers would care for their children while they completed their schoolwork and their homework, enabling them to complete their schooling. Local newspapers report that some adolescents in eMbalenhle aspire to meet their parents' expectations. The first case is that of Kgotso, an adolescent from eMbalenhle whose parents' encouragement enabled him to complete his schooling, which afforded him the opportunity to play soccer in Latvia. He promised to work hard to "make his family proud" (Mathebula, 2019b). The second case is that of Mickey, whose parents inspired him to attain a university degree by working hard at school to achieve the results he required, despite the challenges he experienced. Later, his determination paid off and he uses his story to inspire others from eMbalenhle (Mathebula, 2019f).

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Parents or other caregivers do not only support adolescent resilience by encouraging valorisation of education but also by role-modelling resilience. For example, in Petersen et al.'s (2010) study of 25 HIV-positive adolescents aged 14 to 16 years old and 15 of their caregivers, it was revealed that the adolescents looked to their HIV-positive caregivers for reassurance that they could still live a healthy life despite their status, by accepting their condition. Likewise, for the 1 468 adolescents with a mean age of 14.6 years living in Durban and Cape Town, who participated in Brook et al.'s (2006) study, it was the participants whose parents modelled low levels of substance use who were less likely to associate themselves with deviant peers who use substances. When parents or other caregivers model an inability to parent well – mostly because of contextual constraints – this can inspire adolescents to rise above their current circumstances and aim for a better future than that of their parents. This is evidenced in Theron's (2016c) study of 181 school-attending youths in the Free State aged 13-19, who were mostly challenged by living with single mothers. In this study, participants commented on how their parents' inability to cater to their needs led them to decide not to follow the same fate (Theron, 2016c). This motivated them to work hard and finish their schooling. In eMbalenhle, local community workers call for parents to be role models of good citizenship and safety for their children. For example, the community road safety counsellor calls for parents to set a good example of safety to the youth as pedestrians on the roads (Green, 2013a).

Parental monitoring and supervision of adolescents acts as a resilience enabler for South African adolescents. In Toska et al.'s (2017) study of 1 060 HIV-positive adolescents between 10 and 19 years old in the Eastern Cape, good parental supervision – including monitoring of social activities and home rule setting – was strongly associated with reduced incidents of unprotected sex among HIV-positive adolescents. Likewise, Van Rensburg et al.'s (2018) study of 407 Sesotho-speaking adolescents, aged between 13 and 19 in the Free State, experiencing risks including high unemployment, violent crime and poverty, among others, concluded that monitoring from caregivers was associated with decreased alcohol use. Similarly, Bhana et al. (2016) conducted a study of 177 HIV-positive adolescents between the ages of 9 and 14 and their caregivers, living in and around the Durban area. Their study found that parental supervision lowers levels of adolescent depression and promotes the resilience of HIV-positive youth (Bhana et al., 2016). Parental supervision should be moderate and reasonable to avoid the negative effects of parents supervising their adolescents excessively (Kariuki et al., 2014; Ryan et al., 2015). The

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negative effects of failing to promote an adolescent's independence by providing excessive supervision are evidenced in Madu and Matla's (2004) study of 435 adolescents between the ages of 15 and 19 living in the Pietersburg area of Limpopo Province. Madu and Matla (2004) concluded that a lack of independence could lead to an inability to achieve autonomous function and was positively associated with an increased risk of adolescent suicide. Unfortunately, in eMbalenhle the local newspaper often reports on incidents of familial abuse and/or neglect of adolescents living in the community (Mathebula, 2018g, 2019e, 2019i, 2019k). These reports highlight the negative consequences that may ensue, following the failure of adolescents' caregivers to provide adequate monitoring or supervision, adding to the multiple risks the affected young people are facing in eMbalenhle. Local police appeal to parents and other caregivers to supervise young people and explain how adequate parental supervision assists with circumventing adolescent vulnerability to dangers such as rape (Mathebula, 2018e, 2019i), recruitment into gangs (Mathebula, 2016b), falling into sewerage systems (Misselhorn, 2018) and kidnapping (Mathebula, 2017a). Furthermore, local social workers and police frequently call on families to provide adequate supervision for their adolescent members to protect them from harm. For instance, during the scourge of Nyaope use by adolescents in eMbalenhle, social workers called on parents to monitor their children and look for signs of drug use (Mathebula, 2015).

2.3.2.2 Siblings enable the resilience of South African adolescents

Siblings play an important role in the support provided by the social ecology of adolescents in South Africa, which buffers the adolescents against negative outcomes, especially when parents are unavailable to do so (Hall & Theron, 2016b; Ogina, 2012). This support tends to be affective in terms of a sense of acceptance and building a positive self-belief. To evidence the affective support of acceptance provided by siblings, I will use Mophosho et al.'s (2009) study of four participants between 9 and 18 years old, consisting of two adolescents with cerebral palsy and two adolescents whose siblings had cerebral palsy. In their study, Mophosho et al. (2009) found that sibling relationships can be "powerful bonds" and it is through the acceptance from their siblings these adolescents were able to achieve better than expected outcomes (p. 85). Likewise, in the study of 24 intellectually disabled learners between 10 and 19 years living in Gauteng, which was conducted by Hall and Theron (2016b), the unconditional acceptance of their siblings improved the adolescents' willingness to try new activities. Notably, Sharer et al.'s (2016) study of 1 380 adolescents between the ages of 10 and 20 years old, affected by HIV/AIDS and living in Mpumalanga

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and the Western Cape, questioned the notion that siblings enable adolescent resilience. This study found that the adolescents who indicated that their siblings provided high levels of affective support exhibited more symptoms of depression, anxiety and post-traumatic stress, suggesting that this relationship decreased their resilience (Sharer et al., 2016). Interestingly, the researchers in this study hypothesised that this unexpected result may be indicative of the shared emotional turmoil these adolescents experience with their siblings who are also affected by HIV/AIDS and which may add to the adolescents' distress (Sharer et al., 2016).

Siblings can encourage adolescent self-belief. A case in point is Dass-Brailford's (2005) study of 16 adolescents with a mean age of 21 years old, challenged by residing in a township and related structural risks. The researcher concluded that warm, nurturing and supportive relationships with older siblings compensate for the negative feelings associated with neglect from one or both of the adolescent's parents. Likewise, in Theron and Dunn's (2010) study of 10 adolescents between 14 and 18 years old in Mpumalanga and the Vaal Triangle, who were coming to terms with the adversity of their parents' divorce, the participants described how their siblings helped them to believe that they were not to blame for their parents' divorce, which allowed them to focus on ordinary developmental processes and significantly contributed to their self-reported resilience. Additionally, the seven male adolescent participants in Hage and Pillay's (2017) exploratory study of the gendered experiences of 12- to 14-year-old boys living in child- or youth-headed households in Soweto, shared how their siblings helped them to make better choices by influencing their self-belief.

2.3.2.3 Extended family enables the resilience of South African adolescents

In the South African literature I reviewed, the support provided by the extended family in enabling resilience was often strongly indicated (Bachman DeSilva et al., 2012; Greeff & Du Toit, 2009; Hage & Pillay, 2017; Hlabyago & Ogunbanjo, 2009; Kuo & Operario, 2011; Mokone, 2006; Mtshali, 2015; Soji et al., 2015; Theron & Phasha, 2015; Van Breda & Theron, 2018). According to Dolbin-MacNab and Yancura (2018), 70% of South African youth live in homes with relatives who were not their biological parent; this suggests that many of these youths require key support from their extended family members. Often grandparents are involved in raising and caring for the daily needs of their adolescent grandchildren (Bohman et al., 2007; Leete & Jacobs, 2002; Nyasani et al., 2009; Theron,

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2016a). Many grandparents are not financially or physically capable of supporting the adolescents, which can cause distress. Despite the physical, financial, emotional and social challenges, many grandparents find ways to cope (Ardington et al., 2010; Dolbin-MacNab et al., 2016; Dolbin-MacNab & Yancura, 2018; Ogina, 2012). Other extended family relationships, i.e. aunts (Dass-Brailsford, 2005; Theron 2016a, 2016c), cousins (Theron et al., 2011; Vermeulen & Greeff, 2015) and brothers-in-law (Theron & Theron, 2014) are also indicated as enabling the resilience of adolescents in the South African literature; however, these are reported substantially than grandparents.

In South Africa, grandparents, especially grandmothers, enable adolescent resilience by instilling hope, inspiring adolescents to aim for a better future and providing instrumental assistance (Hatch & Posel, 2018). The participants in Malindi's (2014) study of 30 street-involved female adolescents between 12 and 17 years old shared how their grandmothers played a key role in their support system, as they encouraged the adolescents not to lose hope when faced with adversity. Evidence of grandparents inspiring young South African people is provided in Theron and Theron's (2013) study of 14 resilient, mostly isiZulu and Sesotho speaking students in their late teens to mid-twenties attending North-West University, who were challenged by poverty. These adolescents reported that their grandparents tell stories about the extreme hardships they have faced over their lifetime to the grandchildren they live with. In turn, these stories change the adolescents' perspectives on the difficulties they are facing and strengthen their resolve to cope, despite adversity. Likewise, Gasa (2013) interviewed six adolescents in Grades 10-12 in a KwaZulu-Natal school who grew up in grandparent-headed households. These adolescents explained how their grandmothers inspired them to be strong, despite any hardships that may come their way. In addition to instilling hope, grandparents provide adolescents with instrumental care. This is evidenced in Theron et al.'s (2013) study of the explanations of youth experience from eight members of the advisory panel of their community who faced adversities, including poverty, HIV-positive caregivers and crime. These participants described how, for the adolescents in their community, being housed and cared for by their grandmothers provided them with a sense of safety and security, thus enabling their resilience. Furthermore, many adolescents living in eMbalenhle are primarily cared for by their grandparents, either because their parents are deceased or because their parents have had to relocate to find employment (Green 2014a, 2014b, 2014c; Matumba, 2016a).

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2.3.3 Close relationships with other capable adults support the resilience of South African adolescents

Close relationships with capable adults are frequently identified as resilience enabling in international resilience research (Luthar et al., 2000; Olsson et al., 2003). For example, according to Luthar et al. (2000) and Masten (2001), the social support provided by other capable adults is linked to less violent behaviour among youth exposed to violence. Similarly, resilient South African adolescents have often reported that they depend on a large social network outside of the family, which includes capable or caring adults, who offer support and reinforce their development (Van Rensburg & Barnard, 2005; Wild et al., 2011). As Phasha (2010) and Mberengwa and Johnson (2003) explain, this probably coincides with the Afrocentric worldview of interdependence. For South African adolescents, these relationships most commonly refer to mentor relationships with capable adults such as teachers and adults from a religious community, often including relationships with pastors (Lau & Van Niekerk, 2011; Van Rensburg et al., 2013). For example, adult mentorship resulted in less violent behaviour by protecting South African adolescents from acting on their attitudes and joining in when their friends act violently (Choe et al., 2012). Other relationships with capable adults that enable the resilience of South African adolescents by providing for their basic needs include relationships with health professionals and social workers (Lau & Van Niekerk, 2011; Malindi, 2014). However, relationships with health professionals and social workers were reported less frequently in the South African resilience literature (Van Breda & Theron, 2018).

2.3.3.1 Teachers

Internationally, teachers are regarded as one of the key role players in the championing of adolescent resilience (Liebenberg et al., 2015; Luthar, 2006; Sanders et al., 2016). A number of South African studies support the idea that the mentor relationship adolescents forge with their teachers champions their resilience (Bireda & Pillay, 2018; Ebersöhn, 2007, 2008; Ebersöhn & Ferreira, 2011; Jefferis & Theron, 2017; Mampane, 2014; Naidoo & Albien, 2016; Romero et al., 2019; Wood & Goba, 2011). According to these studies, South African adolescents regard mentoring relationships with their “actively caring and/or motivational teachers” as enabling their resilience (Jefferis & Theron, 2017, p. 2). Mentoring relationships with their teachers provide access to material resources, inspiration towards an upwards life trajectory and providing care that promotes the positive development of the

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adolescent's identity (Ogina, 2012). Dass-Brailsford (2005) conducted a study with 16 participants with a mean age of 21 years, who were in their first year at university and challenged by living in a township on the outskirts of Durban. She found that an established bond with a teacher who takes on the role of mentor is central to the experience of positive student-teacher relationships, which can provide a positive school experience, potentially mitigating the risks of a difficult home environment. The teacher's mentoring role can also include provision of support in other areas of the South African adolescent's development. This is confirmed by Theron and Theron's (2014) study of the youth experiences of 16 resilient, black university students, challenged by the cumulative risks associated with living in poverty. Their study found that teachers provide access to material resources, constructive connections and the development of a "powerful identity" (p. 300).

The positive influence of teachers in promoting adolescent resilience by providing material resources to South African adolescents is evidenced in Theron et al.'s (2014) study of 951 school-attending adolescents between 13 and 19 years old, facing multiple risks, i.e. living in areas of poverty that are unsafe and affected by HIV/AIDS. These adolescents reported that some teachers provided pragmatic care by supporting those adolescents who had been made vulnerable due to parental bereavement, by facilitating the involvement of welfare and/or police protection services (Theron et al., 2014). Furthermore, in Malindi and Machenjedze's (2012) study of 17 adolescent boys in the Free State between 11 and 17 years old, who stayed in a shelter for boys living on the street, one boy described how his teacher cared for him by giving him a sandwich when he was hungry.

In eMbalenhle, some teachers advocate for the adolescents in their school to have access to resources to enhance their well-being and promote resilience. For example, a school teacher and principal at the local special school supported the drive to supply a specialised wheelchair to an adolescent of eMbalenhle who experiences physical disabilities and whose family is unable to afford a new wheelchair for her (Matumba, 2016b). Furthermore, some teachers at a local school in eMbalenhle supported the efforts of their learners to implement their project on environmental governance at their school by assisting the learners to obtain refuse bins for every classroom in the school (Pheto, 2018).

The adolescents in the South African research literature also acknowledge the role of their teachers in providing nurturance and comfort, thus enabling their sense of identity. In Theron and Van Rensburg's (2018) study of 140 black adolescents from six no-fee paying

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township high schools in the Emfuleni municipality, in which there is a large steel and petrochemical industrial unit, the participants explained how their teachers' emotional support comforted them and helped them through difficulties and problems in their lives. Similarly, Johnson and Lazarus (2008) conducted a study of 472 school-going adolescents between 12 and 18 years old in an under-resourced, historically disadvantaged area in the Western Cape. Their study concluded that "friendly" teachers, i.e. teachers with whom the learners can chat and laugh, are an asset in enabling adolescent resilience by listening to and supporting the adolescents when they are facing difficulties, thereby providing a safe space for adolescents to develop a strong sense of identity (Johnson & Lazarus, 2008). However, this is not always the case. To determine the protective resources that 30 school-going adolescents, aged 14 years old and living in Johannesburg, draw from when facing adversity, Kruger and Prinsloo (2008) conducted a study with these adolescents. The adolescents in their study described how they were lacking involved, caring, trustworthy teachers who listened to them and could act as guides in developing their resilience (Kruger & Prinsloo, 2008).

A few teachers in eMbalenhle are making strides in developing meaningful relationships with the local youth. One of these is a local teacher who invests her spare time in assisting at an athletic club for the youth in eMbalenhle (Green, 2014d). Another example of teachers connecting with the youth is when they joined their pupils in a march to discourage people in their community from using Nyaope (Green, 2014e; Mathebula, 2015).

According to the literature, some South African adolescents are inspired by their teachers to aim for a better future. The 2 391 children and adolescents living in Limpopo, at risk due to the consequences of the HIV/AIDS pandemic, who participated in Ebersöhn's (2007) study, reported that the teachers who encouraged future directedness were a source of strength for them. Similarly, in Pretorius and Theron's (2018) study, the 17 black adolescents between 17 and 19 years old who resided in six townships in the Vaal Triangle area, referred specifically to female teachers as a source of motivation and inspiration in times when they "lost hope" (p. 15). Likewise, Jefferis and Theron (2017) worked with 28 school-going, black girls, living in Thabo Mofutsanyana, a rural district in the Free State province, who are considered at risk due to factors including death or loss of loved ones, as well as various forms of abuse and bullying. They revealed that for these girls their

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teachers were the motivators encouraging them to aim for positive, "transformed" futures (p. 6).

Evidence of teachers in eMbalenhle championing their adolescent learners' resilience by inspiring them is reported by the local newspaper. For example, a group of pupils acknowledged and appreciated their teachers' role in inspiring them to take part in the Eskom Expo for Young Scientists where they achieved success when competing on a national level (Mathebula, 2014a). Teachers in eMbalenhle also organised a "career day" for their learners where they invited various stakeholders and professionals in the community to share information about their chosen career, as well as social workers to empower the adolescents with knowledge about career services they can access to make informed decisions when starting out in their careers (Mathebula, 2014b).

2.3.3.2 Clergy

Resilience-enabling relationships for adolescents in South Africa includes their social ties associated with their religious affiliations, usually referring to a relationship with a pastor (Van Breda & Theron, 2018). Relationships with pastors and fellow churchgoers provide many South African adolescents with fatherly role models, learning spaces to grow, meaningful relationships, a sense of belonging and connection to a spiritual being. This was evidenced in Brittian et al.'s (2013) study of 55 black adolescents aged 18. Half of these adolescents lived in high-risk environments and half lived in Johannesburg suburbs. The adolescents reported that their religious communities provided them with social support in the form of pastors and youth leaders who act as father figures and individuals in the church community who positively influence their growth. Likewise, a study conducted at a drop-in centre in a small town in the Free State with 30 black girls between 12 and 17 years old, who were involved in streetism, revealed that meaningful connections with the pastor enabled their resilience (Malindi, 2014). Similarly, for the 59 participants in Arndt and Naudé's (2016) study of mostly Setswana and Sesotho speaking adolescents between the ages of 16 and 22, living in the Free State, it was their Christian church community that provided them with a sense of acceptance into a group. The resilience-enabling characteristics of fellow church members for adolescents in South Africa are also evident in the findings of Pretorius et al.'s (2015) study of six families living in youth-headed households in Port Elizabeth, where adolescents heading their households shared that their fellow church members provided opportunities for them to learn and grow, as well as

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emotional and material aid. In line with this, Andile, an adolescent living in eMbalenhle, attributed her drive to work hard to achieve her goal of becoming a gospel singer to the encouragement of a fellow church member (Green, 2014b).

Adolescents' relationships with clergy also aid and uphold their connection to a spiritual being, which may enable their resilience by providing comfort (Botma, 2012; Hoffman et al., 2010). According to Malindi's (2018) study of 10 school-going teenage mothers in Gauteng between 16 and 19 years old, it was the participants' pastors who promoted their relationship with God by encouraging the adolescents to pray to God. This resulted in a closer relationship with God which, they believed, helped them to cope. The enabling effects of spirituality are further described by the adolescents of divorced parents in Theron and Dunn's (2010) study of 10 Afrikaans-speaking adolescents between the ages of 14 and 18 from divorced homes in Mpumalanga. The adolescents who participated in Theron and Dunn's (2010) study described how their relationship with God provided consistent, reliable comfort and supported their well-being.

2.3.4 Conclusion to resilience section

Liebenberg et al. (2015) explain how adolescents living in risk-laden contexts require "as many relational resources as possible" (p. 148). I have synthesised the South African resilience literature relevant to adolescents to demonstrate the recurrent themes regarding the various relationships which enable adolescent resilience and how their resilience is promoted through these relationships. The gap in the South African resilience studies that I reviewed is that, although there is a plethora of studies on relationships that support resilience and how they do so, none of these studies are of adolescents living in a township challenged not only by typical township risks, but also by risks associated with the petrochemical industry. Similarly, although there are a handful of studies that report the resilience of South African adolescents over time (Bachman DeSilva et al., 2012; Collishaw et al., 2016; Theron & Van Rensburg, 2018; Van Breda & Dickens, 2017), including mention of protective peer, family and other prosocial adult relationships, these studies are not specific to adolescents living in a township in close proximity to a petrochemical plant. Furthermore, through this synthesis it became apparent that although there are a number of mini-dissertations reporting on the resilience of eMbalenhle adolescents (Malakou, 2019; Matlali, 2018; Sithole, 2019; Van Aswegen, 2019), these have not focused on how relationships enable resilience over time (Theron, 2019). Resilience literature highlights the

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centrality of the contextually relative nature of resilience and the risk of privileging some pathways to resilience over others (Panter-Brick & Leckman, 2013; Rutter, 2013; Ungar, 2004; 2015; Van Breda, 2017; Wright & Masten, 2015). Therefore, I cannot assume that the relationship themes in the current literature available on the resilience of South African adolescents apply to the context of the adolescents living in eMbalenhle.

2.4 CONCLUSION

In this chapter, I detailed the trends I observed in the South African literature pertaining to the risks experienced by adolescents living in a community challenged by structural disadvantage (i.e. a township community) and the detrimental effects of the petrochemical industry. Furthermore, I have detailed the trends in the South African literature pertaining to the relationships that enable the resilience of adolescents facing adversity. Notably, from the literature I studied, I concluded that there was no research detailing the relational resilience enablers of adolescents living in a community challenged by structural disadvantage, i.e. a township, and the petrochemical industry over time. Therefore, this review reveals a limitation in the South African resilience literature, which I intend to address through my study. The importance of addressing this gap is stated by Van Rensburg et al. (2018) and Van Breda and Theron (2018), who emphasise the need for compelling evidence of how South African adolescents cope, despite adversity, so that the phenomenon of South African adolescent resilience in the face of adversity over time may be fully understood. Notably, the need for studies of resilience over time is not specific to the South African context; international researchers are also calling for more longitudinal studies of resilience (Cicchetti, 2013; Luthar, 2006; Masten, 2014). In Chapter 3, I elaborate on the methodology I chose to use in my study to address this gap.

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CHAPTER 3
METHODOLOGY

3.1 INTRODUCTION

In this chapter, I detail the methodology applicable to my study. The methodology has been summarised in Chapter 1. In Chapter 3 I provide additional detail such as the advantages and limitations of the applicable methodology.

3.2 SITUATING MY STUDY OF LIMITED SCOPE IN THE RYSE STUDY

As explained in Chapter 1, I worked within a broader, longitudinal, multi-national project, i.e. the RYSE project, which defined the general goal within which my study would be situated. As summarised in Diagram 1, the RYSE study generated three sets of qualitative data. The data generated by the participants in my study made up the 2019 or Time 3 data. I did not use the data generated by the participants in 2018, i.e. Time 2, as the data for Time 2 were generated by a different group of participants. For my study, I wanted to compare data sets that were generated in the same way by the same participants and so I used Time 1 and 3 data.

I formulated the purpose of my study to correspond with the broader RYSE study's focus (see Section 3.3). I chose the paradigmatic perspective (see Section 3.4) and I replicated the data generation methods (see Section 3.5.4) that were used to generate the 2017 or Time 1 data. Given this, I familiarised myself with qualitative research and chose to describe the research design (see Section 3.5.1) as phenomenological. Additionally, I maintained the trustworthiness and ethical conduct of my study myself. I worked with another master's student from the RYSE team during the process of Time 3 data generation, i.e. a co-researcher. During the Time 3 data generation process, the participants were divided into two groups. Half of the participants were randomly assigned to me and half were randomly assigned to my RYSE co-researcher. We both replicated the 2017 data generation activities (as explained in 3.5.4) with each of our groups separately; these were audio-recorded by myself and my co-researcher. We each transcribed the data generated by the group we facilitated independently. These verbatim transcriptions were peer-reviewed and checked by the project manager to promote accuracy. We then pooled the audio-recordings, drawings, written descriptions and verbatim transcripts so that we both had the primary data from all the participants collectively. Following this, my co-researcher and I independently

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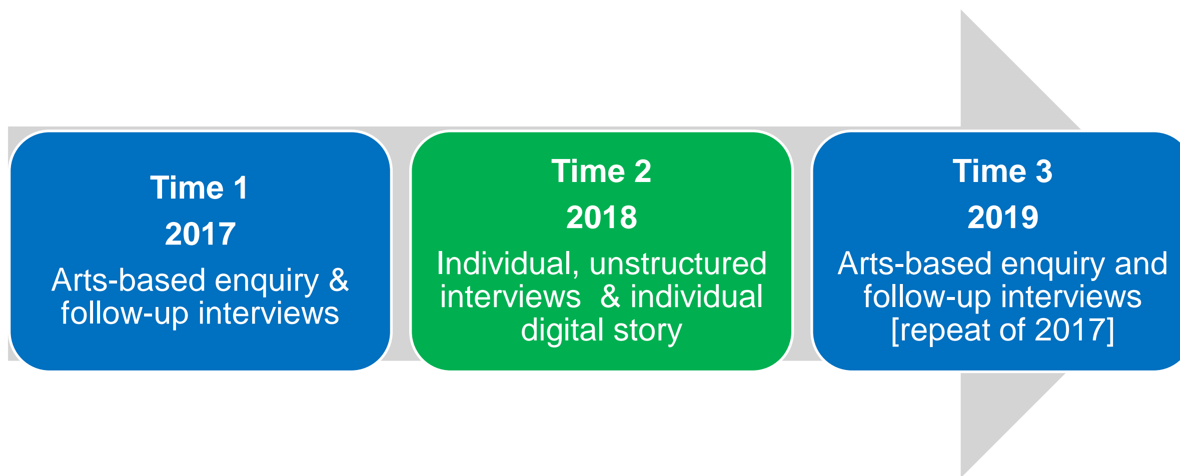
analysed the total data set generated in Time 3 for answers to our respective questions. However, I did not recruit the participants or facilitate their consent to participate in the RYSE study, as explained in Section 3.5.4.1 and Section 3.5.4.2. Overall, I believe that I was actively enough involved in the conceptualisation and execution of my study to confirm that I understand the research method and that I can apply it effectively.

Diagram 1

Qualitative activities of the RYSE study



3.3 PURPOSE OF THE STUDY

The purpose of my study is to describe how relational resources enable the resilience of a group of adolescents (15-24 years old) living in the township of eMbalenhle and to describe the consistency of these relational resilience enablers over time. In effect this means that the study aims to describe how the relational resilience enablers that were reported by this group of adolescents in 2019 compared with what the same group reported in 2017. The aim of my study is therefore descriptive; this implies that I began with a well-defined phenomenon and then conducted my research to describe it more precisely and completely by answering “how” questions about the phenomenon (Fouché & De Vos, 2014; Kreuger & Neuman, 2006). In my study, I used both primary data, i.e. data generated by the group of adolescents in 2019, and secondary data, i.e. data generated by the same group of adolescents in 2017, to fully understand the relational resources that enable their resilience over time. The advantage of a descriptive study is that it encourages the development of a thicker description of a phenomenon (Fouché & De Vos, 2014). Furthermore, according to

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Creswell and Poth (2018), a descriptive focus is useful in enhancing the meaningfulness of phenomenological studies, making it applicable to the research design I selected for my study. A disadvantage is that a descriptive study does not identify the cause of the phenomenon; however, this is not the purpose of my study (Fouché & De Vos, 2014).

3.4 PARADIGMATIC PERSPECTIVE

3.4.1 Epistemological paradigm

Social constructivism was the epistemological paradigm I selected for my study. According to the social constructivism worldview, individuals seek to develop a subjective understanding and make meaning of the world they live in through social interactions and historical and cultural norms (Creswell & Creswell, 2018; Creswell & Poth, 2018; Fouché & Schurink, 2014). The use of a social constructivist paradigm in resilience research is supported by Liebenberg and Theron (2015) and Liebenberg and Ungar (2011). In the context of my resilience study, I challenge the assumption that there is a lack of resilience in "at risk" adolescents (Liebenberg & Theron, 2015) and I create an opportunity for new meanings and understandings of adolescent resilience to be shared through my research. Research from a social constructivist perspective does not expect to provide an ultimate truth and is based on the stories of the experts in the research phenomenon. In my study, the experts are the adolescents themselves. Respecting the adolescent participants as constructors of knowledge supports the purpose of my study.

There are a number of advantages in choosing a social constructivist paradigm for my study. Firstly, it has the capacity to take the complexity of human interactions and the intersubjectivity of social meanings into account (Kim, 2010). This is important as it upholds the complexity principle in resilience research (Ungar, 2011). The inclusion of personal insights into resilience, including the relationships that enable resilience among adolescents living in the eMbalenhle community, makes social constructivism applicable as the research paradigm for my study. Secondly, social constructivism recognises that there will be continually changing interactions of multiple systems over time. Masten (2002) describes how "the same attribute could afford an advantage at one period of development or in one situation and a disadvantage at another time or in a different situation" (p. 288).

Contrastingly, a possible limitation is that the researcher constructs their own interpretation of the data, this construction may be biased as it is based on the researcher's own

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experiences and beliefs (Chenail, 2011). I managed this limitation by frequently engaging in reflective sessions with the RYSE team. Similarly, a limitation of this approach may arise due to individuals in a community generating different understandings of the same issue, causing incongruent findings to emerge in the research (Wang et al., 2011). Through careful formulation of criteria for participant selection and ensuring data saturation of the reported themes, I was able to adequately avoid this limitation.

3.4.2 Methodological paradigm

I followed the qualitative research paradigm to accurately replicate the methodology adopted during the Time 1 data generation; this aided the descriptive nature of the research. Qualitative research involves studying people in their real-world roles and attempts to represent people's views and perspectives in context in order to extend existing explanations of social behaviour and thinking (Yin, 2016). This methodological approach ensures that data, which form the basis of the study, will be used in its original, rich form (Levitt et al., 2018; Stanger, 2011). Furthermore, a qualitative approach, as described by Creswell and Poth (2018), was the most suitable for my study as it allowed me to work with individuals in their "natural settings, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them" (Denzin & Lincoln, 2018, p. 10). This aligns with the worldview of the epistemological paradigm in my study, i.e. social constructivism.

The suitability of a qualitative approach in resilience research has been supported by numerous resilience researchers, e.g. He and Van de Vijver (2015), Rutter (2001), Ungar (2003) and Van Breda and Theron (2018), as it is "better able to preserve the specific meanings that an individual attributes to his or her experiences and actions" (Wright & Masten, 2015, p. 11). Qualitative research values the unique meanings ascribed to a phenomenon by individuals (Creswell, 2014). This enabled me to describe the meaning adolescent participants in my study ascribed to their lived experiences and to consider the complexity of resilience, which simultaneously accommodated the epistemology of my study.

To achieve the aim of my study, eliciting the real-life experiences of the participants was imperative. In order to do this effectively, I asked emergent questions, which could be accommodated in the qualitative research paradigm (Creswell, 2014; Creswell & Creswell, 2018). The value of using a qualitative methodology in my study was that it allowed me to

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"share in the understandings and perceptions of others and explore how people structure and give meaning to their daily lives" (Berg, 2001, p. 7). This enabled the findings of the research to be customised to the experiences of the research participants, based on the information generated through the participants sharing their experiences verbally and through visual representations (Fouché & Delport, 2014). This is important in adhering to the SERT principles (Ungar, 2011).

I considered possible disadvantages of applying qualitative research. Firstly, qualitative research takes much longer to complete (Berg, 2001; Creswell & Poth, 2018). I gave careful attention to the structuring of a realistic timeline in order to ensure effective use of resources within the allotted time. Secondly, qualitative research requires greater clarity of goals than other methodological paradigms (Berg, 2001). I considered this during the planning stages of the research by consulting with the RYSE team on appropriate goals for my study in order to maximise the positive contribution it could make to the current South African resilience literature.

3.5 METHODOLOGY

3.5.1 Research design

My study followed a phenomenological research design. Phenomenological studies explore the meaning participants attach to their experiences of a specific phenomenon (Aspers, 2009; Nieuwenhuis, 2016). Gathering data in studies that follow a phenomenological research design is usually done by conducting interviews or discussions (Creswell, 2014). Phenomenological research assumes that individuals' experiences are socially constructed (Aspers, 2009), which made it a good fit for my study The goal of phenomenological research is to synthesise and describe the meaning of social experiences and the experiences themselves by describing commonalities in the essence of the perspectives from the people involved in the research (Creswell, 2014; Van Wyk & Taole, 2016). Once the data are gathered, the researcher develops a rich description of the essence of the lived experiences of the phenomenon. Phenomenological research, therefore, enables the researcher to gather rich insight from the participants' lived experiences so that the phenomenon in question can be rigorously described.

The reason for selecting this design is that my study's interest is in the phenomenon of resilience-enabling relationships reported over time by a group of adolescents living in

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eMbalenhle, a community challenged by living in a township close to petrochemical plant. I gathered information from the adolescents themselves as I was interested in their experiences of relational resilience enablers, which were supportive in the face of risks associated with the petrochemical industry and living in a township. Furthermore, I identified commonalities in the participants' views on the relational resilience enablers which supported their resilience.

A benefit of using phenomenological research is that it provided me with rich insight generated by the adolescents themselves. Furthermore, it facilitated the adolescents' use of their contextual experiences as a point of departure during data generation which, according to Myburgh et al. (2015), is imperative in resilience research.

One of the limitations of using the phenomenological approach in the research design for my study may have been that it only included a relatively small group of participants, which limits the generalisability of the findings. However, it was not my intention to generalise the findings of my study to the greater South African adolescent population. Additionally, due to the specificity and limited scope of my study, the reader needs to be cautious about the transferability of the results to other contexts (Nieuwenhuis, 2016). I made the reader aware of this limitation by stating this caution throughout my report. Furthermore, I included a thorough description of the participants and their context for the reader to make an informed decision about the transferability of the findings (see Section 3.5.2).

3.5.2 Context of the study

All the participants in my study live in eMbalenhle, a township located in Govan Mbeki Municipality, an area 12km from Secunda in Mpumalanga, South Africa. According to the 2011 census, eMbalenhle is home to 118 889 people of which 99% are Black people and 50% speak isiZulu (Statistics South Africa, 2011). The largest portion of households in eMbalenhle have no income, which is linked to the high unemployment rate of 26% (Statistics South Africa, 2011). The residents in this community are further challenged by structural disadvantage and proximity to a petrochemical production facility (Malakou, 2019; Matlali, 2019; Sithole, 2019; Van Aswegen, 2019). The eMbalenhle community is also surrounded by coal mines and coal-burning power stations (Thabethe et al., 2014). The local newspaper often reports on these challenges (Mathebula, 2016c; Mathebula, 2017b; Mathebula, 2018a, 2018c; Mathebula, 2019h; Misselhorn & Mathebula, 2019).

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I observed many of these challenges when I was in eMbalenhle for data generation (see Figures 1, 2 and 3).

Figure 1

Pollution in eMbalenhle (personal photograph)

Figure 2

Informal housing erected by residents of eMbalenhle (personal photograph)

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Figure 3

Residents of eMbalenhle congregate as they wait for jobs at Sasol (personal photograph)

3.5.3 Participants

The participants who generated the data for my study were recruited purposively. Purposive sampling is frequently used in qualitative research (Creswell, 2012; Strydom & Delport, 2014). Purposive sampling involves deliberately seeking out participants with particular characteristics according to criteria that are in line with the focus of the study to ensure a study's findings fulfil the research purpose (Jupp, 2006; Lewis-Beck et al., 2004). To be selected for Time 3 participation, the participants had to have participated in the Time 1 data generation (see Diagram 1). Time 1 participants were recruited based on the following selection criteria: young people between the ages of 15 and 24, who lived in eMbalenhle, were comfortable speaking English, and believed they were affected (negatively or positively) by the petrochemical industry. To ensure ethical access to the community it is important to obtain approval from the individuals in the community who can provide access to the members (Creswell, 2014). The RYSE Community Advisory Panel (CAP) facilitated the recruitment of participants for the data generated at Time 1 and Time 3. Creswell and Poth (2018) and Terre Blanche et al. (2006) advise that a CAP consists of individuals from the community who have experienced the phenomena in which the particular study is

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interested. In the case of the RYSE study, the CAP comprised youth from the community of eMbalenhle (Mathebula, 2019l; RYSE, n.d.). The CAP endorsed the RYSE study, provided access to the research site and aided in the recruitment of youths who met the criteria for selection to participate in my study (Creswell & Creswell, 2018; Pretorius & Theron, 2019). The CAP used flyers (see Addendum A) and word-of-mouth to purposively recruit participants for my study.

The recruitment for Time 3 yielded a sample of 10 participants. Due to participant attrition, the total number of participants in the Time 3 data generation was significantly smaller than the total number of participants in the Time 1 data generation, i.e. 30 participants. Dareng et al. (2018) and Norris et al. (2007) report on the inevitability of participant attrition in longitudinal studies, especially in Africa, and the importance of taking action to reduce this attrition. Although 10 may be considered a small number of participants for Time 3, it was acceptable for my phenomenological research design. This is supported by Creswell and Creswell (2018) who explain that, to ensure data saturation, the number of participants in phenomenological studies ranges between three and 10. Data saturation occurs during analysis and refers to the point at which the researcher no longer finds new information that further contributes to answering the research question (Creswell & Poth, 2018). After I had completed the data analysis, I was relieved to see that the themes did repeat in the data; therefore, I concluded that I had reached data saturation and confirmed that I had an adequate sample (Charmaz, 2006; Creswell & Poth, 2018).

In summary, the participants in my study consisted of five female and five male participants between the ages of 17 and 23 (mean age= 20; see Table 2). The most common mother tongue language shared between the participants was isiZulu, which was spoken by just more than half of the participants. Notably, the participants were all comfortable with expressing themselves in English since they had attended schools with English as the language of teaching and learning. Most of the participants had completed Grade 12 and were attending a further education and training (FET) institution at the time of data collection.

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Table 2

Summary of participant demographics

Participants	Name	Age	Gender	Mother tongue	School-attending	Tertiary education/ Employment
1	Gugu Precious (real name)	19	Female	isiZulu	No	Tertiary education – Tshwane University of Technology
2	Happy (real name)	19	Female	Venda	No	Tertiary education – University of South Africa
3	Lwande (real name)	23	Female	isiXhosa	No	Tertiary education – Gert Sibande FET College and self-employed
4	Minky (pseudonym)	20	Female	isiZulu	No	Tertiary education – University of South Africa
5	Nhlanhla (real name)	20	Male	isiZulu	Yes – KLS	N/A
6	Sparky (pseudonym)	17	Male	isiZulu	Yes –Thomas Nhlabathi Secondary School	N/A
7	Thulani (real name)	22	Male	isiZulu	No	Unemployed
8	Thuso (real name)	20	Male	isiXhosa	No	Unemployed
9	Tshego (real name)	20	Female	Sepedi	No	Employed – Waitress
10	Zulu (real name)	23	Male	isiZulu	No	Employed – Safety Officer

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The use of purposive sampling in my study had the benefit of ensuring that the participants selected would best inform the research and could contribute meaningful insight to the research question because they met the criteria for selection, e.g. the 2019 participants were all adolescents from the community of eMbalenhle and had participated in the data generation in 2017, which was used as the secondary data in my study (Creswell & Poth, 2018; Maree & Pietersen, 2016).

A disadvantage of making use of purposive sampling in my study was that it did not yield statistical inferences about a population (Creswell & Poth, 2018). However, it was not my intention to use my findings to make inferences about the South African population. Since my study forms part of a longitudinal, diachronic study, participant attrition can create a challenge (Cohen et al., 2011). Evidence of attrition in my study was demonstrated in the smaller 2019 sample. The RYSE team tried to prevent attrition. With support of the CAP, the RYSE project manager kept in contact with participants and continuously updated their contact details; however, participant attrition occurred despite this.

3.5.4 Data generation

3.5.4.1 Primary data generation

To generate the primary data for my study, I replicated the Time 1 qualitative data activities. This means I used two arts-based methods, as outlined in Finley (2011) and Mitchell et al. (2011), i.e. body mapping and draw-write-talk, as described in subsequent Sections 3.5.4.1.1 and 3.5.4.1.2. The body map activity was followed by a one-on-one discussion with the participants. Contrastingly, the draw-write component of the activity was followed by a group discussion in which each participant had an opportunity to explain their drawings. Others listened and contributed by agreeing with the individuals, adding further information or sharing their differing views and experiences. I elected to use a group discussion instead of a focus group because it was more suitable to yield useful information from the participants, which addresses the research question of my study regarding the adolescents' lived experiences of relational resilience enablers. The approach of a group discussion distinguishes it from a focus group as the questions are not formulated prior to the discussion (Nyumba et al., 2018). Therefore, I was able to guide the discussion according to the insights shared by the participants.

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The use of an arts-based approach is supported by Liebenberg and Theron (2015), who advocate for the use of visual, arts-based techniques in resilience research. Furthermore, arts-based approaches have been recommended for South African studies of resilience (Ebersöhn, 2012). Using this "participant-centred" arts-based approach (Punch, 2002, p. 337) empowered the adolescents by giving them the opportunity to control what they wanted to share about what matters to them (Ogina & Nieuwenhuis, 2010; Punch, 2002, p. 337). Furthermore, an arts-based approach reduces the power imbalances between the researcher and the participants, as well as the risk of the researcher misunderstanding the adolescents' body maps and drawings as the adolescents are able to provide clarification by talking about their drawings and body maps (Angell et al., 2015; Ogina & Nieuwenhuis, 2010). This is of particular importance in my study as my first language differs from that of the adolescents; therefore, creating a visual artefact has value as it means that language is not relied upon as the sole medium of communication. However, this approach also has weaknesses as the researcher should be competent in the applicable research methodology to gather important information from each of the activities (Ogina & Nieuwenhuis, 2010). To mitigate this risk, I received training from the RYSE project manager on the relevant methods prior to the data generation session. Additionally, this approach requires the researcher to be patient, sensitive and to show empathy for the adolescent's situation (Ogina & Nieuwenhuis, 2010). This was achieved by establishing a sense of rapport with the participants prior to commencement of the research activities.

I was comfortable with replicating the methods used in Time 1 because I reflected on the key questions to consider when selecting data generation methods for resilience research, i.e. how well the method amplifies the adolescents' voices, how well the method answers the questions about resilience processes in context and how valuable the method is in adding to a meaningful understanding of resilience (Liebenberg & Theron, 2015). I concluded that the methods applied responded to the mentioned considerations. As explained more fully in Section 3.7, I established rapport by means of sympathetic techniques, as suggested by Alderson and Morrow (2011).

3.5.4.1.1 Body mapping

Body mapping is a visual, arts-based research method that is defined as "the process of creating body maps using drawing, painting or other art-based techniques to visually represent aspects of people's lives, their bodies and the world they live in" (Gastaldo et al.,

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2012, p. 5). It is useful as a non-verbal research tool that reduces reliance on the participants' verbal and linguistic abilities and aids the generation of rich data from participants' stories (Dew et al., 2018). Furthermore, it enables the participants to consider the connection between their body, their mind and their social context, enhancing their self-awareness (Skop, 2016). Using body maps involves each participant creating a life-sized image of themselves, including detail pertaining to the research question, thus encouraging the participants to reflect on their experiences in a multi-modal way (Dew et al., 2018). This image is then used to aid the participants' explanations about their experiences of the world, their lives and their bodies to develop a meaningful understanding of their resilience processes (Lys et al., 2018).

The prompt that guided the completion of the body map was the following:

> "We are going to use this paper so that you can each tell a story of how your whole body, head and heart feels and thinks about living in eMbalenhle and how it affects your well-being. It will be like a life-size photograph that you make of yourself.
>
> After this we will each decorate and write on our own body maps. Then we take turns to tell the story of our own body maps to the facilitator who will take photographs of the body maps, take notes while you tell your story, and audio record yourself as you tell your story. The map remains your property and you may take it with you at the end of today's time together. The story of your body map is about how living in eMbalenhle affects your well-being and especially how it affects your well-being (i) in your body, (ii) in your mind and (iii) in your heart."

Following the prompt, participants selected partners to assist them with tracing the outlines of their bodies onto a large piece of paper (Figure 4). I observed that some participants chose partners of the same sex and some chose partners of the opposite sex. The participants then each added relevant details to their own body maps to show how living in eMbalenhle affected their well-being in their body, mind and heart (Figure 5). I then went around to each participant individually so they could tell me more about their body map while the other participants were completing their body maps. These conversation-like interviews were recorded and pictures of the body maps were taken (Figure 6). During this activity, I noted that the participants appeared to enjoy sharing about their lives in eMbalenhle and were willing to share deeply personal experiences.

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Figure 4

A female participant drawing the outline of the body map of a male participant (personal photograph)

Figure 5

A female participant drawing the outline of the body map for another female participant (personal photograph)

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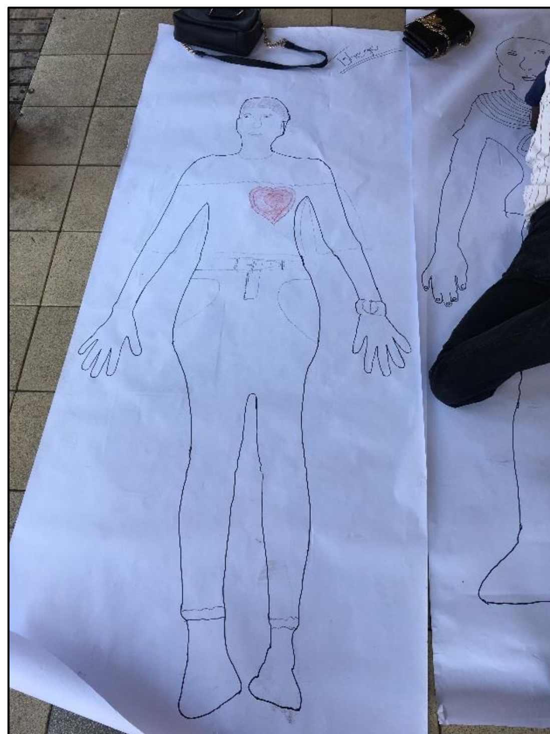
Figure 6

Once the body map outlines were complete, participants added relevant details (personal photograph)

Figure 7

A completed body map at the research site (personal photograph)



Similar to Lys et al. (2018), in my study, one of the key benefits of using body mapping was that it assisted data generation as it prompted the participants to share useful information

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with me so I could better understand their lived experiences. One of the challenges of using body mapping for my research was that strong, painful emotions may have arisen while the adolescents were completing the activity (Gastaldo et al., 2018). Although the adolescents did not appear visually distressed during the activity, it was important for me to remind the participants that they could decide how much they wanted to reveal and that appropriate psychological services were available to them if necessary. This also required that I constantly reflected and that I was ready to modify the activity according to the comfort level of the adolescents, to ensure that they were not emotionally or socially harmed when sharing their narratives. Another challenge arose when some participants lacked in confidence and were concerned that they had inadequate artistic abilities to complete their body map to their satisfaction (Gastaldo et al., 2012). I managed this by reminding the participants that it was not the quality of the artwork that mattered but the message they were conveying through it.

3.5.4.1.2 Draw-write-talk

This creative, multi-method technique was developed in an attempt to resolve some of the drawbacks of the draw and write technique (Mitchell et al., 2011). As explained by Angell and Angell (2013), this technique involves the participants producing artwork in the form of a drawing, annotating the drawing with text to further explain their drawings in written form and then conversationally interpreting the drawing for the researcher in a group discussion.

I began this activity with the following prompt:

> "What or who makes it possible for young people to be OK when life is hard? Take a minute and think how you would answer this question. Now make a drawing that shows your answer and write a couple of sentences to explain your drawing."

I reflected critically on the use of 'who or what' in the preceding prompt, and decided that it was broad enough not to bias participant responses. Asking who/what questions has been used in other SA resilience studies (e.g., Jefferis, 2016; Malindi, 2014). The adolescents were then given time to complete this part of the activity individually (Figure 8 and Figure 9). Once the participants completed their drawing and writing, I used the following prompt: "Please share your drawing and explanation with the group." This sparked a vibrant discussion on the topic, during which each of the participants shared their explanations. Their explanations were complemented by the contributions of the lived experiences of the other group members, as they saw fit. For example, if one of the participants shared about

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how their friends supported their resilience and the other group members had similar experiences, the group would comment in agreement. During this activity, I observed that, having the written explanations at hand, boosted the confidence of the participants who felt uncertain of their ability to share their views in a group setting. Moreover, it seemed as though the participants had organised their thoughts and views while completing the "draw and write" components, which improved the level of discussion held during the "talk" component.

Figure 8

A participant drew a picture depicting who/what makes it OK when her life is hard in eMbalenhle (personal photograph)

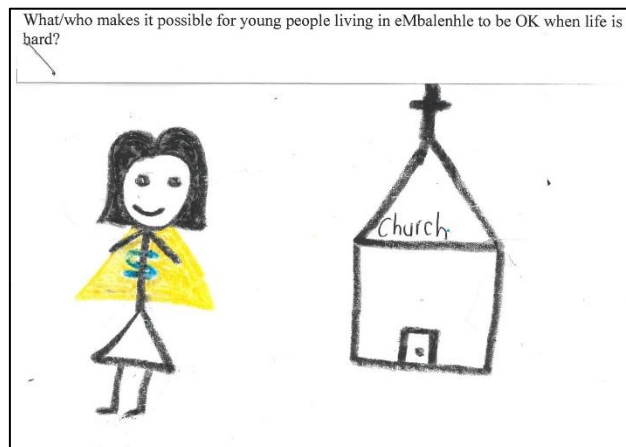
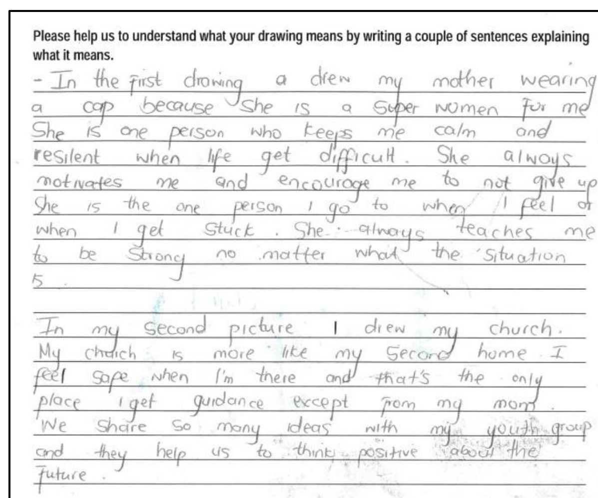


Figure 9

The same participant wrote down her answer to the question using the images in her drawing (personal photograph).


Please help us to understand what your drawing means by writing a couple of sentences explaining what it means.

- In the first drawing a drew my mother wearing a cap because She is a Super women for me. She is one person who keeps me calm and resilent when life get difficult. She always motivates me and encourage me to not give up. She is the one person I go to when I feel or when I get stuck. She always teaches me to be Strong no matter what the situation is.

In my second picture I drew my church. My church is more like my Second home. I feel safe when I'm there and that's the only place I get guidance except from my mom. We Share so many ideas with my youth group and they help us to think positive about the future.

3.5.4.2 Secondary data analysis

The secondary data used in my study were generated in exactly the same way as the primary data (as described in Section 3.5.4.1) by the 2017 RYSE team members, with the same participants (Malakou, 2019; Matlali, 2019; Sithole, 2019; Van Aswegen, 2019). It has been analysed variously by master's students who collaborated in the RYSE study at Time 1 and Time 2 (Matlali, 2019; Sithole, 2019; Van Aswegen, 2019). I was granted access to the secondary data, i.e. the drawings and transcripts of associated group discussions, by the RYSE project manager.

3.5.5 Data analysis

The primary and secondary data consisted of transcripts of group discussions (a total of 44 pages), 20 scans of body maps and 20 scans of drawings and written explanations of the drawings.

3.5.5.1 Primary data analysis

I used inductive thematic content analysis (ITCA) to make meaning of the primary data. ITCA is an iterative, manual process involving steps for engaging with qualitative data that promote familiarity by moving from the particular to the general (Braun & Clarke, 2006, 2014; Delport & De Vos, 2014). ITCA enables the researcher to systematically identify, analyse and report on patterns in the rich data generated, which makes it especially useful in qualitative research (Alhojailan, 2012; Creswell, 2014; Yin, 2016). This bottom-up strategy involves identifying specific themes across the data generated by the participants and supporting the themes with key information from the data (Braun & Clarke, 2006; Creswell & Poth, 2018). Essentially, this meant that the data itself guided the process of analysis (Tracy, 2013). In my study, the aim of the ITCA was to identify themes that gave expression to the communal voices of the participants to describe how relational resilience enablers champion the resilience of adolescents living in a community challenged by structural disadvantage and proximity to a petrochemical plant.

An important benefit of using ITCA for my study was that it could "generate unanticipated insights" (Braun & Clarke, 2006, p. 97). ITCA also facilitated the process of identifying the essence of a large set of data to offer a "thick description" of the data (Braun & Clarke, 2006, p. 97). Working with the RYSE team was an asset in overcoming many of the challenges which arose from the use of ITCA. Biased interpretation is a possible challenge

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when implementing ITCA (Holman, 2017). Discussions with the RYSE team regarding the relevance of my interpretation of the data ensured that this limitation was managed well. Additionally, collaboratively establishing timelines for the completion of each step regarding data analysis relieved the uncertainty around completing the analysis within the agreed upon time frame. Braun and Clarke (2006) describe further pitfalls such as using interview questions as themes or disconnection between the data and the claims made about it. These were addressed by ensuring that the analysis went beyond the content of the interviews as it included visual data, avoiding the use of the questions as themes, discovering themes that were consistent and which could be supported by examples in the data and ensuring that the themes were in agreement with the theoretical framework. I completed the ITCA process by following Braun and Clarke's (2006) six steps:

Step 1: Familiarise yourself with the data

This step entailed immersing myself in the data to ensure that I was closely acquainted with it (Crowe et al., 2015). I completed this step by reading and re-reading all the drawn, written and transcribed data a couple of times and noting down my initial observations until I felt confident in my ability to code it. Importantly, I viewed each piece of data as equally valuable so not to focus too much on one form of the data, e.g. an overemphasis on the narrative data (transcriptions) at the expense of the visual data (Javadi & Zarea, 2016).

Step 2: Generate initial codes

Once I had immersed myself in the data, I needed to systematically code any relevant information across the data set (Feza, 2015). To complete this step, I revisited the data set again. While doing so, every time I noted a piece of data that I thought would potentially answer my research question, I highlighted it and gave it a label, i.e. an open code that paraphrased how it answered the question pertaining to how relationships enable the resilience of adolescents (Schurink et al., 2014). This was challenging given that I needed to identify "who" enabled resilience and "how" they did so; however, in order to answer the research question, it was necessary for this information to be constructed from the data (Braun & Clarke, 2012). These initial open codes were reviewed and agreed upon by the RYSE team. The reviewed open-coding step is evidenced in Addendum B.

Step 3: Search for themes

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This step involved collating similar open codes to identify potential patterns in the data, which formed themes (Stuckey, 2015). A theme, as defined by Braun and Clarke (2006), "captures something important about the data in relation to the research question, and represents some level of patterned response or meaning within the data set" (p. 82). I completed this step by searching for relationships between the open codes, which meant that I grouped similar open codes into candidate themes by highlighting them in the same colour (See Addendum B). I also formulated inclusion and exclusion criteria for the candidate themes to ensure consistency within each theme (See Addendum B).

Step 4: Review the themes

This step involved recursively refining the themes by checking the themes against the data that support each theme (Braun & Clarke, 2006, 2012). I did this by returning to the collated codes, extracts and visual data supporting these and then investigating if the themes were adequately prominent in the data. Throughout this investigation, I continuously reflected on the aptness of the themes and carefully considered any bias which may have affected my view of the data initially. After completing the initial investigation and making the relevant improvements, I presented the reviewed themes and the exclusion and inclusion criteria to the RYSE team who provided valuable feedback on their interpretation of the data, which I used to further refine the themes so that it was true to the data. For example, I initially presented five themes to the RYSE team, i.e. extend emotional support, broaden perspectives, inspire perseverance, create a sense of belonging and supply basic resources. Once I reviewed these themes in consultation with the RYSE team, I decided to combine two of the themes, i.e. extend emotional support and create a sense of belonging, into one as they had similar elements. This enabled me to construct one precise theme which aligned more accurately with the data.

Step 5: Define and name the themes

This step requires the researcher to formulate a name and clear definition for each theme according to the essence of the data. I used examples from the relevant literature and my inclusion and exclusion criteria to inform this process. The names and definitions of these themes are reported in Chapter 4.

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Step 6: Produce the report

The final step in the analysis process involves writing up the themes in a coherent, logical report, providing vivid examples from the data as evidence to support the themes in order to develop an argument that answers the research question (Braun & Clarke, 2012). I completed this step by consolidating each theme, as well as the evidence to support it, and then compiled Chapter 4 using this information.

3.5.5.2 Secondary data analysis

I made use of deductive coding to analyse and make meaning of the secondary data. This is also referred to as "top down" or *a priori* coding as the units of meaning are determined prior to the data analysis (Stuckey, 2015). This systematic process addressed my interest in establishing how what I found in the Time 3 data compared with what the Time 1 data included about relationships and resilience. I began by revisiting the 4 themes that were distilled from the primary data using ITCA – these were my deductive codes. I then consulted the secondary data and searched for segments and visual data in the secondary data that matched those themes (Mayring, 2000). When I found any relevant segments of data and visual data that corresponded with the deductive codes, I labelled the identified data with the thematic code that matched (see Addendum C for an example).

Following the recommendation by Nieuwenhuis (2016), which suggests that researchers should return to the uncoded data to check for information that they may have missed initially, I identified any segments of the data that had not been coded during the *a priori* coding process. I then analysed this to determine if they represented new relationship-focused themes which should be added. I concluded that the uncoded secondary data did not support the introduction of new relationship-focused themes because they related to non-relational resilience enablers (e.g. personal and structural resilience enablers, such as the jobs provided by the petrochemical industry, placing a high value on education, access to community centres and community sports fields) and so could not be used to support relationship-related themes (either the *a priori* ones or new relationship-related ones). To check the deductive analysis, my findings were reviewed and agreed upon by the RYSE team.

One of the advantages of using deductive coding to analyse the secondary data was that it enhanced the clarity of the themes identified in the primary data, thereby strengthening

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these themes (Nieuwenhuis, 2016). Furthermore, it was less time-consuming than repeating the inductive analysis process as completed during primary data analysis. According to Lapadat (2012), a possible shortfall of using deductive coding is that it is relatively rigid. In my study I had already formulated themes from the primary data and I was looking for data that supported those themes in the secondary data in particular. I reduced the possible rigidity of this approach to coding by considering any new themes which may have arisen from the secondary data. However, the secondary data set provided no motivation to refine my themes.

3.6 QUALITY CRITERIA

I considered the five quality criteria, proposed by Lincoln and Guba (1985, 1994), to strengthen the trustworthiness of my study. These criteria are discussed in detail below.

3.6.1 Credibility

Credibility refers to the extent to which my findings were congruent with the reality of the participants, i.e. the internal validity of the study (Morse, 2015; Nieuwenhuis, 2016). This involves rigorously examining the extent to which the expressions of the participants have been accurately identified and portrayed in the findings, making the findings believable (Schurink et al., 2014).

I took steps to ensure my findings were credible according to Lincoln and Guba's (1994) strategies to increase credibility. Firstly, I used formalised, empirically sound qualitative methods which have been adequately researched in a variety of contexts. I provided details of the data generation process in Section 3.5.4 and the data analysis process in Section 3.5.5. Secondly, I engaged in productive peer debriefing during group meetings with other RYSE researchers where my findings were interrogated and agreed upon. The dates of these meetings were 3 May 2019, 16 May 2019, 30 May 2019 and 20 June 2019. Thirdly, to check that my themes were saturated across participants, I presented my themes to the RYSE team who also checked how many participants reported each theme, indicating the level of saturation. Fourthly, I ensured I was adequately trained in the data generation techniques by other members of the RYSE research team, prior to commencing the data generation. Finally, I used a variety of data, i.e. body mapping, draw-write-talk and secondary data sources to triangulate my findings.

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3.6.2 Transferability

Transferability refers to the applicability of one set of research findings to inform research or policy in another context, i.e. external validity (Morrow, 2005; Schurink et al., 2014). As recommended by Shenton (2004), to enhance the accuracy of the potential transferability of the findings from my study, I provided a thick description of the participants (see Table 2 and Section 3.5.3). Additionally, I provided details pertaining to their context (see Section 3.5.2) in sufficient detail that an independent researcher could draw conclusions about whether my study's findings will fit their context, as suggested by Nieuwenhuis (2016).

3.6.3 Dependability

The level of consistency to which the research measures the same phenomenon over time and context, and elicits the same or similar findings, determines the dependability of a study (Nowell et al., 2017). The dependability of my study is closely linked to its credibility (Nieuwenhuis, 2016). As advised by Korstjens and Moser (2018), to maintain the dependability of my study I included an audit trail illustrating key points in my analysis of the Time 1 and Time 3 data (see Addendum B and Addendum C). Furthermore, I included an extract from my reflexive research journal where I documented important information regarding the logistics of the research and personal reflections (see Addendum D).

3.6.4 Confirmability

Confirmability refers to the extent to which the findings of a study are shaped by the data generated by the participants, without the interference of characteristics inherent to the researcher (Tobin & Begley, 2004). Triangulation of the data generated by the participants in a study strengthens the confirmability of a study (Schurink et al., 2014). To triangulate the findings of my study, I investigated the data generated by the participants across the participants' verbal discussions and visual artefacts (see Section 3.5.4). Additionally, I have included my assumptions (see Section 1.7) and my views on the benefits and limitations (see Section 5.4) of using the methodologies I chose so the decision-making process can be shared with the reader, as advised by Shenton (2004). The themes identified were strengthened by identifying the theme in more than one data source. Regarding member checking, I followed Morse (2015) and Tobin and Begley (2004), who explain that member checking is not always practical because the themes that the researcher asks participants to check might not be meaningful if the participants in question did not report insights related

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to those themes. Therefore, it is sometimes more useful to ask a different group of people from the same context, with comparable experiences to those of the participants, to review the themes. Consequently, in my study, it made more sense to take the findings back to a group of people who represented the participants, i.e. the CAP. The findings of my study were evaluated by the CAP youth members on 13 and 14 November 2019. These individuals were satisfied that the findings of my study fit with their experiences and those of other eMbalenhle adolescents.

3.6.5 Authenticity

Authenticity concerns the fairness and faithfulness with which the researcher conveys a range of different realities when reporting on the data (Elo et al., 2014; Tobin & Begley, 2004). Authenticity is maintained by selecting appropriate participants to partake in the study. In my study I maintained this through the use of purposive sampling, according to specific criteria, as reported in Section 3.5.3 (Connelly, 2016). Furthermore, in Chapter 4 I included quotes from as many of the 10 participants as possible per theme, to show that my portrayal of the participants' insights is authentic. I also tried to vary whose voices I reported so that the theme was a fair representation of all voices. This also demonstrates that I did not privilege the data generated by certain participants over others.

3.7 ETHICAL CONSIDERATIONS

My study was conducted according to the ethical guidelines provided by the University of Pretoria. Furthermore, the process of formulating the consent forms was facilitated by the RYSE team to ensure best practice. As per the consent letters (see Addendum E), participants were informed that they could withdraw from the study without any consequences to them and the data generated were kept safe and confidential and used solely by the researcher and the RYSE team.

Following Van Wyk's (2016) guidelines to ensure ethical approaches are applied in African research, I checked with the participants that they were comfortable with me taking photographs of the previously described visual artefacts (see Section 3.5.4) and audio recording the one-on-one discussions and group discussion (see Addendum E). Furthermore, I reminded them that the information they shared with myself and my co-researcher would be used for our respective research studies.

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Furthermore, it was vital for me to interact ethically with the participants. This began with adhering to the four principles of resilience research, as outlined by McCubbin and Moniz (2015), in my interactions with the adolescents. I upheld these principles by, firstly, respecting the adolescents' unique descriptions of the meaning associated with their lived experiences and acknowledging the importance of these. Secondly, I considered the context of the participants by showing a verbal and non-verbal willingness to understand their experiences of relational resilience enablers specific to their context, from their perspective, to enhance the relevance of the research findings. Thirdly, I encouraged dialogue and building trust while generating data to uphold reciprocity and to encourage openness in the discussions. Fourthly, I was responsible throughout the research process by ensuring that the confidentiality of the adolescents was maintained. I maintained confidentiality by saving the transcripts from the discussions on a password-protected computer and storing the artefacts in a locked store room. To ensure that the ethics of limited confidentiality in a group setting were managed, I ensured that the participants did not feel pressured to share information that was too personal by reminding them that it was their choice to share the information they felt comfortable sharing with those in the group, and we agreed that the information that was shared would be kept within the group and would not be shared with others outside of that setting.

As recommended by Sotuku and Duku (2015), to ensure beneficence, I considered whether the knowledge generated by my study would benefit the participants. I concluded that my research will be beneficial to the participants as it potentially informs future resilience interventions which support adolescents in their context, or similar contexts, about the relationships which enable resilience and how they do so.

As advised by King and Churchill (2000), to ensure non-maleficence, it was important for me to work to minimise any possible harm to the participants as a result of my study. I managed this by respecting the boundaries the participants put in place regarding the extent of the information they shared about their lived experiences of the relationships which enable their resilience. I did not press for personal information during my interactions with the participants if they did not volunteer the information. In order to develop rapport with the adolescents, so they may be at ease during the interviews, I made use of sympathetic techniques, as suggested by Alderson and Morrow (2011). These include sitting at the same eye level, making an effort to look and sound attentive, gently reflecting the

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adolescents' points, observing their body language and asking follow-up questions. In my reporting of the data I took care not to stereotype or malign the participants.

3.8 CONCLUSION

In this chapter, I discussed the methodology I used to yield meaningful data in my study, as well as the benefits and challenges of each of these methodologies. The next chapter includes a presentation of the findings that resulted from the methods detailed in this chapter.

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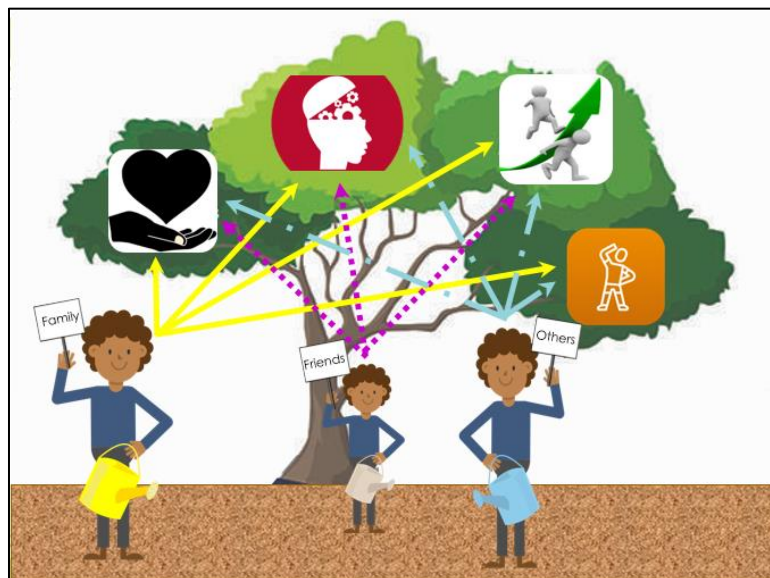
CHAPTER 4
REPORTING RESULTS

4.1 INTRODUCTION

In answering the question, “How do relationships enable the resilience of a group of adolescents living in eMbalenhle, a community stressed by petrochemical pollution and structural disadvantage, and how consistent are these relational resilience enablers over time?” i.e. how the relational resilience enablers reported by this group of adolescents in 2019 compared with what they reported in 2017, four themes emerged, as summarised in Figure 10. The themes are: extending emotional comfort and affective caring, broadening perspectives or inspiring solutions, encouraging grit and perseverance, and promoting physical health or fulfilling of basic needs.

Figure 10

Visual summary of my findings



Before I discuss the themes and what they meant, it is important to indicate which relationships were included in the themes; these will be presented in order of theoretical density, i.e. which relationships were reported most. As depicted by the three human figures in Figure 10, all the participants reported family, where family refers to “a group of two or more people connected by blood, adoption, marriage or choice who may rely on each other for social, emotional and financial support” (Howe, 2011, p. 4). Almost all of the participants (8 of the 10 adolescents) reported others, where others refer to those who are neither

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friends nor family, including strangers, acquaintances (e.g. people that they know from faith-based activities or their neighbourhood), spiritual beings or public figures within the adolescent's larger social system. Just over half of the participants (6 of the 10 adolescents) reported relationships with trustworthy friends, where a trustworthy friend refers to a dependable person with whom one has a bond. Friendship typically excludes relationships of a sexual nature or with blood relatives. When friends were not trustworthy, they did not provide reliable support and the participants reported wariness of these so-called friends. The participants reported that at times their friends gossiped or pressured them into doing something they did not want to do, e.g. smoking. This pattern was not replicated in relationships with family or others. The relationship which facilitated each resilience-enabling mechanism is shown by the arrows in Figure 10, i.e. family and others supported all four themes, while friends only supported three of the four themes. Typically, participants included more than just one of these relationships in their responses (see, for example, Figure 12).

The first theme, i.e. extending emotional comfort and affective caring, is represented as the human hand holding the heart. The second theme, i.e. broadening perspectives or inspiring solutions, is represented as the brain being unfastened and revealing what is inside. The third theme, i.e. encouraging grit and perseverance, is represented as the person running towards the upwards-pointing arrow supported by a human figure. The fourth theme, i.e. promoting physical health or the fulfilling of basic needs, is represented by the human figure performing a stretching exercise. In what follows below, I discuss each theme individually as it was reported by the adolescents over time.

4.2 THEME 1: EXTENDING EMOTIONAL COMFORT AND AFFECTIVE CARING

This theme refers to emotional support as comfort and affective caring, which the participants described as love (sense of belonging), trust or a safe, emotional space which steers adolescents away from focusing on the negatives, towards positive thinking and engaging in positive activity. According to the participants, this emotional comfort and affective caring support wellbeing and enable resilience. All participants reported family, friends and others extending emotional comfort and affective caring to them. For example, Tshego explained that her family provides her with comfort as they provide a space which allows her to relax (Figure 11). In her drawing she drew her "loved ones" as a place of rest, separate from the factors driving her to success. She said, "On the issue of family it's also

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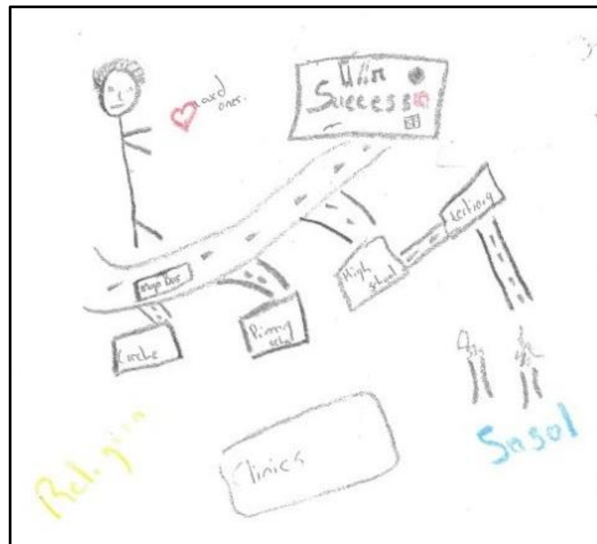
having somewhere to run to … at the end of the day, when the sun sets, it's always important to have somewhere to go and relax and unwind."

Figure 11

Tshego's drawing depicts her family (loved ones) who provide her with a safe emotional space



Likewise, Gugu Precious describes how her family comfort her by caring for her and putting her at ease. She explains that "at home [with my family] … they just teaching you to … have that thing that it's gonna be okay at some point you know, everything is gonna be fine …". Additionally, in her drawing she depicted her relationships with her family as a factor which makes it all right when life is hard in Embalenhle (see Figure 12).

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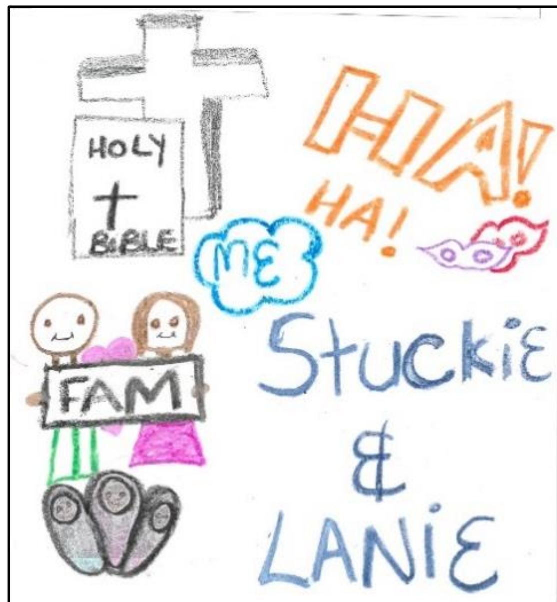
Figure 12

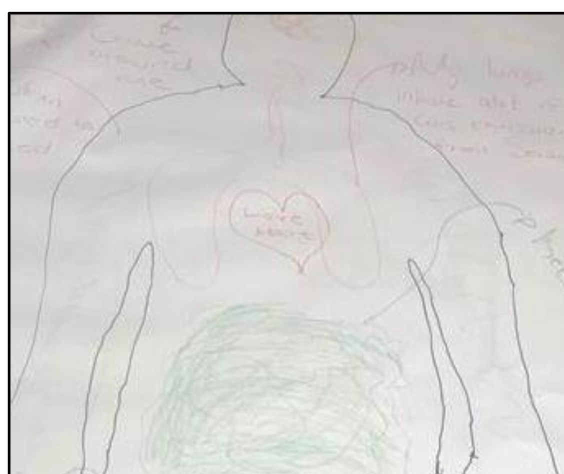
Gugu Precious's picture includes a drawing of her family and her friends, Stuckie and Lanie



In a similar fashion, in Thulani's body map (see Figure 13) he describes love as having an important effect on him. He refers specifically to love from his family when he says, "… parents and all that, they love me."

Figure 13

Thulani depicts love in his body map drawing



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Gugu Precious included her friends' names (Stuckie and Lanie) in her drawing (see Figure 12). Similarly, in her interview, Minky elaborates on how her friends provide comfort and caring in that they provide a sense of belonging. She mentions how her friends "… feel like family".

Furthermore, Lwande describes how her "imaginary God" provides an honourable outlet for her private emotions. This outlet comforts her and serves as an alternative to sharing these emotions with her friends, who may spread it to others. She explained how she trusts God when she said, "… instead of talking to someone that will talk to someone else tomorrow … it escalates, I talk to my imaginary God; at least I will feel better afterwards and I will not be a laughing stock."

4.2.1 How this theme was represented in the Time 1 data

In the Time 1 data, four of the participants reported elements similar to the elements of this theme. For instance, in Thulani's body map (Figure 14) he shared that his grandmother provides emotional support and affective caring. He wrote, "Granny's words make my heart happy."

Figure 14

Thulani's body map where he states that his grandmother provides emotional comfort and affective caring

Likewise, Thuso explains how the community provides him with emotional support so that he can cope with the challenges around him. During his description of his drawing (Figure 15) of what makes it tolerable to live in eMbalenhle when life is hard, he explains how he

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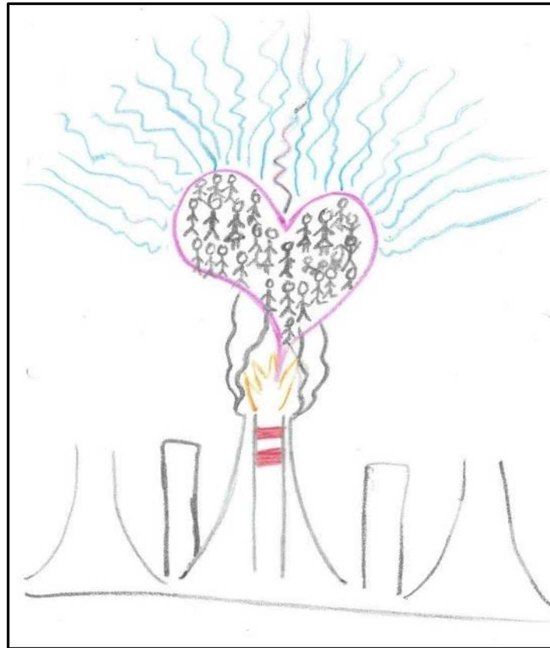
drew his community because they are like "one huge family, because they actually, they basically hold together to actually not be affected by what is happening around them".

Figure 15

Thuso's drawing depicting his community as the people who make it all right when life is hard in eMbalenhle



Similarly, in Sparky's drawing of what comforts him when life is hard in eMbalenhle, (Figure 16) he drew his friend, as it is his friends who encourage him to focus on positive thinking. During his explanation of his drawing he described how his friends "… always stay positive and tell [him] to stay positive too".

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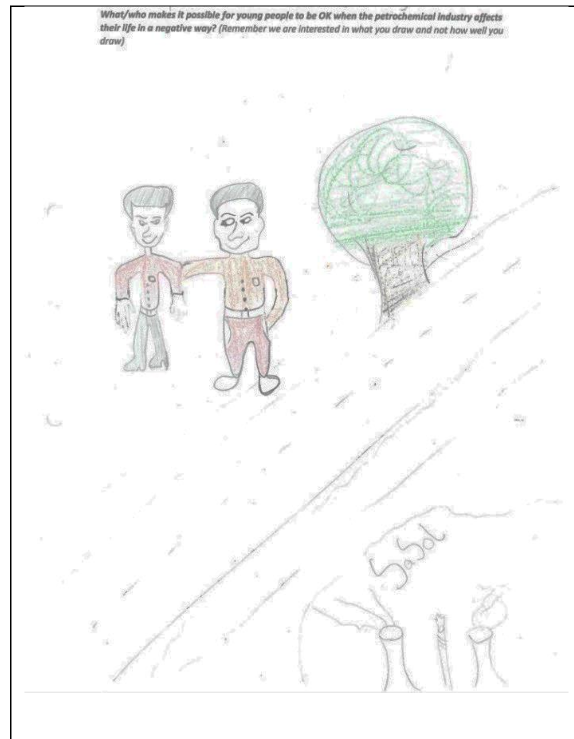
Figure 16

Sparky's drawing of himself and his friend as it is his friends who make it all right when life is hard in eMbalenhle



Furthermore, in Zulu's explanation of his body map (Figure 17), he described how his peers and the new people with whom he comes into contact at church and in the broader eMbalenhle community, provide emotional comfort by helping him realise that he is not alone in struggling to face a difficult situation. In his explanation he described how he gets to "… speak to new people and seeing that I am not the only person in the situation," which helps him to feel all right when life is difficult in eMbalenhle.

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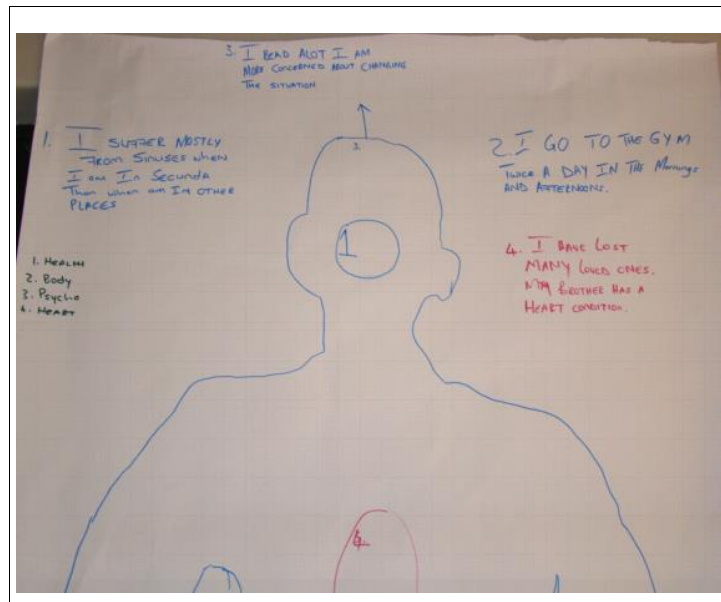
Figure 17

Zulu's body map which he used to explain how the people in his community provide comfort



4.2.2 What the relevant literature reports about extending emotional comfort and affective caring

This theme fits well with what has previously been published regarding which relationships enable adolescent resilience by providing emotional comfort and affective caring. Similar to the literature, which explains how adolescents' peers and families, i.e. parents, siblings and grandparents, enable their resilience by providing a feeling of being accepted (Hall & Theron, 2016a, 2016b; Lethale & Pillay, 2013; Mophosho et al., 2009), the adolescents in my study identified relationships with siblings and caregivers as promoting their resilience by providing emotional solace and a sense of inclusion in a group. Similar to the reports of Malindi (2014), Malindi and Theron (2010) and Vogel's (2001) studies of adolescent resilience, for the adolescent participants in my study, relationships with their friends also enabled their resilience as their peers cultivated a sense of belonging. According to the literature, adolescents acknowledge their relationships with clergy as enabling their resilience by providing a sense of belonging (Arndt & Naudé , 2016; Malindi, 2014). This is similar to the reports of the adolescents in my study; however, for the adolescents in my study it was their connectedness with a spiritual being, i.e. an imaginary God, that created a safe space and bolstered their emotional wellbeing. Therefore, my study invites closer scrutiny of the reasons why the adolescent participants in my study reported a connection

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to a divine being and the people at church as enabling, but are silent about connections to clergy.

The theme of extending emotional comfort and caring was reported by the adolescents at Time 1 (albeit by only four of them) and Time 3, which suggests consistency over time. This consistency corresponds with the findings of other longitudinal South African studies such as Bachman DeSilva et al. (2012), who discussed how, over time, the emotional bonds forged with family members, through the provision of affective caring, enabled the resilience of the 157 orphans in their study of adolescents between 9 and 15 years old living in KwaZulu-Natal. Furthermore, Van Breda and Dickens (2017) describe how the adolescents in their study valued their relationships with their families over time because they provided emotional care and support. Collishaw et al. (2016) reported on the valuable emotional support provided through positive relationships with peers over time, which enabled the resilience of the 944 orphaned adolescents with a mean age of 13.5 years, who participated in their study conducted in Cape Town. In Theron and Van Rensburg's (2018) study of 140 adolescents attending high school in a township, it was the adolescents' friends that, over time, provided them with a space of momentary respite from their difficulties in life. Contrastingly, none of the available longitudinal studies of resilience in South Africa reported that their relationship with a spiritual being provided adolescents with emotional comfort and affective caring over time. Furthermore, for the adolescents in Van Breda and Dickens (2017) and Theron and Van Rensburg's (2018) longitudinal studies, teachers provided the adolescents with comfort and care, which enabled their resilience over time. This was not the case for the participants in my study. I will discuss these discrepancies further in Chapter 5.

To an extent, my findings regarding who enables the adolescent participants' resilience by extending emotional comfort and affective caring, concur with typical adolescent development. Adolescents' relationships with their family members remain important as their families continue to provide emotional support (Woolfolk & Perry, 2014). Furthermore, peer relationships become increasingly valuable sources of emotional support as adolescents identify more closely with their peers (Brown & Larson, 2009). Additionally, for the adolescents in my study, their connection to a spiritual being enabled their resilience, which is expected, as individuals begin to explore their spirituality during adolescence (Woolfolk & Perry, 2014).

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4.3 THEME 2: BROADENING PERSPECTIVES AND INSPIRING SOLUTIONS

Broadening perspectives and inspiring solutions refers to social networks that provide advice or increase access to different cultures or alternative worldviews, which could result in a resource used to succeed, or guidance towards a solution. Almost all of the participants (9 of the 10 adolescents) reported that family, friends and others broaden their perspectives or inspire solutions in their lives. A case in point is Thulani who, during the draw, write and talk activity (Figure 18), drew a picture of his grandmother as someone who helps him cope well with adversity. He described how she expands his mind by telling him stories about people in the past who have coped with difficult circumstances and stated that this has had a positive impact on him. He said, "My grandmother now, she's always telling me ancient stories about how people used to manage … told me that you need to read … there were people before you who found ways in which they escaped this and escape this … getting knowledge from people who existed before me … it's good."

Figure 18

Thulani's drawing of his grandmother as the person who makes it tolerable when times are hard for him in eMbalenhle

Similarly, in her body map, Tshego used a variety of different colours to draw interwoven threads in her head (Figure 19). She explained how the threads represent the novel possibilities her friends share with her and how these ideas may enable her to prosper in the future. She said, "I make friends everywhere I go … [they] show me that it's possible … All of those are different ideas that could lead me to living a successful life."

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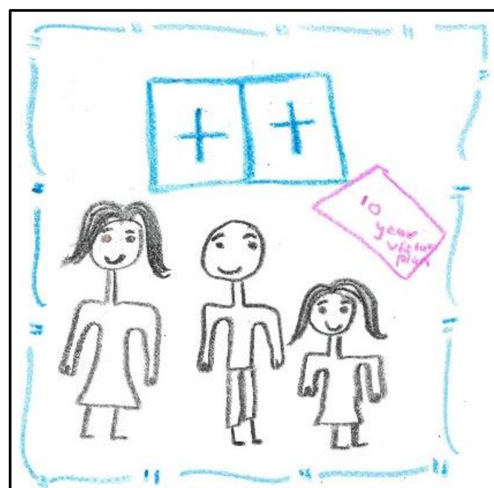
Figure 19

Tshego used multi-coloured lines in her body map to represent the new perspectives she gains from her friends

Likewise, Happy described how her acquaintances at church provide her with connections to enrich her knowledge on the process of pursuing her intended career. She expressed this by telling a story of how, when she mentioned her intended career to these acquaintances, they provided her with social connections who shared their insight regarding this career path. She said, "... like when I've stated, I wanna be in health science faculty … the church [acquaintances] made it available that they found somebody who's in that … field and they could help me out." In her drawing she included an image of the Bible, which represents the church as who or what makes living in eMbalenhle bearable when life is hard (Figure 20).

Figure 20

Happy drew a picture of the Bible and explained how her acquaintances at church make it bearable when life is hard in eMbalenhle



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Furthermore, Thuso chose to draw a purple heart in his drawing to represent his mother's role in his life (Figure 21). During the interview he described how his mother provides him with direction towards a positive outcome. He stated that "she [his mother] is perfect for advice … she's the person that basically guides us".

Figure 21

Thuso drew a purple heart to represent his mother's role in his life as she provides him with good counsel

4.3.1 How this theme was represented in the Time 1 data

In the Time 1 data, four of the participants reported elements similar to the elements in this theme. For example, during the body map interview, Thulani (Figure 22) elaborated on his drawing by stating that he enjoys reading with his friend who recommends books to him so he is able to learn how to look after himself well. He said, "We usually sit together, me and Simphiwe … we read a lot of books yeah. So, helps to, you know, renew our minds and help get more knowledge about how we can take care of ourselves."

Furthermore, in his explanation of his body map (Figure 22), Thulani reported that his grandmother shared valuable information about how he should live his life. He explained how he listens to his grandmother who "tells [him] a lot about life and you know how should I treat myself and how should I behave" when she tells him about the teachings she has heard at church as well as " … [his] past … [his] heritage, family stuff".

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Figure 22

Thulani uses his body map to show how his friend helps him learn new things from books which helps him take care of himself

Likewise, while Sparky was explaining his drawing during the draw-write-talk activity, he reported that his older sister makes life bearable when it is hard in eMbalenhle, because she gives him advice.

Similarly, in her explanation of her body map (Figure 23) Lwande explained how the people in the community of eMbalenhle broaden her perspectives. She said: "… it's really nice to get to know people … their lifestyles … traditions … everything about them."

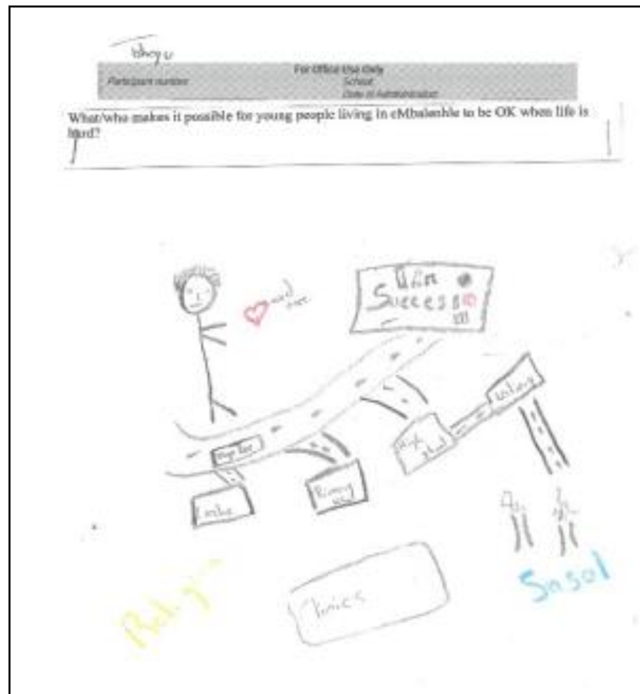
Figure 23

Lwande's body map which she used to describe how the community of eMbalenhle broadens her perspectives

Moreover, Tshego used her body map (Figure 24) to share how the people with whom the adolescents in eMbalenhle spend time, i.e. their acquaintances in the community, broaden their perspectives as they observe the behaviour of these acquaintances to understand more about the way they think. She said: "People around, more especially people they spend time with, because this also contributes to the way they think and how they do things."

Figure 24

Tshego's drawing about who and/or what helps young people to be okay when life is hard in eMbalenhle



4.3.2 What the relevant literature reports about broadening perspectives or inspiriting solutions

This theme is a good fit with the previously published literature which identifies relationships with family members (Lamb & Snodgrass, 2013; Malindi, 2014; Phasha, 2010; Singh & Naicker, 2019) and other capable adults such as clergy (Brittian et al., 2013) as factors that inspire adolescents to aim for a better future and the provision of a space where they can be exposed to and learn new ideas. Similarly, the adolescents in my study also experienced their relationships with family members, i.e. mothers and grandmothers, and others as broadening their perspectives and inspiring solutions to their challenges, thus enabling their resilience. However, in contrast to the literature reviewed in my study (Dass-Brailsford, 2005; Jefferis & Theron, 2017; Ogina, 2012), the adolescent participants in my study did not indicate that their teachers play a role in inspiring them to aim for an upward life trajectory or in advising them how to navigate difficult life circumstances or solve challenges, as none of the adolescents identified teachers' influence in promoting this theme. Possible reasons for this omission will be explored in Chapter 5.

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Broadening perspectives or inspiring solutions was a theme reported by the participants at Time 1 (albeit only four) and Time 3, suggesting that it is consistent over time. In the longitudinal South African literature on adolescent resilience, the role family and friends play in promoting the broadening of perspectives or inspiring solutions is not indicated. The role that other capable adults, such as church connections, play in broadening perspectives is reported by the adolescent participants in Theron and Van Rensburg's (2018) study. Additionally, for the adolescents in Theron and Van Rensburg's study, it was the adolescents' teachers who gave them new ideas. As already noted, this was not evident in the data generated by the adolescent participants in my study. I will discuss the divergences in my findings in further detail in Chapter 5.

The detail of this theme corresponds with the understanding of the adolescent phase of development. Prior to adolescence, it is expected that the role of an individual's family would be to expose them to new knowledge and ideas about the world around them (Brighouse & Swift, 2014). During adolescence, individuals begin to discover the world around them for themselves; their friends and other capable adults also play an increasingly influential role in exposing adolescents to new ways of thinking and different ways of living, which enables their resilience (Shaffer & Kipp, 2013).

4.4 THEME 3: ENCOURAGING GRIT AND PERSEVERANCE

Encouraging grit and perseverance in adolescents refers to the determination to persist in fulfilling the challenges related to their life goals; it can therefore be defined as "perseverance and passion for long-term goals" (Duckworth et al., 2007, p. 1087). Almost all of the participants (8 of the 10 adolescents) reported family, friends and others providing encouragement to have grit and to persevere. For example, Thulani has education goals that are hard to achieve, given the quality of education opportunities in eMbalenhle. During the body map interview, he described how he identifies with his role model, Nelson Mandela, who inspired him to persist in striving to reach his education goals. He explains that, "Mandela … grew up in the same circumstances, the same conditions, same problems, same hardships, in South Africa like me but he found ways in which he [could access] education."

Correspondingly, being the primary caregiver for her siblings motivates Lwande to persevere through any difficulty. In the draw-write-talk activity Lwande drew her family

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(Figure 25) and explained: "I just think to myself if I lose hope where do I put them … so I have to be strong … positive not just for myself for them as well … I draw my strength from them 'cause I have to be a better person for them." In her written explanation about her picture she wrote, "When the going gets tough my siblings are always my pillar of strength, they motivate me to be my best. Through them I've seen my capability" (Figure 26).

Figure 25

Lwande drew her siblings as the primary motivator compelling her to persevere in the face of adversity

Figure 26

In her paragraph Lwande described how acting as primary caregiver to her siblings motivates her to be a better person

Family is everything. When the going gets tough, my sibling are always my pillar of strength. They motivate me to be my best, through them I've seen my capability.

Likewise, Sparky drew his brother as the person who makes it tolerable when life is hard in eMbalenhle because his brother motivates him to keep going by overcoming the challenges he is facing with his health (Figure 27). He stated that his brother told him that "… in life whatever you experience, then you have to fight back. And he also told me that … Uh, this environment that I'm living in, it's sort of obstacles. So I must take these disadvantages and the diseases that I have as obstacles that will stop me from pursuing my career." This

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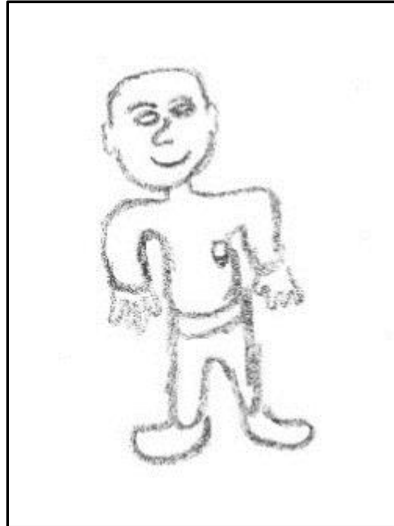
was further supported by the paragraph related to his drawing (Figure 27) where he wrote that his brother told him that "no matter how hard the situation is, I must fight back".

Figure 27

Sparky drew his brother as the main source of inspiration to have grit despite his health challenges



Similarly, Minky explained that she provides encouragement to her friends and they reciprocate and that these exchanges drive her ambition and encourage her to persevere to be the best she can be. When describing how her relationship with her friends enables her resilience she said, "… positive things that we share and the encouragement that we share amongst each other and like we push each other to the limit and towards being like better people."

4.4.1 How this theme was represented in the Time 1 data

In the Time 1 data, two of the participants reported elements similar to the elements of this theme. During the draw-write-talk activity, Gugu Precious reported that other people in eMbalenhle encourage her to persevere. In her drawing she included images of the people in her community encouraging one another (Figure 29). In the write-up, Gugu Precious stated that she gets "motivated by others to work hard" (Figure 29).

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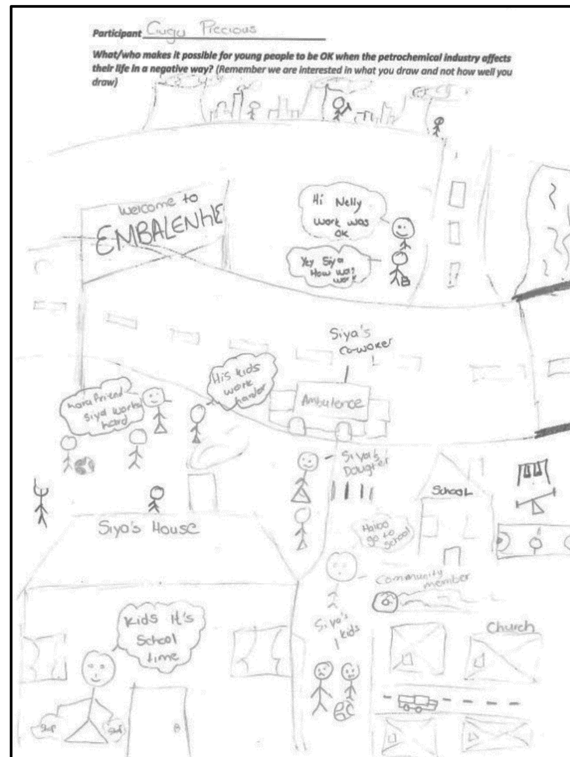
Figure 28

During the draw-write-talk activity Gugu Precious drew an image and explained how she is motivated by the other people in eMbalenhle to work hard



Likewise, during his explanation of the draw component of the draw-write-talk activity, Sparky shared that his friends encourage him to keep persevering at school even when life is difficult in eMbalenhle. He explains how his friends say that, "... if I think negatively about the petrochemical industry, my studies may be affected too."

4.4.2 What the relevant literature reports about encouraging grit and perseverance

The literature reviewed in Chapter 2 identifies the key role family relationships play in encouraging grit and perseverance (Gasa, 2013; Malindi, 2014; Phasha, 2010; Singh & Naicker, 2019). My study aligns well with what has previously been published regarding the value of family relationships and adds further relationships which may be involved in enabling adolescent grit and perseverance. According to the literature, relationships with parents support adolescents' educational aspirations, which motivates them to persist in attaining a good education (Phasha, 2010; Singh & Naicker, 2019) and relationships with grandparents who share hope encourage the adolescents to keep going even when life is hard (Hatch & Posel, 2018; Malindi, 2014; Theron & Theron, 2013). Although the

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adolescents in my study reported on the role family relationships play, it was their relationships with their siblings, the influence of their friends and the example of other role models such as Nelson Mandela specifically, and not their parents or extended families, that were more prominently reported as factors which strengthened their capacity to persist in the face of adversity. Therefore, the findings of my study draw attention to relationships beyond those with parents or extended family that also inspire grit and perseverance.

Encouraging grit and perseverance was reported at Time 1 (albeit only by two people) and Time 3, which indicates consistency over time. The findings of my study agree with Bachman DeSilva et al. (2012) and Theron and Van Rensburg's (2018) findings that friends provide adolescents with encouragement to persevere and be strong, which galvanises the adolescents' resilience over time. Although the participants in my study reported family, e.g. sibling relationships and connections with role models, i.e. Nelson Mandela, as relationships which motivated them to keep going in the face of hardship, these relationships were not indicated by the participants in the other studies of adolescent resilience over time (Bachman DeSilva et al., 2012; Collishaw et al., 2016; Theron & Van Rensburg, 2018; Van Breda & Dickens, 2017).

It is expected that peer relationships become increasingly important sources of companionship during adolescence. Consequently, as the influence of an adolescent's peers grows, so does the peers' ability to encourage certain behaviours (Reitz et al., 2014). Therefore, the finding that for the adolescent participants in my study friends were an important source of motivation over time is not unexpected. Moreover, Zimmerman et al., (2013) report on the value of positive adult role models during adolescence. My finding that adult role models are an important source of encouragement to persevere during adolescence is a reminder of the importance of adolescents' relationships with a positive role model.

4.5 THEME 4: PROMOTING PHYSICAL HEALTH OR FULFILLING BASIC NEEDS

Promoting physical health or fulfilling basic needs refers to the provision of basic physical resources, which promote physical health (i.e. basic healthcare) or fulfil basic needs, especially those that are physiological, i.e. food, water, shelter and safety (Maslow, 1943). Fewer than half (4 of the 10 participants) reported that relationships promote physical health or fulfil basic needs; these relationships were with family or others. For example, Minky

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went to the doctor when she experienced breathing problems. After identifying the cause of the breathing problems, the doctor gave her an inhaler. Access to this inhaler made it possible for her to go jogging without worrying about her health. She said, "I had breathing problems ... so I went to the doctor … they gave me … an inhaler … With the inhaler I think it's much better ... now I can do like maybe jogging because I love jogging, so even when I jog and stuff I don't worry because I know when I go home it will be able to be well again."

Furthermore, Sparky described his struggle to get help for his health problems. He first attempted to get medication from the doctor but when this did not have the desired effect, he asked the pastors at church for help. It was through their intervention that he has the medication he needs. This is evident from the interactions which unfolded during the body map interview. Sparky said, "Well, I got medication from the doctor but it doesn't work and then I went to church here and they helped me." I asked, "How did they help you?" Sparky replied, "Um, they gave me some tea to drink." To understand whom 'they' referred to I also asked, "Ok, and who at the church helped you?" Sparky replied, "It's the pastors."

Furthermore, when Tshego relocated to Johannesburg her aunt provided her with a place of shelter, which enabled her to pursue her dreams of performing in the arts. She said, "I decided that I would move to Joburg because that's where it's happening there. I went there and I lived with my aunt."

Likewise, Thulani was grateful for the influence of his grandmother on his health. He acknowledged that her cooking style encouraged him to eat healthily, which has now become a habit of his. He explains this by stating, "I'm still fortunate to live with my grandmother who still uses the old way of cooking and still eats like all those stuffs like greens … so I eat greens."

4.5.1 How this theme was represented in the Time 1 data

In the Time 1 data, three of the participants reported similar elements to the elements of this theme. For example, during the body map interview, Blessed used her body map to explain how her basic needs are provided by her family members who are able to make a living (Figure 30). She said, "I have food, I have shelter, I have clothes, because my parents or my brother, they work at Sasol; they are able to provide all of those things for me."

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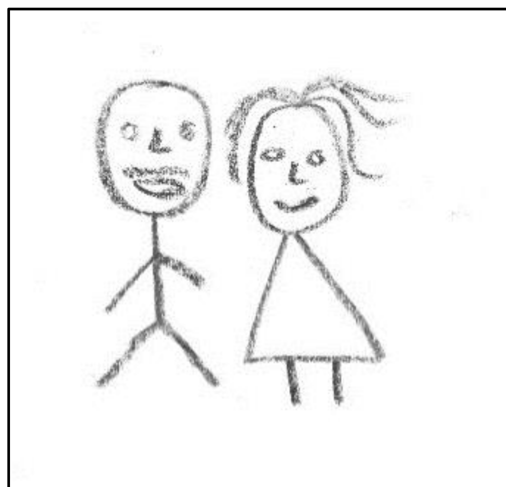
Figure 29

Blessed wrote "basics" on her body map and explained how these are provided by the members of her family

Similarly, Zulu drew his parents during the draw-write-talk activity (Figure 31). He explained how they provided for him when he was unable to find a job. In his paragraph he wrote, "It would have been harder for me to be OK if they weren't there. Because they provide everything for me since finding a job is a problem; they help out quite a lot" (Figure 31).

Figure 30

Zulu used the draw, write and talk activity to draw his parents and shared about how they provide for his basic needs when he struggles to find a job and support himself



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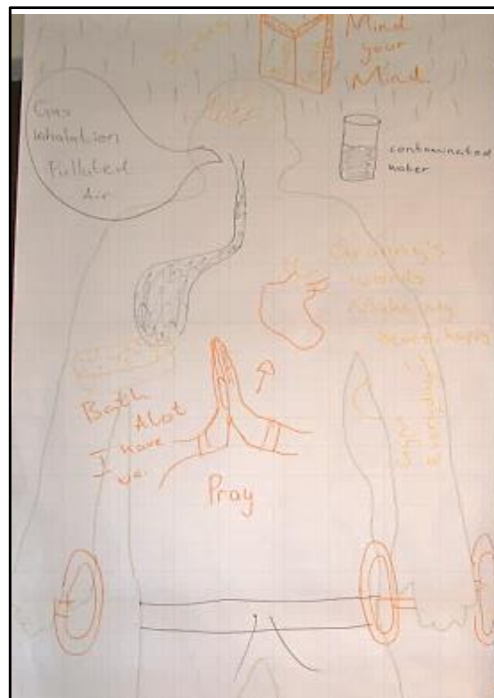
Likewise, in his explanation of his body map (Figure 17) Zulu explained how the people in his community are examples of the value of staying fit and healthy to avoid getting sick; their behaviour taught him how to promote health.

Furthermore, Thulani and his friend exercise at the gym together daily. This shared activity promotes their physical health. Thulani included dumbbells in his body map (Figure 32) in order to depict how going to the gym with his friend helps him stay healthy. During the interview he stated that his relationship with his friend improves his physical health; he explained this by stating, "… for my health … we go to the gym ... me and Simphiwe, every day, 6 o'clock we gym."

Figure 31

Thulani included dumbbells in his drawing and explained that going to the gym with his friend daily assists him with staying healthy



Thulani also referred to his relationship with God as an enabler of a sense of safety. During his explanation of his body map (Figure 32) he said: "… I usually pray for God to keep me safe."

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4.5.2 What the relevant literature reports about promoting physical health or fulfilling basic needs

The data included in this theme align well with the literature reviewed in my study. According to the literature, adolescents' relationships with their extended family provided instrumental support (Gasa, 2013; Theron et al., 2013) and through the adolescents' relationships with others access to material resources was provided (Pretorius et al., 2015; Theron & Theron, 2014), which promotes their physical health or fulfils their basic needs. For the adolescents in my study, their parents, siblings and extended family, e.g. aunts, provided shelter and enabled healthy eating, which promoted their physical health, and others, i.e. doctor and pastor, provided for their needs by offering healthcare services. The correspondence between the findings of my study and the reviewed literature is limited with regard to friends. The literature identifies friends as sharing resources with adolescents (Hills et al., 2016); however, for the adolescents in my study, friends shared exercise routines rather than tangible resources such as food or money.

This theme was reported similarly at Time 1 and Time 3, which indicates consistency over time. This consistency aligns with the findings of Bachman DeSilva et al. (2012), Collishaw et al., (2016), Theron and Van Rensburg (2018) and Van Breda and Dickens (2017). For the adolescents in their studies, the relationships with their immediate and extended families and other capable adults supplied resources and information to meet their basic needs over time, which enabled their resilience. However, my study differs from the findings of other longitudinal studies of adolescent resilience in that the adolescents in the literature perceived that, over time, their relationship with God also ensured that their basic needs were provided for (Theron & Van Rensburg, 2018). Although the Time 1 data included that Thulani referred to praying to God to keep him safe, there was no comparable data at Time 3.

As adolescents develop, they begin to rely less and less on their parents for fulfilment of their basic needs (Eccles, 2004; Mota & Matos, 2015). In many developing countries, such as South Africa, parents expect the adolescents in their families to take care of themselves by sourcing their own employment to survive (Patton et al., 2016). Consequently, the extent to which adolescents can rely on their parents is limited and adolescents must turn to others to find employment or other sources of support. This aligns with the reported experiences

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of the adolescents in my study as they included relationships with others, i.e. pastors, in supplying their basic needs.

4.6 CONCLUSION

In conclusion, the findings of my study mostly align with the trends in the findings of relevant studies of the resilience of South African adolescents over time. The findings of my study also contrast with the findings of some of the previous studies of the resilience of at-risk adolescents in South Africa over time. This contrast is not unusual or unexpected, considering the complexity of resilience (Ungar, 2013). The notion of the complexity of resilience implies that what enables the resilience of adolescents in one context or point in time may not enable the resilience of adolescents in another context or point in time (Ungar, 2011).

There are fairly substantial differences in the number of participants reporting the themes at Time 1 and Time 3 in all themes, except promoting physical health or fulfilling basic needs, with relational resilience enablers being more prominent at Time 3 than at Time 1. Considering that adolescence is a time of change (Casey et al., 2010), the challenges that adolescents are facing may also differ over time, requiring them to identify and rely on different relationships to help them cope. At Time 1, community-based resources (e.g. big industry) were more prominently reported by the adolescents, particularly because of their potential to provide jobs (Sithole, 2019). At Time 1, many of the adolescents were beginning to search for work (CAP for the RYSE Project, 2017) and so community resources (like industry) might have been foregrounded at Time 1. In the interim, i.e. between Time 1 and Time 3, they may have realised that it is not as simple to find a job as they may have originally expected, as evidenced in the number of participants who are unemployed who are unemployed and/or involved in further education or training with the hope of that advancing their employability (see Section 3.5.3). They were perhaps more aware of the relational resources around them at Time 3, given that Barrar (2010) and Bray et al. (2011) report that the high youth unemployment rate in South Africa is associated with continued dependence on relational resources, i.e. caregivers. Therefore, it is expected that these adolescents would turn to relationships with the people around them and rely on these relationships for comfort, inspiration and advice to succeed. Interestingly, relational resources promoting physical health or fulfilling basic needs was the theme with the least difference in saturation, where three adolescent participants reported this at Time 1 and

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four adolescent participants reported this theme at Time 3. This may be because the group of adolescents in my study continue to struggle to establish financial independence because they are challenged by unemployment and live in a resource-constrained community. These ongoing socioeconomic challenges would mean that over time they will need support from those around them to meet their basic needs. This concurs with the explanations of Barrar (2010) and Bray et al. (2011). The low number of participants reporting this theme at Time 1 and 3 fits with the trend of South African adolescents being more likely to report affective or inspirational support from relational resources than instrumental support (Van Breda & Theron, 2018).

In conclusion, my study contributes to the current literature on the relationships which enable South African adolescent resilience over time and how they do so (Bachman DeSilva et al., 2012; Collishaw et al., 2016; Theron & Van Rensburg, 2018; Van Breda & Dickens, 2017), in that it adds the insights at two points in time of a group of adolescents challenged by living in a township within proximity to a petrochemical production facility. Even though this adverse context is under-explored in the resilience literature, my findings show a good fit with relational enablers reported in other South African contexts of risk over time, such as being orphaned (Collishaw et al., 2016) and aging out of care (Van Breda & Dickens, 2017). However, my study also raises questions about relational resilience enablers over time and encourages a follow-up study. In the final chapter, I collate these findings into an overall conclusion to my study of limited scope.

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CHAPTER 5
CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

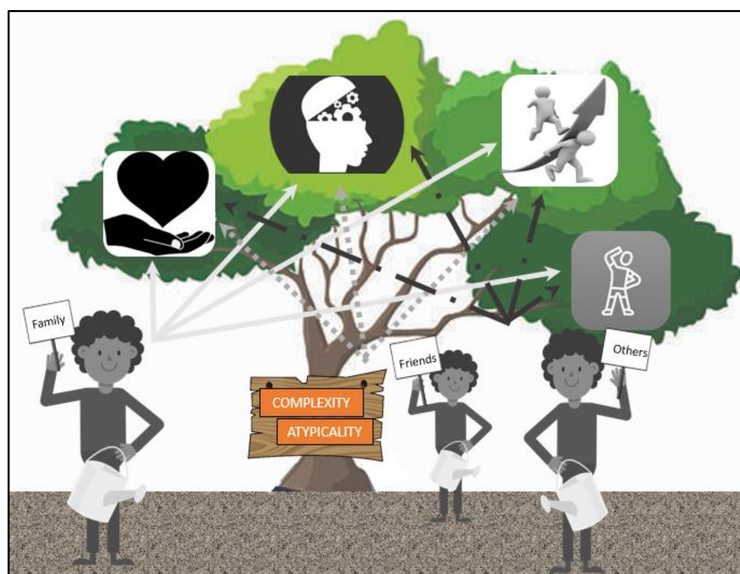
In this chapter, I consider the extent to which my findings address the primary research question of my study. This is followed by a reflection on the effectiveness of the research methodology I adopted and a disclosure of the limitations of my study. Next, I suggest possible recommendations for future research and for educational psychologists in South Africa, which emerged from my study.

5.2 QUESTIONS REVISITED AND FINDINGS DISCUSSED

My study of limited scope was directed by one primary question: How do relationships enable the resilience of a group of adolescents living in eMbalenhle, a community stressed by petrochemical pollution and structural disadvantage, and how consistent are these relational resilience enablers over time? In other words, how do the relational resilience enablers reported by a group of adolescents in 2019 compare with what they reported in 2017? Figure 33 illustrates my findings and their fundamental relationship to the complexity and atypicality principles of SERT, which is the theoretical framework for my study.

Figure 32

Illustrated summary of the findings of my study and their relationship to the theoretical framework which directed my study



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The findings of my study emerged from data generated by 10 adolescents in a community stressed by the cumulative risks associated with living in a township within proximity to a petrochemical production facility. The findings of my study complement the understanding that relationships are key enablers of adolescent resilience (Luthar, 2006; Masten, 2014; Ungar et al., 2007), as the group of adolescents who participated in my study all reported that relationships consistently enabled their resilience and they all shared their experiences of how relationships did so. Notably, relationships were increasingly reported as enablers of resilience over time for the group of adolescents who participated in my study, meaning that there is substantially more evidence of relationships in the adolescents' reports of the enablers of their resilience at Time 3 when compared to Time 1.

The focus on relationships as enablers of the resilience of the group of adolescents in my study aligns with the beliefs of traditional African culture, which maintains that all people are to be respected and we can gain from all people, as discussed by Adams et al. (2012), Mkhize (2006) and Ramose (2015). Furthermore, although the adolescents are moving towards the developmental stage of emerging adulthood, which suggests they are moving towards independence (Christie & Viner, 2005; Spear & Kulbok, 2004), their disadvantaged and resource-constrained context may influence their reliance on relationships with the people around them as they must rely on these relationships to succeed (Dass-Brailsford, 2005; Olsson, 2009). Awareness of this reliance over time may increase their appreciation of relationships, which may account for the increased frequency with which the adolescents reported these relationships as resilience-enabling over time. The increase in prominence of relationships as resilience enablers in the reports of the adolescent participants in my study over time highlights the importance of championing adolescents' resilience-enabling relationships in the context of cumulative risk.

Four themes emerged from the reports of the group of adolescents in my study regarding how relationships enabled their resilience over time. The most prominent theme reported by the adolescents in my study was relationships extending emotional comfort and caring (i.e., it was reported by all 10 participants at Time 3). This finding aligns well with existing South African studies of resilience over time, which also report the value of relationships in extending emotional comfort and caring (Bachman De Silva et al., 2012; Collishaw et al., 2016; Theron & Van Rensburg, 2018). This finding highlights the value of a relationship that provides emotional support in enabling the resilience of a group of adolescents living in a

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community challenged by disadvantage. The implication of this finding for educational psychologists serving adolescents in disadvantaged communities is that they could endeavour to provide psychoeducation to the people whom adolescents rely on for emotional support, such as family members. This psychoeducation could include information encouraging their efforts with the adolescents they have relationships with and providing them with insight on how to take care of themselves so they can continue to be supportive of the adolescents' resilience in this way, as advocated by Matsopoulous and Luthar (2020).

The least prominent theme reported by the adolescents in my study, over time, was relationships promoting physical health and fulfilling basic needs (i.e., it was only reported by 4 adolescents at Time 3). Although existing South African studies report on the value of physical health and the fulfilment of basic needs in enabling adolescent resilience over time (i.e. Bachman DeSilva et al., 2012; Collishaw et al., 2016; Theron & Van Rensburg, 2018; Van Breda & Dickens, 2017) there is limited reporting on the role relationships play in providing for these needs. The implication of this finding for educational psychologists working with adolescents in disadvantaged communities, such as eMbalenhle, is that these adolescents may rely more on personal resilience-enabling processes such as resourcefulness (Van Breda & Dickens, 2017) or structural resilience-enabling processes such as schools (Theron & Van Rensburg, 2018) to promote physical health and fulfil their basic needs.

The theoretical framework for my study was Ungar's (2011; 2015) SERT approach to understanding resilience as it highlights the value of an individual's social ecology in bolstering their resilience. In Figure 33 I illustrated the two SERT principles that speak to the findings of my study as the tree trunk, which is connected to each of the four themes through the branches of the tree. The findings of my study align with the two SERT principles of atypicality and complexity. However, the principles of decentrality and cultural relativity were not as well represented in the findings of my study. I will now discuss these principles further.

Firstly, the principle of atypicality, as outlined by Ungar (2011), correlates with the findings of my study as the adolescents reported relationships with others (i.e. neither family nor friends) to be the second most prominent relational source enabling their resilience over time. It was interesting that people who were neither family nor friends supported

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adolescent resilience in the same way as family and friends do (i.e., by extending emotional comfort and extending emotional comfort and affective caring, broadening perspectives or inspiring solutions, encouraging grit and perseverance, and promoting physical health or fulfilling of basic needs). This is an interesting outcome because, with the exception of Van Breda (2015), I am unaware of any other previous studies which draw attention to the value of others (i.e. neither family nor friends) in enabling adolescent resilience. This fairly atypical emphasis on relationships with others as resilience enablers needs to be considered in the effort to understand and nurture the relational resilience enablers of adolescents in South Africa. It is possible that the appreciation of others concurs with the adolescent development phase, i.e. adolescents' inclination to expand their social networks (Mwamwenda, 2004), or with traditional African valuing of all members of a social ecology and not just those with whom the adolescent shares family or friendship ties (Mnyaka & Mothlabi, 2005; Theron & Phasha, 2015). This finding may be relevant for the practice of educational psychologists in South Africa as it suggests that more engagement with broader communities to raise awareness of the effect strangers, acquaintances, or public figures can have on enabling the adolescents in their community and how to do so, e.g. by setting an example of resilience, is integral to their effectiveness.

Secondly, the complexity of resilience is highlighted by the phenomenon of relationships with family members remaining a prominent enabler of resilience over time in the reports of the adolescents in my study. Figure 33 illustrates this finding as the largest person in the image is standing with the label "family". It was interesting that family supported adolescent resilience similarly to how friends and others did (i.e., by extending emotional comfort and affective caring, broadening perspectives or inspiring solutions, and encouraging grit and perseverance). This finding contrasts with the literature pertaining to adolescent development, which describes how adolescents typically begin to disengage from their relationships with their family members over time (Brown & Larson, 2009; Fosco et al., 2012). However, this finding aligns with the findings of existing South African studies of adolescent resilience over time (Bachman DeSilva et al., 2012; Collishaw et al., 2016; Theron & Van Rensburg, 2018; Van Breda & Dickens, 2017). Therefore, this apparently age-inappropriate prominence of family may be linked to the adolescents' context since it has been reported that, for adolescents living in a disadvantaged community with constrained opportunities, families remain prominent as resilience enablers over time (Bachman DeSilva et al., 2012; Van Breda & Dickens, 2017). Whereas for adolescents

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living in privileged western societies, where adolescents leave home to study, au pair and travel, the prominence of family relationships in adolescents' reports of enablers of their resilience is reduced (Luthar & Becker, 2002; Smetana, 2010). Therefore, bolstering family relationships should be an integral part of a resilience intervention which aims to promote adolescent coping, when adolescents are growing up in resource-constrained or stressed environments, as advocated by Pinkerton and Dolan (2007). This finding may be important for the practice of educational psychologists in South Africa as it encourages the inclusion of meaningful efforts to bolster adolescents' positive relationships with their family and vice versa. The presence of this phenomenon in the findings of my study highlights the complexity of resilience as it is related to the understanding that the relationships that matter to adolescent resilience are probably relative to their situational and cultural context.

Two of the SERT principles were not as extensively represented in my findings, i.e. decentrality and cultural relativity. Firstly, my study assumed decentrality of resilience, as described by Ungar (2011), because I focused on adolescents' relationships and not their personal contributions to these relationships, in particular, or their resilience in general. This was necessary in order to address the primary research question that directs my study. Still, even though the focus was on relationships, each adolescent's individual resources were implicated, e.g., the appreciation of a relationship implies the capacity for gratitude. Secondly, the principle of cultural relativity was not specific to my study's research question and did not emerge explicitly in the participants' responses. According to Raghavan and Sandanapitchai (2020), it would be expected that the research respondents would spontaneously report on their cultural values as sources of strength. Although the content of the adolescents' responses did not explicitly refer to culture, there was some cultural nuancing from their spontaneous inclusion of a range of relationships. This finding fits in with African cosmology. Traditionally, African people perceive themselves as being interconnected with the people living in their communities; therefore, their relationships are flexible and may encompass people beyond the confines of family and close friends (Adams et al., 2012; Ramose, 2015).

5.3 REFLEXIVITY

Reflexivity plays an integral role in qualitative research (Corlett & Mavin, 2018). It has been defined as the iterative process of the researcher, reflecting on their role in their research and the relationships between the knowledge produced, the context in which it was

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produced and the consequences of their research (May & Perry, 2017; Whitaker & Atkinson, 2019). An important part of engaging in reflexivity as a researcher is reflecting on positionality in relation to the participants and the context in which the research is taking place (Corlett & Mavin, 2018). Positionality refers to the stance of the researcher in relation to the study participants along the dimensions of age, culture, gender, religion and sexual orientation, among others (Ratele, 2019; Rowe, 2014). Engaging in reflection on the researcher's own positionality is described by Cousin (2010) as the fluid process of reflecting on his/her worldview, which is "always from within it and what we see, or what we erase from view, will be framed by our cultural resources" (p. 10). Therefore, every researcher has positionality in their research and the researcher is obliged to continuously reflect on their positionality to be aware of their own influence on the research process (Brooks et al., 2014).

Throughout the research process I endeavoured to remain reflexive on my positionality by being aware of and reflecting on my effect on the process of generating, analysing and reporting the data. This compelled me to reflect on how my position as a privileged, White, English-speaking female may have played into how the adolescent participants responded during the data generation, the lenses through which I analysed the data and the manner in which I reported the data. I considered how being white may have affected the willingness of the participants during the data generation process to explicitly share about the value of their African cultural heritage in enabling their resilience, as the participants may have assumed that I would not understand or appreciate the value of their culture.

One of my assumptions when I began my study was that friends would be reported as a key resilience enabler for the adolescent participants in my study. Although relationships with friends were reported as enabling the adolescents' resilience, relationships with friends were superseded by relationships with family and others as the categories of relationships which enabled the adolescents' resilience. This broadened my understanding of the challenges faced by South African adolescents and how it affects the resources they draw from when they face challenges such as unemployment. As an educational psychologist in training, my study has further emphasised the importance of having a "not knowing" attitude towards my clients so that I do not address my clients with preconceived ideas about their context and experiences.

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5.4 LIMITATIONS OF THIS STUDY

Reporting on the limitations of a study is a key component of any study (Price & Murnan, 2004). Reflecting on my study led me to identify various limitations. These include the following:

- Firstly, the discussion around the draw-write-talk activity being facilitated in a group may have been a limitation of this study. According to Adams and Cox (2008) and Packer-Muti (2010), participants may feel pressure to conform to the group consensus on specific topics, which may silence their experience of reality if it is different from the experiences of others in the group. This may create a barrier to spontaneously sharing their unique experiences of the research phenomenon, which reduces the richness of the data generated. During the group discussion as part of the data generation in my study, I encouraged each of the participants to have an opportunity to share their experiences with the group, based on their drawings and written pieces, to mitigate this pressure. To further mitigate this pressure, the participants were divided into two groups for data generation at Time 3; each group consisted of five adolescent participants. Conducting this discussion in a smaller group reduced the pressure on the adolescents to conform to the shared experiences of other group members. This benefit is supported by Fusch and Ness (2015), who explain that a smaller group is advantageous in reducing the pressure to conform to the shared experiences of the group as a whole, so the individual participants will not be influenced by the group context.
- Secondly, I did not inductively code the secondary data, primarily to reduce the time it took to analyse the data, so that the analysis could be completed within the timeline allocated. Furthermore, as a master's student, I wanted to gain experience in both methods to broaden my skills and understanding of both methods so that I may make use of these in future research projects. Deductively coding the secondary data may have limited the accuracy with which I reported the secondary data, as confirmed by Tracy (2013), who describes how inductive coding represents the data more comprehensively.
- Thirdly, my time with the adolescents was limited as they were only able to generate the data over one afternoon. Furthermore, once the participants in my group observed that my co-researcher's group had completed their tasks and were able to

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leave the research site, the adolescents in my group began to provide less descriptive responses so they could also end their session and return home.

- Fourthly, the practice of engaging communities in discussions about the findings of research conducted in their community bridges the research-practice gap (Collins et al., 2018). In my study, once I had completed analysing the data from Time 3 and Time 1, I did not return to the participants to further investigate possible reasons for the increase in relationships that enable their resilience at Time 3. Although I could speculate about possible reasons for these changes, my speculations were not informed by the views of the adolescents themselves. This was a limitation because my speculations may not fully describe the adolescents' reasons for the changes over time.

5.5 RECOMMENDATIONS

5.5.1 Recommendations relating to future research

Future research that focuses on the relationships that enable South African adolescent resilience over time will address the scarcity of studies of this nature. However, I would suggest some modifications. Firstly, I recommend a study which engages the adolescents individually during the talk component of the draw-write-talk methodology of data generation. This will address the limitation of the adolescent participants feeling pressure to conform to the group context. Alternatively, I recommend that the adolescents engage in an individual drawing activity prior to engaging in data generation for future resilience research. Drawings have been identified as an effective research methodology by numerous researchers locally (Malindi & Theron, 2011; Mitchell et al., 2011; Ogina, 2012) and internationally (Allen, 2017; Butler-Kisber, 2017; Einarsdottir et al., 2009; Given, 2008). Guillemin (2004) suggests that "through the process of producing a drawing, the drawer is simultaneously constructing knowledge about the drawing" (p. 274). Therefore, drawing is a valuable tool for encouraging the research participants to reflect on and organise their thoughts around their experiences. I anticipate that if this is done prior to drawings being discussed in a group setting, which adolescents may experience as a pressurised setting, participants will be supported to formulate their individual experiences.

Secondly, I recommend that future research uses inductive coding for the secondary data analysis to ensure that data are accurately represented in the findings. The use of inductive

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coding for primary and secondary data analysis is advocated by Braun and Clarke (2004) as providing rich descriptions and more accurately representing the data.

Thirdly, I recommend that future research involves the researcher spending more time with the participants to ensure the participants have enough opportunity to express their views and their experiences in context. Related to this is careful consideration of the organisation of the research site so that the two groups of participants are facilitated in separate research venues.

Fourthly, I recommend that the participants are afforded the opportunity to comment on their views on why the relationships and/or relational resilience enablers reported at Time 1 differed from those reported at Time 3 to provide further insight on these differences. Additionally, I recommend a study that explores whether this finding is reported by other adolescents in similar contexts and, if so, possible reasons for this finding.

5.5.2 Recommendations for educational psychologists

Although my study is a study of limited scope, the findings are transferable to similar contexts around the world; therefore, these findings have value for educational psychologists championing the resilience of adolescents in similar contexts. The findings of my study align with previous research which states that relationships matter in galvanising adolescent resilience and continue to matter over time (Werner, 2013). The alignment of my findings excites me because it further emphasises the key role that relationships play in enabling the resilience of South African adolescents who are disadvantaged.

The findings of my study also highlight the importance of family relationships in enabling adolescent resilience over time. This suggests that educational psychologists should be well trained in strengthening family relationships and family resilience. Family resilience processes have been outlined by Walsh (2003; 2016) and resilience-focused family interventions have been shown to hold promise for improving adolescent wellbeing in disadvantaged South African settings (Kuo et al., 2016). “Our Family Our Future” is one of the interventions for strengthening families to relate well to adolescents in at-risk contexts, which has been successfully trialled in South Africa (Kuo et al., 2019; Kuo et al., 2020) and could be used by educational psychologists in disadvantaged contexts to promote healthy relationships between adolescents and their families and to bolster family and adolescent resilience.

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Furthermore, the findings of my study emphasise the value of connections with others (who are neither family nor friends) in enabling adolescent resilience. This finding suggests that educational psychologists place more focus on enabling the resilience of people in the community, to whom the adolescents are not related or closely acquainted with, but who can reach out to support and act as positive role models to the adolescents living in that community. The presence of role models in an adolescent's community has been highlighted as a key psychosocial enabler of adolescent resilience (Van Schalkwyk & Wissing, 2010). Promoting role models in an adolescent's community is especially pertinent in disadvantaged communities where there is a scarcity of role models for adolescents (Dass-Brailsford, 2005; Matshabane, 2016; Naidoo & Albien, 2016).

The adolescent participants in my study reported an increase in the prominence of relationships as resilience enablers over time. This understanding of South African adolescent resilience over time has important implications for educational psychologists engaging in psychotherapy with adolescents in similar contexts. Educational psychologists should be careful not to assume that the resilience-enabling support adolescents draw from their relationships with their family, others and friends in their context, and the extent to which they do so, will be the same in the beginning stages of the psychotherapeutic process as it will be later in the therapeutic process.

5.6 CONCLUSION

The findings of my study contribute insight into how relationships enable the resilience of a group of adolescents living in eMbalenhle over time, i.e. through the action of extending emotional comfort and affective caring, broadening perspectives or inspiring solutions, encouraging grit and perseverance, and by promoting physical health or fulfilling basic needs. Insight into how relationships enable adolescent resilience is valuable for service and mental health practitioners working with adolescents faced with cumulative risks. This insight may enable practitioners to equip communities with the tools to take action in bolstering the resilience of the adolescents living in these communities and encouraging families, others and friends to understand their importance in galvanising the resilience of adolescents. The findings of my study also contribute insight into which relationships enable the resilience of a group of adolescents living in eMbalenhle over time and how these relationships become increasingly prominent resilience enablers over time. This insight suggests that it is not only about understanding how to galvanise the resilience of

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individuals. It is also about encouraging families, communities and friends to understand their increasingly important role in enabling adolescent resilience over time, especially for those adolescents who live in the context of risk.

The aforementioned insight and subsequent action enabled by the findings of my study do not only apply to service and mental health practitioners. Any one of us can take action to bolster the resilience of the adolescents in our communities through our relationships with them. As Mother Theresa said: "*I alone cannot change the world, but I can cast a stone across the water to create many ripples*" (Goodreads, n.d.). In the context of my study, the "stone" may be the action of providing comfort, inspiration, encouragement or physical resources for an adolescent with whom we have a relationship, thus enabling their resilience to cope in the face of adversity. Taking this action may set off a resilience ripple that may resonate through the community around us, bolstering the resilience of the adolescents with whom we have a relationship, whether the adolescents are family members, adolescents living in our communities or friends. It may even extend to those we may not be acquainted with. It is up to each of us to first "… *cast a stone across the water".*

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REFERENCE LIST

Adams, A., & Cox, A. L. (2008). Questionnaires, in-depth interviews and focus groups. In P. Cairns & A. L. Cox (Eds.), *Research methods for human computer interaction* (pp. 17-34). Cambridge University Press.

Adams, B., Van de Vijver, F., & De Bruin, G. (2012). Identity in South Africa: Examining self-descriptions across ethnic groups. *International Journal of Intercultural Relations, 36*(3), 377-388. https://doi.org/10.1016/j.ijintrel.2011.11.008

Agasisti, T., Avvisati, F., Borgonovi, F., & Longobardi, S. (2018). Academic resilience: What schools and countries do to help disadvantaged students succeed in PISA. *OECD Education Working Papers*, No. 167. OECD Publishing. http://dx.doi.org/10.1787/e22490ac-en

Alderson, P., & Morrow, V. (2011). *The ethics of research with children and young people: A practical handbook.* SAGE.

Aliber, M. A. (2001). Study of the incidence and nature of chronic poverty and development policy in South Africa: An overview. *Chronic Poverty Research Centre Working Paper*, 3. http://dx.doi.org/10.2139/ssrn.1754544

Alhojailan, M. I. (2012). Thematic analysis: A critical review of its process and evaluation. *West-East Journal of Social Sciences, 1*(1), 39-47. http://westeastinstitute.com/journals/wp-content/uploads/2013/02/4-Mohammed-Ibrahim-Alhojailan-Full-Paper-Thematic-Analysis-A-Critical-Review-Of-Its-Process-And-Evaluation.pdf

Allen, M. (2017). *The SAGE encyclopedia of communication research methods*. SAGE.

Angell, C., Alexander, J., & Hunt, J. A. (2015). ‘Draw, write and tell’: A literature review and methodological development on the ‘draw and write’ research method. *Journal of Early Childhood Research*, *13*(1), 17-28. https://doi.org/10.1177/1476718X14538592

© University of Pretoria

Angell, R. J., & Angell, C. (2013). More than just “Snap, Crackle, and Pop”: “Draw, Write, and Tell”: An innovative research method with young children. *Journal of Advertising Research*, *53*(4), 377-390. https://doi.org/10.2501/JAR-53-4-377-390

Ardington, C., Case, A., Islam, M., Lam, D., Leibbrandt, M., Menendez, A., & Olgiati, A. (2010). The impact of AIDS on intergenerational support in South Africa: Evidence from the Cape Area Panel Study. *Research on Aging*, *32*(1), 97-121. https://doi.org/10.1177/0164027509348143

Arndt, N., & Naudé, L. (2016). Contrast and contradiction: Being a black adolescent in contemporary South Africa. *Journal of Psychology in Africa*, *26*(3), 267-275. https://doi.org/10.1080/14330237.2016.1185913

Aspers, P. (2009). Empirical phenomenology: A qualitative research approach (The Cologne Seminars). *Indo-Pacific Journal of Phenomenology*, *9*(2), 1-12. https://doi-org.uplib.idm.oclc.org/10.1080/20797222.2009.11433992

Austin, D., & Forinash, M. (2005). Arts-based inquiry. In B. Wheeler (Ed.), *Music therapy research* (2nd ed., pp. 458–471). Barcelona Publishers.

Bachman DeSilva, M., Skalicky, A., Beard, J., Cakwe, M., Zhuwau, T., & Simon, J. (2012). Longitudinal evaluation of the psychosocial well-being of recent orphans compared with non-orphans in a school-attending cohort in KwaZulu-Natal, South Africa. *International Journal of Mental Health Promotion*, *14*(3), 162-182. https://doi.org/10.1080/14623730.2012.733600

Bantjes, J., Rabie, S., Almirol, E., Gordon, S., Stewart, J., Goldbeck, C., Weiss, R., Tomlinson, M., & Rotheram-Borus, M. J. (2019). Associations between violence, criminality, and cognitive control deficits among young men living in low resource communities in South Africa. *Aggressive Behavior*, *46*(1), 5-15. https://doi.org/10.1002/ab.21867

Barbarin, O. A., & Richter, L. (2001). Economic status, community danger and psychological problems among South African children. *Childhood*, *8*(1), 115-133. https://doi.org/10.1177/0907568201008001007

© University of Pretoria

Barbarin, O., Richter, L., & De Wet, T. (2001). Exposure to violence, coping resources, and psychological adjustment of South African children. *The American Journal of Orthopsychiatry, 71*(1), 16-25. https://doi.org/10.1037/0002-9432.71.1.16

Barber, B. K., Stolz, H. E., Olsen, J. A., Collins, W. A., & Burchinal, M. (2005). Parental support, psychological control, and behavioral control: Assessing relevance across time, culture, and method. *Monographs of the Society for Research in Child Development*, 1-147. https://www.jstor.org/stable/3701442

Barrar, E. M. (2010). *Township youth perceptions of poverty and unemployment in Cape Town, South Africa* [Doctoral dissertation, University of Cape Town]. http://handle.net/11427/3842

Bateson, T. F., & Schwartz, J. (2007). Children's response to air pollutants. *Journal of Toxicology and Environmental Health, 71,* 238-243. https://doi.org/10.1080/15287390701598234

Béné, C., Newsham, A., Davies, M., Ulrichs, M., & Godfrey-Wood, R. (2014). Resilience, poverty and development. *Journal of International Development*, *26*(5), 598-623. https://doi.org/10.1002/jid.2992

Benson, P. L., Roehlkepartain, E. C., & Rude, S. P. (2003). Spiritual development in childhood and adolescence: Toward a field of inquiry. *Applied Developmental Science*, *7*(3), 205-213. https://doi.org/10.1207/S1532480XADS0703_12

Berg, B. L. (2001). *Qualitative research methods for the social sciences* (4th ed.). Allyn & Bacon.

Bergin, C., Talley, S., & Hamer, L. (2003). Prosocial behaviours of young adolescents: A focus group study. *Journal of Adolescence, 26*(1), 13-32. https://doi.org/10.1016/S0140-1971(02)00112-4

Bhana, A., & Bachoo, S. (2011). The determinants of family resilience among families in low-and middle-income contexts: A systematic literature review. *South African Journal of Psychology*, *41*(2), 131-139. https://doi.org/10.1177/008124631104100202

© University of Pretoria

Bhana, A., Mellins, C. A., Small, L., Nestadt, D. F., Leu, C. S., Petersen, I., Machanyangwa, S., & McKay, M. (2016). Resilience in perinatal HIV+ adolescents in South Africa. *AIDS Care*, *28*, 49-59. https://doi.org/10.1080/09540121.2016.1176676

Bireda, A. D., & Pillay, J. (2018). Enhancing protective factors in South African adolescents affected by HIV/AIDS. *Vulnerable Children and Youth Studies*, *13*(2), 183-194. https://doi.org/10.1080/17450128.2017.1395101

Birmaher, B., Bridge, J., Williamson, D., Brent, D., Dahl, R., Axelson, D., Dorn, L., & Ryan, N. (2004). Psychosocial functioning in youths at high risk to develop major depressive disorder. *Journal of the American Academy of Child and Adolescent Psychiatry, 43*(7), 839-846. https://doi.org/10.1097/01.chi.0000128787.88201.1b

Biyase, M., & Zwane, T. (2018). An empirical analysis of the determinants of poverty and household welfare In South Africa. *The Journal of Developing Areas*, *52*(1), 115-130. https://muse.jhu.edu/article/676869

Bohman, D. M., Vasuthevan, S., Van Wyk, N. C., & Ekman, S. (2007). “We clean our houses, prepare for weddings and go to funerals”: Daily lives of elderly Africans in Majaneng, South Africa. *Journal of Cross-Cultural Gerontology*, *22*(4), 323–337. https://doi.org/10.1007/s10823-007-9040-8

Botha, A., & Van den Berg, H. (2016). Trauma exposure and life satisfaction among at-risk black South African adolescents. *Journal of Psychology in Africa*, *26*(6), 500-507. https://doi.org/10.1080/14330237.2016.1250422

Botma, E. C. (2012). *Pastoral guidance for the spiritual development of the adolescents of Little Falls Christian Centre* [Doctoral dissertation, North-West University]. http://hdl.handle.net/10394/8573

Branson, N., Hofmeyr, C., & Lam, D. (2014). Progress through school and the determinants of school dropout in South Africa. *Development Southern Africa, 31*(1), 106-126. http://dx.doi.org/10.1080/0376835X.2013.853610

© University of Pretoria

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101. http://dx.doi.org/10.1191/1478088706qp063oa

Braun, V., & Clarke, V. (2012). Thematic analysis. In H. Cooper (Ed.), *APA handbook of research methods in psychology* (pp.57-71). American Psychological Association.

Braun, V., & Clarke, V. (2014). What can "thematic analysis" offer health and wellbeing researchers? *International Journal of Qualitative Studies on Health & Well-Being, 9*, Article 26152. http://dx.doi.org/10.3402/qhw.v9.26152

Bray, R., Gooskens, I., Moses, S., Kahn, L., & Seekings, J. (2011). *Growing up in the new South Africa: Childhood and adolescence in post-apartheid Cape Town*. HSRC Press. https://doi.org/10.1016/j.childyouth.2018.12.010

Breen, A., Daniels, K., & Tomlinson, M. (2019). Adolescent's views on youth gang involvement in a South African township. *Children and Youth Services Review*, *98*, 171-177. https://doi.org/10.1016/j.childyouth.2018.12.010

Brighouse, H., & Swift, A. (2014). *Family values: The ethics of parent-child relationships*. Princeton University Press.

Brittian, A. S., Lewin, N., & Norris, S. A. (2013). "You must know where you come from" South African youths' perceptions of religion in time of social change. *Journal of Adolescent Research*, *28*(6), 642-663. https://doi.org/10.1177/0743558413480834

Brook, J. S., Morojele, N. K., Pahl, K., & Brook, D. W. (2006). Predictors of drug use among South African adolescents. *Journal of Adolescent Health*, *38*(1), 26-34. https://doi.org/10.1016/j.jadohealth.2004.08.004

Brooks, R., Te Riele, K. & Maguire, M. (2014). Identity, power and positionality. In R. Brooks, K. te Riele, & M. Maguire (Eds.), *Research methods in education: Ethics and education research* (pp. 100-116). SAGE.

Brown, B. B. (2004). Adolescent relationships with peers. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (2nd ed., pp. 363-394). Wiley.

© University of Pretoria

Brown, B. B., & Larson, J. (2009). Peer relationships in adolescence. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (3rd ed., pp. 74-103). Wiley.

Burkhardt, P. (2019, August 16). Sasol delays review of $13bn investment. *Fin24.* https://www.fin24.com/Companies/Industrial/sasol-delays-results-for-review-of-13bn-investment-20190816

Burman, C. J., Aphane, M. A., & Mtapuri, O. (2017). Just being a teenager: Exploring the social drivers of HIV risk and resilience in a rural South African context. *Commonwealth Youth and Development, 15*(1), 1-16. https://hdl.handle.net/10520/EJC-ccd5765a3

Burns, P. A., & Snow, R. C. (2012). The built environment & the impact of neighborhood characteristics on youth sexual risk behavior in Cape Town, South Africa. *Health & Place*, *18*(5), 1088-1100. https://doi.org/10.1016/j.healthplace.2012.04.013

Butler-Kisber, L. (2017). *Qualitative inquiry: Thematic, narrative and arts-informed perspectives*. SAGE.

Cairns, P. (2019, August 19). The funds most exposed to Sasol. *Moneyweb.* https://www.moneyweb.co.za/investing/the-funds-most-exposed-to-sasol/

Calderón-Garcidueñas, L., Mora-Tiscareño, A., Ontiveros, E., Gómez-Garza, G., Barragán-Mejía, G., Broadway, J., Chapman, S., Valencia-Salazar, G., Jewells, V., Henriquez-Roldán, C., Pérez-Guillé, B., Torres-Jardón, R., Herrit, L., Brooks, D., Osnaya-Brizuela, N., Monroy, M. E., González-Maciel, A., Reynose-Robles, R., Villarreal-Calderon, R., ... Engle, R.W. (2008). Air pollution, cognitive deficits and brain abnormalities: A pilot study with children and dogs. *Brain and Cognition, 68*, 117-127. https://doi.org/10.1016/j.bandc.2008.04.008

Cameron, C. A., Theron, L., Tapanya, S., Li, C., Lau, C., Liebenberg, L., & Ungar, M. (2013). Visual perspectives on majority-world adolescent thriving. *Journal of Research on Adolescence*, *23*(1), 149-161. https://doi.org/10.1111/j.1532-7795.2012.00794.x

© University of Pretoria

Cappella, E., & Weinstein, R. S. (2001). Turning around reading achievement: Predictors of high school students' academic resilience. *Journal of Educational Psychology*, *93*(4), 758-771. https://doi.org/10.1037/0022-0663.93.4.758

Carr, A. (2011). *Positive psychology: The science of happiness and human strengths*. Routledge.

Carrington, K., McIntosh, A., & Scott, J. (2010). Globalization, frontier masculinities and violence: Booze, blokes and brawls. *British Journal of Criminology, 50*(3), 393–413. https://doi.org/10.1093/bjc/azq003

Casey, B. J., Jones, R. M., Levita, L., Libby, V., Pattwell, S. S., Ruberry, E. J., Soliman, F., & Somerville, L. H. (2010). The storm and stress of adolescence: Insights from human imaging and mouse genetics. *Developmental Psychobiology: The Journal of the International Society for Developmental Psychobiology*, *52*(3), 225-235. https://doi.org/10.1002/dev.20447

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. SAGE.

Charmaz, K. (2011). Grounded theory methods in social justice research. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research* (4th ed., pp. 359-380). SAGE.

Chang, T., Zivin, J. S. G., Gross, T., & Neidell, M. J. (2016). Particulate pollution and the productivity of pear packers. *American Economic Journal: Economic Policy 2016, 8*(3), 141-169. https://www.aeaweb.org/articles?id=10.1257/pol.20150085

Chay, K. Y., & Greenstone, M. (2003). The impact of air pollution on infant mortality: evidence from geographic variation in pollution shocks induced by a recession. *The Quarterly Journal of Economics*, *118*(3), 1121-1167. https://doi.org/10.1162/00335530360698513

Chenail, R. J. (2011). Interviewing the investigator: Strategies for addressing instrumentation and researcher bias concerns in qualitative research. *The Qualitative Report*, *16*(1), 255-262. https://nsuworks.nova.edu/tqr/vol16/iss1/16

© University of Pretoria

Chersich, M. F., Swift, C. P., Edelstein, I., Breetzke, G., Scorgie, F., Schutte, F., & Wright, C. Y. (2019). Violence in hot weather: Will climate change exacerbate rates of violence in South Africa? *South African Medical Journal*, *109*(7), 447-449. http://dx.doi.org/10.7196/SAMJ.2019.v109i7.14134

Choe, D. E., Zimmerman, M. A., & Devnarain, B. (2012). Youth violence in South Africa: Exposure, attitudes, and resilience in Zulu adolescents. *Violence and Victims, 27*(2), 166–181. http://dx.doi.org/10.1891/0886-6708.27.2.166

Choobineh, A., Soltanzadeh, A., Tabatabaee, H., Jahangiri, M., & Khavaji, S. (2012). Health effects associated with shift work in 12-hour shift schedule among Iranian petrochemical employees. *International Journal of Occupational Safety and Ergonomics, 18*(3), 419-427. https://doi.org/10.1080/10803548.2012.11076937

Christie, D., & Viner, R. (2005). Adolescent development. *British Medical Journal*, *330*(7486), 301-304. https://doi.org/10.1136/bmj.330.7486.301

Christodoulou, J., Stokes, L. R., Bantjes, J., Tomlinson, M., Stewart, J., Rabie, S., Gordon, S., Mayekiso, A., & Rotheram-Borus, M. J. (2019). Community context and individual factors associated with arrests among young men in a South African township. *PloS One*, *14*(1), 1-14. http://dx.doi.org.uplib.idm.oclc.org/10.1371/journal.pone.0209073

Cicchetti, D. (2013). Annual research review: Resilient functioning in maltreated children–past, present, and future perspectives. *Journal of Child Psychology and Psychiatry*, *54*(4), 402-422. https://doi.org/10.1111/j.1469-7610.2012.02608.x

Cluver, L., & Gardner, F. (2006). The psychological well-being of children orphaned by AIDS in Cape Town, South Africa. *Annals of General Psychiatry*, *5*(1), 8-16. http://www.annals-general-psychiatry.com/content/5/1/8

Cluver, L., & Orkin, M. (2009). Cumulative risk and AIDS-orphanhood: Interactions of stigma, bullying and poverty on child mental health in South Africa. *Social Science & Medicine*, *69*(8), 1186-1193. https://doi.org/10.1016/j.socscimed.2009.07.033

Cobb, N. J. (2010). *Adolescence: Continuity, change, and diversity* (7th ed.). Sinauer Associates.

© University of Pretoria

Coemans, S., Wang, Q., Leysen, J., & Hannes, K. (2015). The use of arts-based methods in community-based research with vulnerable populations: Protocol for a scoping review. *International Journal of Educational Research*, *71*, 33-39. https://doi.org/10.1016/j.ijer.2015.02.008

Cohen, L., Manion, L., & Morrison, K. (2011). *Research methods in education*. (7th ed.). Routledge.

Cohn, M. A., Fredrickson, B. L., Brown, S. L., Mikels, J. A., & Conway, A. M. (2009). Happiness unpacked: Positive emotions increase life satisfaction by building resilience. *Emotion*, *9*(3), 361. https://doi.org/10.1037/a0015952

Collins, S. E., Clifasefi, S. L., Stanton, J., Straits, K. J., Gil-Kashiwabara, E., Espinosa, P. R., Andrasik, M. P., Miller, K. A., Orfaly, V. E., Gil-Kishiwabara, E., Nicasio, A. V., Hawes, S, M., Nelson, L. A., Duran, B. M., & Wallerstein, N. (2018). Community-based participatory research (CBPR): Towards equitable involvement of community in psychology research. *American Psychologist*, *73*(7), 884-898. https://doi.org/10.1037/amp0000167

Collins, W. A., & Laursen, B. (2004). Parent-adolescent relationships and influences. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (2nd ed., pp. 331-361). Wiley.

Collishaw, S., Gardner, F., Aber, J. L., & Cluver, L. (2016). Predictors of mental health resilience in children who have been parentally bereaved by AIDS in urban South Africa. *Journal of Abnormal Child Psychology*, *44*(4), 719-730. https://doi.org/10.1007/s10802-015-0068-x

Community Advisory Panel for the RYSE Project. (2017, October 3). Meeting minutes [unpublished].

Compton, W. C. (2005). *Introduction to positive psychology*. Thomson Wadsworth.

Connelly, L. M. (2016). Understanding research: Trustworthiness in qualitative research. *MEDSURG Nursing*, *25*(6), 435-437. http://search.ebscohost.com.uplib.idm.oclc.org/login.aspx?direct=true&db=hch&AN=120221607&site=ehost-live&scope=site

© University of Pretoria

Corlett, S., & Mavin, S. (2018). Reflexivity and researcher positionality. In C. Cassell, A. L. Cunliffe & G. Grandy. *The SAGE handbook of qualitative business and management research methods* (pp. 377-398). SAGE.

Cousin, G. (2010). Positioning positionality: The reflexive turn. In M. Savin-Baden & C. Howell Major (Eds.), *New approaches to qualitative research: Wisdom and uncertainty* (pp. 9-18). Routledge.

Cox, R. S., Irwin, P., Scannell, L., Ungar, M., & Bennett, T. D. (2017). Children and youth's biopsychosocial wellbeing in the context of energy resource activities. *Environmental Research*, *158*, 499-507. https://doi.org/10.1016/j.envres.2017.07.014

Creswell, J. W. (2012). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). SAGE.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE.

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE.

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry & research design: Choosing among five approaches* (4th ed.). SAGE.

Criss, M. M., Pettit, G. S., Bates, J. E., Dodge, K. A., & Lapp, A. L. (2002). Family adversity, positive peer relationships, and children's externalizing behavior: A longitudinal perspective on risk and resilience. *Child Development*, *73*(4), 1220-1237. https://doi.org/10.1111/1467-8624.00468

Crowe, M., Inder, M., & Porter, R. (2015). Conducting qualitative research in mental health: Thematic and content analyses. *The Australian and New Zealand Journal of Psychiatry, 49*(7), 616-623. https://doi.org/10.1177/0004867415582053

Dakwa, F. (2016). The interview method. In C. Okeke & M. van Wyk (Eds.), *Educational research: An African approach* (pp. 296-315). Oxford University Press.

© University of Pretoria

Dareng, E., Olaniyan, Y., Adebamowo, S., Eseyin, O., Odutola, M., Obiefuna, E., Offiong, R., Pharoah, P. P., & Adebamowo, C. (2018). Age, HIV status, and research context determined attrition in a longitudinal cohort in Nigeria. *Journal of Clinical Epidemiology, 100*, 32-43. https://doi.org/10.1016/j.jclinepi.2018.04.012

Dass-Brailsford, P. (2005). Exploring resiliency: Academic achievement among disadvantaged black youth in South Africa. *South African Journal of Psychology*, *35*(3), 574-591. https://doi.org/10.1177/008124630503500311

Davis, E., Rotheram-Borus, M., Weichle, T., Rezai, R., & Tomlinson, M. (2017). Patterns of alcohol abuse, depression, and intimate partner violence among township mothers in South Africa over 5 years. *Aids and Behavior, 21*(2), 174-182. https://doi-org.uplib.idm.oclc.org/10.1007/s10461-017-1927-y

Delport, C. S. L., & De Vos, A. S. (2014). Professional research and professional practice. In A. S. de Vos, H. Strydom, C. B. Fouché, & C. S. L. Delport (Eds.), *Research at grass roots: For the social sciences and human service professions* (4th ed., pp. 45-60). Van Schaik.

Denham, A. R. (2008). Rethinking historical trauma: Narratives of resilience. *Transcultural Psychiatry*, *45*(3), 391-414. https://doi.org/10.1177/1363461508094673

Denzin, N. K., & Lincoln, Y. S. (2018). Introduction: The discipline and practice of qualitative research. In N. K. Denzin, & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research* (5th ed., pp. 1-27). SAGE.

Dew, A., Smith, L., Collings, S., & Dillon Savage, I. (2018). Complexity embodied: Using body mapping to understand complex support needs. *Forum: Qualitative Social Research*, *19*(2). https://doi.org/10.17169/fqs-19.2.2929

Dolbin-MacNab, M. L. & Yancura, L. A. (2018). International perspectives on grandparents raising grandchildren: Contextual considerations for advancing global discourse. *The International Journal of Aging and Human Development, 86*(1), 3-33. https://doi.org/10.1177/0091415016689565

© University of Pretoria

Dolbin-MacNab, M. L., Jarrott, S. E., Moore, L. E., O'Hora, K. A., Vrugt, M. D. C., & Erasmus, M. (2016). Dumela Mma: An examination of resilience among South African grandmothers raising grandchildren. *Ageing & Society*, *36*(10), 2182-2212. https://doi.org/10.1017/S0144686X15001014

Dowling, E. M., Gestsdottir, S., Anderson, P. M., Von Eye, A., Almerigi, J., & Lerner, R. M. (2004). Structural relations among spirituality, religiosity, and thriving in adolescence. *Applied Developmental Science*, *8*(1), 7-16. https://doi.org/10.1207/S1532480XADS0801_2

Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: perseverance and passion for long-term goals. *Journal of Personality and Social Psychology*, *92*(6), 1087-1101. https://doi.org/10.1037/0022-3514.92.6.1087

Dunkle, K. L., Jewkes, R. K., Brown, H. C., Gray, G. E., McIntyre, J. A., & Harlow, S. D. (2004). Gender-based violence, relationship power, and risk of HIV infection in women attending antenatal clinics in South Africa. *The Lancet*, *363*(9419), 1415-1421. https://doi.org/10.1016/S0140-6736(04)16098-4

East, L., Jackson, D., O'Brien, L., & Peters, K. (2010). Storytelling: An approach that can help to develop resilience. *Nurse Researcher*, *17*(3), 17-25. https://doi.org/10.7748/nr2010.04.17.3.17.c7742

Ebersöhn, L. (2007). Voicing perceptions of risk and protective factors in coping in a HIV & AIDS landscapes reflecting on capacity for adaptiveness. *Gifted Education International*, *23*(2), 149-159. https://doi.org/10.1177/026142940702300205

Ebersöhn, L. (2008). Children's resilience as assets for safe schools. *Journal of Psychology in Africa*, *18*(1), 11-17. https://doi.org/10.1080/14330237.2008.10820167

Ebersöhn, L. (2012). Imagining career resilience research and training from an indigenous knowledge production perspective. *South African Journal of Higher Education*, *26*(1), 800-812. https://hdl.handle.net/10520/EJC132700

© University of Pretoria

Ebersöhn, L. (2013). Building generative theory from case work: The relationship-resourced resilience model. In M. P. Wissing (Ed.), *Well-being research in South Africa* (pp. 97-121). Springer.

Ebersöhn, L. (2019). *Flocking together: An indigenous psychology theory of resilience in Southern Africa.* Springer

Ebersöhn, L., & Ferreira, R. (2011). Coping in an HIV/AIDS-dominated context: teachers promoting resilience in schools. *Health Education Research*, *26*(4), 596-613. https://doi.org/10.1093/her/cyr016

Ebersöhn, L., Eloff, I., Finestone, M., Grobler, A., & Moen, M. (2015). Telling stories and adding scores: Measuring resilience in young children affected by maternal HIV and AIDS. *African Journal of AIDS Research*, *14*(3), 219-227. https://doi.org/10.2989/16085906.2015.1052822

Ebersöhn, L., Eloff, I., Finestone, M., Van Dullemen, I., Sikkema, K., & Forsyth, B. (2012). Drawing on resilience: Piloting the utility of the Kinetic Family Drawing to measure resilience in children of HIV-positive mothers. *South African Journal of Education*, *32*(4), 331-348. https://doi.org/10.1016/j.aip.2017.04.007

Ebersöhn, L., Lewis, A., & Theron, L. C. (2015). *The adolescent.* Pearson.

Ebersöhn, L., Nel, M., & Loots, T. (2017). Analysing risk and resilience in the first sand tray of youth at a rural school. *The Arts in Psychotherapy*, *55*, 146-157. https://doi.org/10.1016/j.aip.2017.04.007

Ebersohn, S., & Bouwer, C. (2013). An exploratory study on the utilisation of resilience by middle adolescents in reconstituted families following divorce. *South African Journal of Education*, *33*(2). https://hdl.handle.net/10520/EJC134990

Eccles, J. S. (2004). Schools, academic motivation and stage-environment fit. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (2nd ed., pp. 125-153). Wiley.

© University of Pretoria

Einarsdottir, J., Dockett, S., & Perry, B. (2009). Making meaning: Children's perspectives expressed through drawings. *Early Child Development and Care*, *179*(2), 217-232. https://doi.org/10.1080/03004430802666999

Ellis, B. J., Bianchi, J., Griskevicius, V., & Frankenhuis, W. E. (2017). Beyond risk and protective factors: An adaptation-based approach to resilience. *Perspectives on Psychological Science*, *12*(4), 561-587. https://doi.org/10.1177/1745691617693054

Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K., & Kyngäs. H. (2014). Qualitative content analysis: A focus on trustworthiness. *SAGE Open, 4*(1), 1-10. https://doi.org/10.1177/2158244014522633

Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, *62*(1), 107-115. https://doi.org/10.1111/j.1365-2648.2007.04569.x

El Zoghbi, M. B., & El Ansari, W. (2014). University students as recipients of and contributors to information on climate change: Insights from South Africa and implications for well-being. *Central European Journal of Public Health*, *22*(2), 125-132. http://dx.doi.org/10.21101/cejph.a3999

Evans, G. W., & Kim, P. (2007). Childhood poverty and health: Cumulative risk exposure and stress dysregulation. *Psychological Science*, *18*(11), 953-957. https://doi.org/10.1111/j.1467-9280.2007.02008.x

Fergus, S., & Zimmerman, M. A. (2005). Adolescent resilience: A framework for understanding healthy development in the face of risk. *Annual Review of Public Health*, *26*, 399-419. https://doi.org/10.1146/annurev.publhealth.26.021304.144357

Feza, N. (2015). Qualitative data analysis. In C. Okeke & M. van Wyk (Eds.), *Educational research: An African approach* (pp. 458-475). Oxford University Press.

Fielding-Miller, R., Dunkle, K. L., & Murdock, D. (2015). Not everyone can afford an apple a day: Stigma and food insecurity in rural South African young adults. *African Journal of AIDS Research*, *14*(4), 361-369. https://doi.org/10.2989/16085906.2015.1123162

© University of Pretoria

Finley, S. (2008). Arts-based research. In J. G. Knowles & A. L. Cole (Eds.), *Handbook of the arts in qualitative research* (pp. 71-81). SAGE.

Finley, S. (2011). Critical arts-based inquiry: The pedagogy and performance of a radical ethical aesthetic. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research* (pp. 435-450). SAGE.

Fosco, G. M., Stormshak, E. A., Dishion, T. J., & Winter, C. E. (2012). Family relationships and parental monitoring during middle school as predictors of early adolescent problem behavior. *Journal of Clinical Child & Adolescent Psychology*, *41*(2), 202-213. https://doi.org/10.1080/15374416.2012.651989

Fouché, C. B., & Delport, C. S. L. (2014). Introduction to the research process. In A. S. de Vos, H. Strydom, C. B. Fouché, & C. S. L. Delport (Eds.), *Research at grass roots: For the social sciences and human service professions* (4th ed., pp. 61-76). Van Schaik.

Fouché, C. B. & De Vos, A. S. (2014). Formal formulations. In A. S. de Vos, H. Strydom, C. B. Fouché, & C. S. L. Delport (Eds.), *Research at grass roots: For the social sciences and human service professions* (4th ed., pp. 89-112). Van Schaik.

Fouché, C. B. & Schurink, W. (2014). Qualitative research designs. In A. S. de Vos, H. Strydom, C. B. Fouché, & C. S. L. Delport (Eds.), *Research at grass roots: For the social sciences and human service professions* (4th ed., pp. 307-327). Van Schaik.

Fraser-Thomas, J., & Côté, J. (2009). Understanding adolescents' positive and negative developmental experiences in sport. *The Sport Psychologist*, *23*(1), 3-23. https://journals.humankinetics.com/view/journals/tsp/23/1/article-p3.xml

Fredrickson, B. L., & Joiner, T. (2002). Positive emotions trigger upward spirals toward emotional well-being. *Psychological Science*, *13*(2), 172-175. https://doi.org/10.1111/1467-9280.00431

Fusch, P. I., & Ness, L. R. (2015). Are we there yet? Data saturation in qualitative research. *The Qualitative Report*, *20*(9), 1408-1416. http://works.bepress.com/d101mentor/4/

© University of Pretoria

Garrett, P. M. (2016). Questioning tales of ‘ordinary magic’: ‘Resilience’ and neo-liberal reasoning. *British Journal of Social Work, 46*(7), 1909–1925. http://dx.doi.org/10.1093/bjsw/bcv017

Gasa, V. (2013). Resilience in the context of learners and youth raised in grandparent-headed families. *Commonwealth Youth and Development*, *11*(1), 22-31. https://hdl.handle.net/10520/EJC142720

Gastaldo, D., Magalhães, L., Carrasco, C., & Davy, C. (2012). *Body-map storytelling as research: Methodological considerations for telling the stories of undocumented workers through body mapping*. http://www. migrationhealth.ca/undocumented-workers-ontario/body-mapping

Gastaldo, D., Rivas-Quarneti, N., & Magalhães, L. (2018). Body-map storytelling as a health research methodology: Blurred lines creating clear pictures. *Forum Qualitative Sozialforschung*, *19*(2). https://doi.org/10.17169/fqs-19.2.2858

Gee, G.C., & Payne-Sturges, D. C. (2004). Environmental health disparities: A framework integrating psychosocial and environmental concepts. *Environmental Health Perspectives, 112*(17), 1645-1643. https://doi.org/10.1289/ehp.7074

George, A. A. (2017). The influence of dispositional and contextual factors as possible determinants on adolescent suicide ideation. *Southern African Journal of Social Work and Social Development*, *29*(1), 73-91. https://hdl.handle.net/10520/EJC-89e0f1d1d

Given, L. M. (2008). *The SAGE encyclopedia of qualitative research methods*. SAGE.

Gizir, C. A., & Aydin, G. (2009). Protective factors contributing to the academic resilience of students living in poverty in Turkey. *Professional School Counseling*, *13*(1), 38-49. https://doi.org/10.1177/2156759X0901300103

Goldenberg, S., Shoveller, J., Koehoorn, M., & Ostry, A. (2008). Barriers to STI testing among youth in a Canadian oil and gas community. *Health and Place, 14*(4), 718-729. https://doi.org/10.1016/j.healthplace.2007.11.005

© University of Pretoria

Goldenberg, S. M., Shoveller, J. A., Koehoorn, M., & Ostry, A. S. (2010). And they call this progress? Consequences for young people of living and working in resource-extraction communities. *Critical Public Health, 20*(2), 157-168. https://doi.org/10.1080/09581590902846102

Goliath, V., & Pretorius, B. (2016). Peer risk and protective factors in adolescence: Implications for drug use prevention. *Social Work / Maatskaplike Werk, 52*(1), 113-129. https://doi.org/10.15270/52-1-482

Goodreads. (n.d.) Mother Theresa: Quotes. https://www.goodreads.com/quotes/49502-i-alone-cannot-change-the-world-but-i-can-cast

Gorman-Smith, D. & Tolan, P. H. (2003). Positive adaptation among youth exposed to community violence. In S. S. Luthar (Ed.). *Resilience and vulnerability: Adaptation in the context of childhood adversities* (pp. 392- 413). Cambridge University Press.

Govender, K., & Killian, B. J. (2001). The psychological effects of chronic violence on children living in South African townships. *South African Journal of Psychology*, *31*(2), 1-11. https://doi.org/10.1177/008124630103100201

Gqola, P. D. (2011). Unconquered and insubordinate: Embracing black feminist intellectual activist legacies. In X. Mangcu (Ed.), *Becoming worthy ancestors* (pp. 67-88). Wits University Press.

Graber, R., Turner, R., & Madill, A. (2016). Best friends and better coping: Facilitating psychological resilience through boys' and girls' closest friendships. *British Journal of Psychology, 107*(2), 338-358. https://doi.org/10.1111/bjop.12135

Greeff, A. P., & Du Toit, C. (2009). Resilience in remarried families. *The American Journal of Family Therapy*, *37*(2), 114-126. https://doi.org/10.1080/01926180802151919

Green, D. (2013a, November 24). Keeping children safe on eMbalenhle roads. *The Ridge Times.* https://ridgetimes.co.za/8336/keeping-children-safe-on-the-roads/

Green, D. (2013b, November 26). Gert Sibande district leads with HIV prevalence. *The Ridge Times.* https://ridgetimes.co.za/8497/council-prepares-of-word-aids-day/

© University of Pretoria

Green, D. (2014a, April 10). Ntwanano cares for elderly*. The Ridge Times*. https://ridgetimes.co.za/12510/ntwanano-cares-for-elderly/

Green, D. (2014b, May 25). Andile wants to be a star. *The Ridge Times*. https://ridgetimes.co.za/13852/andile-wants-to-be-a-star/

Green, D. (2014c, June 8). Tell children you love them daily. *The Ridge Times.* https://ridgetimes.co.za/14360/tell-children-you-love-them-daily/

Green, D. (2014d, June 12). eMbalenhle athletic club needs support. *The Ridge Times*. https://ridgetimes.co.za/14531/embalenhle-athletic-club-needs-support/

Green, D. (2014e, August 21). eMbalenhle pupils march against nyaope. *The Ridge Times*. https://ridgetimes.co.za/17794/embalenhle-pupils-march-against-nyaope/

Greening, L., & Stoppelbein, L. (2002). Religiosity, attributional style, and social support as psychosocial buffers for African American and White adolescents' perceived risk for suicide. *Suicide and Life‐Threatening Behavior*, *32*(4), 404-417. https://doi.org/10.1521/suli.32.4.404.22333

Guillemin, M. (2004). Understanding illness: Using drawings as a research method. *Qualitative Health Research*, *14*(2), 272-289. https://doi.org/10.1177/1049732303260445

Hage, L., & Pillay, J. (2017). Gendered experiences of African male learners in child- and youth-headed households: Implications for the role of psychologists. *South African Journal of Psychology, 47*(3), 305-315. https://doi.org/10.1177/0081246316685073

Hajkowicz, S. A., Heyenga, S., & Moffat, K. (2011). The relationship between mining and socioeconomic well-being in Australian regions*. Resources Policy, 36*, 30-38. https://doi.org/10.1016/j.resourpol.2010.08.007

Hall, A. M., & Theron, L. (2016a). How school ecologies facilitate resilience among adolescents with intellectual disability: Guidelines for teachers. *South African Journal of Education*, *36*(2). http://dx.doi.org/http://dx.doi.org/10.15700/saje.v36n2a1154

© University of Pretoria

Hall, A. M., & Theron, L. C. (2016b). Resilience processes supporting adolescents with intellectual disability: A multiple case study. *Intellectual and Developmental Disabilities*, *54*(1), 45-62. https://doi.org/10.1352/1934-9556-54.1.45

Han, J., Zhang, N., Niu, C., Han, B., & Bai, Z. (2014). Personal exposure of children to particle-associated polycyclic aromatic hydrocarbons in Tianjin, China, *Polycyclic Aromatic Compounds, 34*(4), 320–342. https://doi.org/10.1080/10406638.2014.883416.

Harley, D., & Hunn, V. (2015). Utilization of photovoice to explore hope and spirituality among low-income African American adolescents. *Child and Adolescent Social Work Journal*, *32*(1), 3-15. https://doi.org/10.1007/s10560-014-0354-4

Hatch, M., & Posel, D. (2018). Who cares for children? A quantitative study of childcare in South Africa. *Development Southern Africa*, *35*(2), 267-282. https://doi.org/10.1080/0376835X.2018.1452716

Hatcher, A., Stöckl, H., McBride, R., Khumalo, M., & Christofides, N. (2019). Pathways from food insecurity to intimate partner violence perpetration among peri-urban men in South Africa. *American Journal of Preventive Medicine, 56*(5), 765-772. https://doi.org/10.1016/j.amepre.2018.12.013

Hauser, S. T., & Allen, J. P. (2007). Overcoming adversity in adolescence: Narratives of resilience. *Psychoanalytic Inquiry*, *26*(4), 549-576. https://doi.org/10.1080/07351690701310623

He, J., & Van de Vijver, J. R. (2015). The value of keeping an open eye for methodological issues in research on resilience and culture. In L. C. Theron, L. Liebenberg & M. Ungar (Eds.), *Youth resilience and culture: Commonalities and complexities* (pp. 189-201). Springer.

Heunis, C., Pienaar, A., & Van Rensburg, H. (2011). A qualitative exploration of resilience in pre-adolescent AIDS orphans living in a residential care facility. *SAHARA: Journal of Social Aspects of HIV/AIDS Research Alliance*, *8*(3), 128-137. https://doi.org/10.1080/17290376.2011.9724995

© University of Pretoria

Hills, F., Meyer-Weitz, A., & Asante, K. O. (2016). The lived experiences of street children in Durban, South Africa: Violence, substance use, and resilience. *International Journal of Qualitative Studies on Health and Well-being*, *11*(1), 30302. https://doi.org/10.3402/qhw.v11.30302

Hlabyago, K. E., & Ogunbanjo, G. A. (2009). The experiences of family caregivers concerning their care of HIV/AIDS orphans. *South African Family Practice*, *51*(6), 506-511. https://doi.org/10.1080/20786204.2009.10873915

Hlatshwayo, M., & Vally, S. (2014). Violence, resilience and solidarity: The right to education for child migrants in South Africa. *School Psychology International*, *35*(3), 266-279. https://doi.org/10.1177/0143034313511004

Hodge, D. R., Cardenas, P., & Montoya, H. (2001). Substance use: Spirituality and religious participation as protective factors among rural youths. *Social Work Research*, *25*(3), 153-161. https://doi.org/10.1093/swr/25.3.153

Hoffman, L., & Janse van Rensburg, J. (2010). Spiritual formation of adolescents – a semiotic analysis. *Stellenbosch Theological Journal*, *51*(3-4), 21-35. https://doi.org/10.5952/51-3-77

Holder, D. W., Durant, R. H., Harris, T. L., Daniel, J. H., Obeidallah, D., & Goodman, E. (2000). The association between adolescent spirituality and voluntary sexual activity. *Journal of Adolescent Health*, *26*(4), 295-302. https://doi.org/10.1016/S1054-139X(99)00092-0

Holman, A. (2017). Content analysis, process of. In M. Allen (Ed.), *The SAGE encyclopedia of communication research methods* (pp. 246-248). SAGE.

Holstein, J. A., & Gubrium, J. F. (2011). The constructionist analytics of interpretive practice. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research* (pp. 341-357). SAGE.

Holt, J. (2017). *How children learn*. Hachette.

Howe, D. (2011). *Attachment across the lifecourse: A brief introduction*. Macmillan.

© University of Pretoria

Humm, A., Kaminer, D., & Hardy, A. (2018). Social support, violence exposure and mental health among young South African adolescents. *Journal of Child & Adolescent Mental Health*, *30*(1), 41-50. https://doi.org/10.2989/17280583.2018.1476358

Hurt, H, Malmud, E., Brodsky, H. L., & Giannetta, J. (2001). Exposure to violence: Psychological and academic correlates in child witnesses*. Archives of Pediatric and Adolescent Medicine, 155,* 1351-1356. https://doi.org/10.1001/archpedi.155.12.1351

Javadi, M., & Zarea, K. (2016). Understanding thematic analysis and its pitfall. *Journal of Client Care, 1*(1), 34-40. https://doi.org/10.15412/J.JCC.02010107

Jefferis, T. C. (2016). Resilient black South African girls in contexts of adversity: A participatory visual study [Doctoral dissertation, North-West University]. http://hdl.handle.net/10394/20488

Jefferis, T. C., & Theron, L. C. (2017). Promoting resilience among Sesotho-speaking adolescent girls: Lessons for South African teachers. *South African Journal of Education*, *37*(3). https://doi.org/10.15700/saje.v37n3a1391

Johnson, B., & Lazarus, S. (2008). The role of schools in building the resilience of youth faced with adversity. *Journal of Psychology in Africa*, *18*(1), 19-30. https://doi.org/10.1080/14330237.2008.10820168

Johnson, L. T., & Kane, R. J. (2016). Deserts of disadvantage: The diffuse effects of structural disadvantage on violence in urban communities. *Crime & Delinquency, 64*(2), 143-165. http://dx.doi.org/10.1177/0011128716682228

Johnston, M., & Krettenauer, T. (2011). Moral self and moral emotion expectancies as predictors of anti-and prosocial behaviour in adolescence: A case for mediation? *European Journal of Developmental Psychology*, *8*(2), 228-243. https://doi.org/10.1080/17405621003619945

Jupp, V. (2006). *The SAGE dictionary of social research methods*. SAGE.

Kampa, M., & Castanas, E. (2008). Human health effects of air pollution. *Environmental Pollution*, *151*(2), 362-367. https://doi.org/10.1016/j.envpol.2007.06.012

© University of Pretoria

Kamper, G. (2008). A profile of effective leadership in some South African high-poverty schools. *South African journal of education*, *28*(1), 1-18. https://hdl.handle.net/10520/EJC32156

Kane, R. J. (2011). The ecology of unhealthy places: Violence, birthweight, and the importance of territoriality in structurally disadvantaged communities. *Social Science & Medicine, 73*, 1585-1592. https://doi.org/10.1016/j.socscimed.2011.08.035

Kariuki, N. S., Aloka, P. J. O., Kinai, T., Gatumu, H. N., & Ndeke, F. N. (2014). Relationship between adolescents' perceptions of their parents' behaviours and youths' non-illegal and minor- illegal delinquency in Nairobi secondary schools, Kenya. *Mediterranean Journal of Social Sciences*, *5*(7), 390-401. https://doi.org/10.5901/mjss.2014.v5n7p390

Keating, L., Tomishima, M., Foster, S., & Alessandri, M. (2002). The effects of a mentoring program on at-risk youth. *Adolescence, 37*(148), 717-734. http://search.ebscohost.com.uplib.idm.oclc.org/login.aspx?direct=true&db=s3h&AN=106884703&site=ehost-live&scope=site

Kim, B. (2010). Social constructivism. In M. Orey (Ed.), *Emerging perspectives on learning, teaching, and technology* (pp. 55-61). https://www.academia.edu/2800253/Emerging_perspectives_on_learning_teaching_and_technology

Kim, S., & Esquivel, G. (2011). Adolescent spirituality and resilience: Theory, research, and educational practices. *Psychology in the Schools, 48*(7), 755-765. https://doi.org/10.1002/pits.20582

King, N. M. P., & Churchill, L. R. (2000). Ethical principles guiding research on child and adolescent subjects. *Journal of Interpersonal Violence, 15*(7), 710-724. https://doi.org/10.1177/088626000015007004

King, P., & Roeser, R. (2009). Religion and spirituality in adolescent development. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology: Individual bases of adolescent development* (pp. 435-478). Wiley.

© University of Pretoria

Kocayörük, E. (2010). Pathways to emotional well-being and adjustment in adolescence: The role of parent attachment and competence. *International Online Journal of Educational Sciences*, *2*(3), 719-737. https://www.researchgate.net/publication/49591625

Korstjens, I., & Moser, A. (2018). Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. *European Journal of General Practice*, *24*(1), 120-124. https://doi.org/10.1080/13814788.2017.1375092

Kreuger, L., & Neuman, W. L. (2006). *Social work research methods: Qualitative and quantitative applications*. Pearson Education.

Kruger, L., & Prinsloo, H. (2008). The appraisal and enhancement of resilience modalities in middle adolescents within the school context. *South African Journal of Education*, *28*(2), 241-260. https://www.jstor.org/stable/44109630

Kruger, L., Lubbe-de Beer, C., & Du Plessis, A.-B. (2016). Resilience in gay and lesbian parent families: Perspectives from the chrono-system. *Journal of Comparative Family Studies*, *47*(3), 343-356. https://doi.org/10.3138/jcfs.47.3.343

Kumpfer, K. L. (1999). Factors and processes contributing to resilience: The resilience framework. In M. D. Glantz & J. L. Johnson (Eds.), *Longitudinal research in the social and behavioral sciences. Resilience and development: Positive life adaptations* (pp. 179–224). Kluwer Academic.

Kumpulainen, K., Theron, L., Kahl, C., Bezuidenhout, C., Mikkola, A., Salmi, S., Khumalo, T., & Uusitalo-Malmivaara, L. (2016). Children's positive adjustment to first grade in risk-filled communities: A case study of the role of school ecologies in South Africa and Finland. *School Psychology International*, *37*(2), 121-139. https://doi.org/10.1177/0143034315614687

Kuo, C., & Operario, D. (2011). Health of adults caring for orphaned children in an HIV-endemic community in South Africa. *AIDS Care*, *23*(9), 1128-1135. https://doi.org/10.1080/09540121.2011.554527

© University of Pretoria

Kuo, C., Atujuna, M., Mathews, C., Stein, D. J., Hoare, J., Beardslee, W., Operario, D., Cluver, L., & Brown, L. K. (2016). Developing family interventions for adolescent HIV prevention in South Africa. *AIDS Care*, *28*(1), 106-110. https://doi.org/10.1080/09540121.2016.1146396

Kuo, C., LoVette, A., Pellowski, J., Harrison, A., Mathews, C., Operario, D., Beardslee, W., Stein, D. J., & Brown, L. (2019). Resilience and psychosocial outcomes among South African adolescents affected by HIV. *Aids, 33(1)*, 29-34. https://doi.org/10.1097/QAD.0000000000002177

Kuo, C., Mathews, C., Giovenco, D., Atujuna, M., Beardslee, W., Hoare, J., Stein, D. J., & Brown, L. K. (2020). Acceptability, feasibility, and preliminary efficacy of a resilience-oriented family intervention to prevent adolescent HIV and depression: A pilot randomized controlled trial. *AIDS Education and Prevention*, *32*(1), 67-81. https://doi.org/10.1521/aeap.2020.32.1.67

Lamb, S., & Snodgrass, L. (2013). Growing up with normalised violence: Narratives of South African youth. *Commonwealth Youth and Development 11*(1), 4-21. https://hdl.handle.net/10520/EJC142721

Landau, J. (2007). Enhancing resilience: Families and communities as agents for change. *Family Process*, *46*(3), 351-365. https://doi.org/10.1111/j.1545-5300.2007.00216.x

Lapadat, J. C. (2012). Thematic analysis. In A. J. Mills, G. Durepos & E. Wiebe (Eds.), *Encyclopaedia of case study research* (pp. 926-927). SAGE.

Larson, R., Wilson, S., & Mortimer, J. (2002). Conclusions: Adolescents' preparation for the future. *Journal of Research on Adolescence, 12*(1), 159-166. https://doi.org/10.1111/1532-7795.00029

Lau, U., & Van Niekerk, A. (2011). Restorying the self: An exploration of young burn survivors' narratives of resilience. *Qualitative Health Research, 21*(9), 1165-1181. https://doi.org/10.1177/1049732311405686

© University of Pretoria

Lavy, V., Ebenstein, A., & Roth, S. (2014). *The impact of short term exposure to ambient air pollution on cognitive performance and human capital formation* (NBER Working Paper 20648) [Unpublished]. http://www2.warwick.ac.uk/fac/soc/ economics/staff/academic/lavy/text _ and _ tables _ air _ pollution _ draft _ 20 _ 09 _ 12. Pdf

Leete, R., & Jacobs, T. (2002*). Situation and voices: The older poor and excluded in South Africa and India*. (Population and Development Strategies Series, 2). UNFPA.

Lethale, P. S., & Pillay, J. (2013). Resilience against all odds: A positive psychology perspective of adolescent-headed families. *Africa Education Review*, *10*(3), 579-594. https://doi.org/10.1080/18146627.2013.853550

Levitt, H. M., Bamberg, M., Creswell, J. W., Frost, D. M., Josselson, R., & Suárez-Orozco, C. (2018). Journal article reporting standards for qualitative primary, qualitative meta-analytic, and mixed methods research in psychology: The APA Publications and Communications Board task force report. *American Psychologist*, *73*(1), 26-46. http://dx.doi.org/10.1037/amp0000151

Lewis-Beck, M. S., Bryman, A., & Futing Liao, T. (2004). *The SAGE encyclopedia of social science research methods*. SAGE.

Li, H., Bottrell, D., & Armstrong, D. (2017). Understanding the pathways to resilience: Voices from Chinese adolescents. *Young*, *26*(2), 126-144. https://doi.org/10.1177/1103308817711532

Li, X., Chi, P., Sherr, L., Cluver, L., & Stanton, B. (2015). Psychological resilience among children affected by parental HIV/AIDS: A conceptual framework. *Health Psychology and Behavioral Medicine*, *3*(1), 217-235. https://doi.org/10.1080/21642850.2015.1068698

Liebenberg, L., & Theron, L. C. (2015). Innovative qualitative explorations of culture and resilience. In L. C. Theron, L. Liebenberg & M. Ungar (Eds.), *Youth resilience and culture: Commonalities and complexities* (pp. 203-215). Springer.

© University of Pretoria

Liebenberg, L., & Ungar, M. (2011). Understanding youth resilience in action: The way forward. In L. Liebenberg & M. Ungar (Eds.), *Resilience in action* (pp. 3-16). University of Toronto Press.

Liebenberg, L., Theron, L., Sanders, J., Munford, R., Van Rensburg, A., Rothmann, S., & Ungar, M. (2015). Bolstering resilience through teacher-student interaction: Lessons for school psychologists. *School Psychology International*, *37*(2), 140-154. https://doi.org/10.1177/0143034315614689

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry.* SAGE.

Lincoln, Y. S., & Guba, E. (1994). Competing paradigms in qualitative research. In N. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (pp.105–117). SAGE.

Lincoln, Y. S., Lynham, S. A., & Guba, E. G. (2011). Paradigmatic controversies, contradictions, and emerging confluences, revisited. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research* (pp. 97-128). SAGE.

Lionetti, F., Palladino, B. E., Moses Passini, C., Casonato, M., Hamzallari, O., Ranta, M., Dellagiulia, A., & Keijsers, L. (2019). The development of parental monitoring during adolescence: A meta-analysis. *European Journal of Developmental Psychology*, *16*(5), 552-580. https://doi.org/10.1080/17405629.2018.1476233

Louw, D. & Louw, A. (2010). *Child and adolescent development.* University of the Free State.

Lumadi, M. W. (2016). The logic of sampling. In C. Okeke & M. van Wyk (Eds.), *Educational research: An African approach* (pp. 224-242). Oxford University Press.

Luthar, S. (2006). Resilience in development: A synthesis of research across five decades. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology: Risk, disorder, and adaptation* (2nd ed., pp. 739-795). Wiley.

Luthar, S. S., & Becker, B. E. (2002). Privileged but pressured? A study of affluent youth. *Child Development*, *73*(5), 1593-1610. https://doi.org/10.1111/1467-8624.00492

© University of Pretoria

Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development, 71*(3), 543-562. https://doi.org/10.1111/1467-8624.00164

Luthar, S. S., Crossman, E. J., & Small, P. J. (2015). Resilience and adversity. In R. M. Lerner & M. E. Lamb (Eds.). *Handbook of child psychology and developmental science* (7th ed., pp. 247-286). Wiley.

Lys, C., Gesink, D., Strike, C., & Larkin, J. (2018). Body mapping as a youth sexual health intervention and data collection tool. *Qualitative Health Research*, *28*(7), 1185-1198. https://doi.org/10.1177/1049732317750862

Mactaggart, F., McDermott, L., Tynan, A., & Gericke, C. (2016). Examining health and well-being outcomes associated with mining activity in rural communities of high-income countries: A systematic review. *The Australian Journal of Rural Health, 24*, 230-237. https://doi.org/10.1111/ajr.12285

Madu, S. N., & Matla, M. Q. P. (2004). Family environmental factors as correlates for adolescent suicidal behaviors in the Limpopo Province of South Africa. *Social Behavior and Personality: An International Journal*, *32*(4), 341-353. https://doi.org/10.2224/sbp.2004.32.4.341

Malakou, K. T. (2019). Resilience explanations from adolescents challenged by unemployment. [Master's mini-dissertation]. University of Pretoria.

Malindi, M. J. (2014). Exploring the roots of resilience among female street-involved children in South Africa. *Journal of Psychology*, *5*(1), 35-45. https://doi.org/10.1080/09764224.2014.11885503

Malindi, M. J. (2018). Personal and socio-ecological resilience resources among school-going teenage mothers: An exploratory study. *Journal of Psychology in Africa*, *28*(4), 340-343. https://doi.org/10.1080/14330237.2018.1501883

Malindi, M. J., & Machenjedze, N. (2012). The role of school engagement in strengthening resilience among male street children. *South African Journal of Psychology*, *42*(1), 71-81. https://doi.org/10.1177/008124631204200108

© University of Pretoria

Malindi, M. J., & Theron, L. C. (2010). The hidden resilience of street youth. *South African Journal of Psychology*, *40*(3), 318-326. https://doi.org/10.1177/008124631004000310

Malindi, M., & Theron, L. C. (2011). Drawing on strengths: images of ecological contributions to male street youth resilience. In L. C. Theron, C. Mitchell, A. Smith, & J. Stuart (Eds.), *Picturing research: Drawings as visual methodology* (pp. 103-117). Sense.

Mampane, M. R. (2014). Factors contributing to the resilience of middle-adolescents in a South African township: Insights from a resilience questionnaire. *South African Journal of Education*, *34*(4). https://hdl.handle.net/10520/EJC162722

Mampane, R., & Bouwer, C. (2011). The influence of township schools on the resilience of their learners. *South African Journal of Education*, *31*(1). https://hdl.handle.net/10520/EJC32260

Marcotte, D. E. (2016). Something in the Air? Pollution, allergens and children's cognitive functioning. *Institute for the Study of Labor, 9689.* http://hdl.handle.net/10419/130370

Maree, K. (2013). *Counselling for career construction: Connecting life themes to construct life portraits: Turning pain into hope*. Sense.

Maree, K. & Pietersen, J. (2016). Sampling. In K. Maree (Ed.), *First steps in research 2* (2nd ed., pp. 191-202). Van Schaik.

Maringira, G., & Masiya, T. (2018). Persistence of youth gang violence in South Africa. *The African Review*, *45(1)*, 164-179. https://journals.udsm.ac.tz/index.php/ar/article/view/2236

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, *50*(4), 370-396. https://doi.org/10.1037/h0054346

Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, *56*(3), 227-238. http://dx.doi.org.uplib.idm.oclc.org/10.1037/0003-066X.56.3.227

© University of Pretoria

Masten A. S. (2002). Resilience comes of age. In M. D. Glantz & J. L. Johnson (Eds.), *Resilience and development. Longitudinal research in the social and behavioral sciences: An interdisciplinary series* (pp. 281-296). Springer.

Masten, A. S. (2004). Regulatory processes, risk, and resilience in adolescent development. *Annals of the New York Academy of Sciences*, *1021*(1), 310-319. https://doi.org/10.1196/annals.1308.036

Masten, A. S. (2011). Resilience in children threatened by extreme adversity: Frameworks for research, practice, and translational synergy. *Development and Psychopathology,* 23, 141–154. https://doi.org/10.1017/S0954579411000198

Masten, A. S. (2014). Global perspectives on resilience in children and youth. *Child Development*, *85*(1), 6-20. https://doi.org/10.1111/cdev.12205

Masten, A. S. (2015). *Ordinary magic: Resilience in development*. Guilford.

Masten, A. S. (2018). Resilience theory and research on children and families: Past, present, and promise. *Journal of Family Theory & Review*, *10*(1), 12-31. https://doi.org/10.1111/jftr.12255

Masten, A. S., & Cicchetti, D. (2016). Resilience in development: Progress and transformation. *Developmental Psychopathology*, 1-63. https://doi.org/10.1002/9781119125556.devpsy406

Masten, A. S., & Tellegen, A. (2012). Resilience in developmental psychopathology: Contributions of the project competence longitudinal study. *Development and Psychopathology*, *24*(2), 345-361. https://doi.org/10.1017/S095457941200003X

Mathebula, S. (2014a, October 16). Kiriyatswane Secondary School pupils excel. *The Ridge Times*. https://ridgetimes.co.za/22025/kiriyatswane-secondary-school-pupils-win/

Mathebula, S. (2014b, November 5). Pupils empowered on career day. *The Ridge Times*. https://ridgetimes.co.za/23564/pupils-empowered-on-career-day/

© University of Pretoria

Mathebula, S. (2015, November 11). Eight signs your child might be using drugs. *The Ridge Times.* https://ridgetimes.co.za/46484/umkhondo-alathia-rehabilitation-centre-helps-addicts/

Mathebula, S. (2016a, August 26). Young women's club recruits the youth. *The Ridge Times*. https://ridgetimes.co.za/71192/young-womens-club-recruits-the-youth/

Mathebula, S. (2016b, September 6). Gangsters terrorise eMbalenhle. *The Ridge Times*. https://ridgetimes.co.za/72157/gangsters-terrorise-emba/

Mathebula, S. (2016c, September 8). Poverty worst enemy for locals. *The Ridge Times*. Retrieved from https://ridgetimes.co.za/72172/poverty-worst-enemy-for-locals/

Mathebula, S. (2016d, November 15). Hlengiwe launches donation campaign for the needy. *The Ridge Times*. https://ridgetimes.co.za/76983/hlengiwe-launches-donation-campaign-for-the-needy/

Mathebula, S. (2017a, March 22). Young girls escape kidnapping in eMbalenhle. *The Ridge Times*. https://ridgetimes.co.za/84202/young-girls-escape-kidnapping/

Mathebula, S. (2017b, December 16). Heavy rain causes severe damage in eMbalenhle. *The Ridge Times*. https://ridgetimes.co.za/105031/heavy-rain-causes-severe-damages/

Mathebula, S. (2018a, January 29). Uncollected refuse poses a health hazard to people living in eMbalenhle. *The Ridge Times.* https://ridgetimes.co.za/106824/uncollected-refuse-poses-a-health-hazard/

Mathebula, S. (2018b, February 19). Sasol is willing to engage with locals. *The Ridge Times.* https://ridgetimes.co.za/108448/sasol-is-willing-to-engage-with-locals/

Mathebula, S. (2018c, June 14). Youth continue fighting for employment. *The Ridge Times.* https://ridgetimes.co.za/117236/govan-mbeki-forum-distances-themselves-from-violence/

Mathebula, S. (2018d, June 27). Post office goes up in flames during eMbalenhle service delivery protest. https://ridgetimes.co.za/118346/emba-service-delivery-protest-turn-violent/

© University of Pretoria

Mathebula, S. (2018e, October 12). Rape cases of children on the rise in eMbalenhle. *The Ridge Times.* https://ridgetimes.co.za/125809/rape-cases-of-children-on-the-rise-in-emba/

Mathebula, S. (2018f, October 26). Ntokozo helps his peers love education. *The Ridge Times.* https://ridgetimes.co.za/126304/ntokozo-help-his-peers-love-education/

Mathebula, S. (2018g, November 21). Brothers get 12 years' imprisonment for raping 7-year-old sister when they were teenagers. *The Ridge Times.* https://ridgetimes.co.za/128647/brothers-get-12-years-imprisonment-raping-7-year-old-sister-teenagers/

Mathebula, S. (2019a, January 1). Locals fight against police for doing their job. *The Ridge Times.* https://ridgetimes.co.za/130638/locals-fight-police-for-doing-their-job/

Mathebula, S. (2019b, March 24). Football takes Kgotso Masangane to Europe. *The Ridge Times*. https://ridgetimes.co.za/135052/football-takes-kgotso-masangane-europe/

Mathebula, S. (2019c, April 5). Local clinic hosts TB awareness day in eMbalenhle. *The Ridge Times.* https://ridgetimes.co.za/135954/local-clinic-hosts-tb-awareness-day-embalenhle/

Mathebula, S. (2019d, April 26). Parents protest over dilapidated building at Tholukwazi Primary School in eMbalenhle. *The Ridge Times.* https://ridgetimes.co.za/137090/parents-protest-dilapidated-building-tholukwazi-primary-school-embalenhle/

Mathebula, S. (2019e, April 27). Uncle is in custody for allegedly raping his 14-year-old disabled niece. *The Ridge Times.* https://ridgetimes.co.za/137121/uncle-custody-allegedly-raping-14-year-old-disabled-niece/

Mathebula, S. (2019f, May 12). Mickey inspires learners to focus on education. *The Ridge Times.* https://ridgetimes.co.za/138189/mickey-inspires-learners-focus-education/

© University of Pretoria

Mathebula, S. (2019g, June 2). #FirstwatchEntrepreneursChallenge: Ntokozo Nzima from eMbalenhle ends in top 5. *The Ridge Times.* https://ridgetimes.co.za/139025/firstwatchentrepreneurschallenge-ntokozo-nzima-embalenhle-ends-top-5/

Mathebula, S. (2019h, June 19). eMbalenhle residents demand action against electricity crisis. *The Ridge Times.* https://ridgetimes.co.za/142865/embalenhle-residents-demand-action-electricity-crisis/

Mathebula, S. (2019i, September 11). 7 Year old allegedly raped by her father in Ext 18, eMbalenhle. *The Ridge Times*. https://ridgetimes.co.za/145402/7-year-old-girl-allegedly-raped-father-ext18-embalenhle/

Mathebula, S. (2019j, September 15). Secondary school learners march against crime, *The Ridge Times.* https://ridgetimes.co.za/145510/watch-secondary-school-learners-march-crime/

Mathebula, S. (2019k, October 17). eMbalenhle mother is in custody for child neglect*. The Ridge Times.* https://ridgetimes.co.za/147134/embalenhle-mother-custody-child-neglect/

Mathebula, S. (2019l, December 2). Local youth form part of Canadian study project. *The Ridge Times.* https://ridgetimes.co.za/151410/local-youth-form-part-canadian-study-project/

Mathews, S., & Benvenuti, P. (2014). Violence against children in South Africa: Developing a prevention agenda. In S. Mathews, L. Jamieson, L. Lake & C. Smith (Eds.), *South African child gauge*, (pp. 26-34). Children's Institute, University of Cape Town.

Matlali, R. M. (2019). *Personal protective resources supporting adolescent resilience to the challenges of a petrochemical-affected community* [Master's mini-dissertation]. University of Pretoria.

© University of Pretoria

Matshabane, O. P. (2016). *Exploring the influence of role models on the career development process of school-going adolescents from a low-income community in South Africa* [Doctoral dissertation, Stellenbosch University]. http://hdl.handle.net/10019.1/100356

Matsopoulos, A., & Luthar, S. S. (2020). Parents, caregivers and educators: The forgotten stakeholders in the discussion of resilience — An international perspective. *International Journal of School & Educational Psychology, 8*(2), 75-77. https://doi.org/10.1080/21683603.2020.1734126

Matumba, L. (2015, November 15). Clinic staff admit a shortage of nurses. *The Ridge Times*. https://ridgetimes.co.za/46164/clinic-staff-admit-a-shortage-of-nurses/

Matumba, L. (2016a, May 12) Bongani is dreaming big. *The Ridge Times.* https://ridgetimes.co.za/63072/bongani-is-dreaming-big/

Matumba, L. (2016b, September 29). Thando desperately requires a special chair. *The Ridge Times*. https://ridgetimes.co.za/73533/thando-needs-a-special-chair/

May, T., & Perry, B. (2017). *Reflexive practice: The essential guide.* SAGE. https://dx.doi.org/10.4135/9781473983052

Mayring, P. (2000). Qualitative content analysis. *Qualitative Social Research 1*(2), 1-10. http://nbnresolving.de/urn:nbn:de:0114-fqs0002204.

Mberengwa, L. R., & Johnson, J. M. (2003). Strengths of Southern African families and their cultural context. *Journal of Family and Consumer Sciences*, *95*(1), 20-25. https://search-proquest-com.uplib.idm.oclc.org/docview/218184164?accountid=14717

McCubbin, L. D., & Moniz, J. (2015). Ethical principles in resilience research: Respect, relevance, reciprocity and responsibility. In L. C. Theron, L. Liebenberg & M. Ungar (Eds.), *Youth resilience and culture: Commonalities and complexities (*pp. 217-229). Springer.

© University of Pretoria

Mchunu, K., & Nkambule, S. (2019). An evaluation of access to adequate housing: A case study of eZamokuhle township, Mpumalanga; South Africa. *Cogent Social Sciences*, *5*(1), 1653618. https://doi.org/10.1080/23311886.2019.1653618.

McNeely, C. A., & Barber, B. K. (2010). How do parents make adolescents feel loved? Perspectives on supportive parenting from adolescents in 12 cultures. *Journal of Adolescent Research*, *25*(4), 601-631. https://doi.org/10.1177/0743558409357235

Melhem, N., Porta, G., Shamseddeen, W., Walker, P., & Brent, D. (2011). Grief in children and adolescents bereaved by sudden parental death. *Archives of General Psychiatry, 68*(9), 911-919. https://doi.org/10.1001/archgenpsychiatry.2011.101

Mendelsohn, A. S., Gill, K., Marcus, R., Robbertze, D., Van de Venter, C., Mendel, E., Mzukwa, L., & Bekker, L. G. (2018). Sexual reproductive healthcare utilisation and HIV testing in an integrated adolescent youth centre clinic in Cape Town, South Africa. *Southern African Journal of HIV Medicine*, *19*(1). https://doi.org/10.4102/sajhivmed.v19i1.826

Miller, C. L., Nkala, B., Closson, K., Chia, J., Cui, Z., Palmer, A., Hogg, R., Kaida, A., Gray, G., & Dietrich, J. (2017). The Botsha Bophelo adolescent health study: A profile of adolescents in Soweto, South Africa. *Southern African Journal of HIV Medicine*, *18*(1), 1-10. http://dx.doi.org/10.4102/sajhivmed.v18i1.731

Misselhorn, A. (2018, June 1). Stop killing our kids, says top cop. *The Ridge Times*. https://ridgetimes.co.za/84202/young-girls-escape-kidnapping/

Misselhorn, A., & Mathebula, S. (2019, June 24). Protest erupts in eMbalenhle. *The Ridge Times*. https://ridgetimes.co.za/140796/breaking-news-protest-errupts-embalenhle/

Mitchell, C., Theron, L. C., Smith, A., & Stuart, J. (2011). Picturing research: An introduction. In L. C. Theron, C. Mitchell, A. Smith & J. Stuart (Eds.), *Picturing research: Drawings as a visual methodology* (pp. 1-16). Sense.

Mitchell, C., Theron, L. C., Stuart, J., Smith, A., & Campbell, Z. (2011). Drawings as research method. In L. C. Theron., C. Mitchell., A. Smith & J. Stuart (Eds.), *Picturing research: Drawings as visual methodology* (pp. 19-36). Sense.

© University of Pretoria

Mkhize, N. (2006). African traditions and the social, economic and moral dimensions of fatherhood. In L. Richter & R. Morrell (Eds.), *Baba: Men and fatherhood in South Africa* (pp. 183–198). HSRC.

Mnyaka, M., & Motlhabi, M. (2005). The African concept of ubuntu/botho and its socio-moral significance. *Black Theology: An International Journal, 3*(2), 215-237. https://doi.org/10.1558/blth.3.2.215.65725

Mohangi, K., Ebersöhn, L., & Eloff, I. (2011). “I am doing okay”: Intrapersonal coping strategies of children living in an institution. *Journal of Psychology in Africa*, *21*(3), 397-404. https://doi.org/10.1080/14330237.2011.10820473

Mokone, J. M. (2006). Challenges experienced by grandparents raising grandchildren: An exploratory study. *Social Work / Maatskaplike Werk*, *42*(2), 187-200. https://doi.org/10.15270/42-2-311

Moletsane, R., Mitchell, C., & Lewin, T. (2015). Gender violence, teenage pregnancy and gender equity policy in South Africa: Privileging the voices of women and girls through participatory visual methods. In J. Parkes (Ed.), *Gender violence in poverty contexts: The educational challenge* (pp. 186-196). Routledge.

Mophosho, M., Widdows, J., & Gomez, M. T. (2009). Relationships between adolescent children and their siblings with cerebral palsy: A pilot study. *Journal on Developmental Disabilities*, *15*(3), 81-87.

Morrow, S. (2005). Quality and trustworthiness in qualitative research in counseling psychology. *Journal of Counseling Psychology, 52*(2), 250-260. http://dx.doi.org.uplib.idm.oclc.org/10.1037/0022-0167.52.2.250

Morse, J. M. (2015). Critical analysis of strategies for determining rigor in qualitative inquiry. *Qualitative Health Research*, *25*(9), 1212-1222. https://doi.org/10.1177/1049732315588501

Mosavel, M., Ahmed, R., Ports, K. A., & Simon, C. (2015). South African, urban youth narratives: Resilience within community. *International Journal of Adolescence and Youth*, *20*(2), 245-255. https://doi.org/10.1080/02673843.2013.785439

© University of Pretoria

Mota, C. P., & Matos, P. M. (2015). Adolescents in institutional care: Significant adults, resilience and well-being. *Child & Youth Care Forum, 44*(2), 209-224. https://doi.org/10.1007/s10566-014-9278-6

Mtshali, M. N. G. (2015). The relationship between grandparents and their grandchildren in the black families in South Africa. *Journal of Comparative Family Studies*, *46*(1), 75-83. https://doi.org/10.3138/jcfs.46.1.75

Mwamwenda, T. S. (2004). *Educational psychology: An African perspective*. Heinemann.

Myburgh, C., Moolla, A., & Poggenpoel, M. (2015). The lived experiences of children living on the streets of Hillbrow. *Curationis, 38*(1), 1-8. http://dx.doi.org/10.4102/CURATIONIS.V3811.1274

Naidoo, A. V., & Albien, A. J. (2016). Social career influences of Xhosa adolescents elicited using the systems theory framework in a peri-urban South African township. *South African Journal of Higher Education*, *30*(3), 111-137. https://doi.org/10.20853/30-3-668

Ndobo, F., & Sekhampu, T. J. (2013). Determinants of vulnerability to food insecurity in a South African township: A gender analysis. *Mediterranean Journal of Social Sciences*, *4*(14), 311-317. https://doi.org/10.5901/mjss.2013.v4n14p311

Nieuwenhuis, J. (2016). Qualitative research designs and data-gathering techniques. In K. Maree (Ed.), *First steps in research 2* (2nd ed., pp 72-102). Van Schaik.

Nkosi, V., Wichmann, J., & Voyi, K. (2015). Mine dumps, wheeze, asthma, and rhinoconjunctivitis among adolescents in South Africa: Any association? *International Journal of Environmental Health Research*, *25*(6), 583-600. https://doi.org/10.1080/09603123.2014.989493

Norris, S. A., Richter, L. M., & Fleetwood, S. A. (2007). Panel studies in developing countries: Case analysis of sample attrition over the past 16 years within the birth to twenty cohort in Johannesburg, South Africa. *Journal of International Development: The Journal of the Development Studies Association*, *19*(8), 1143-1150. https://doi.org/10.1002/jid.1390

© University of Pretoria

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, *16*(1), 1-13. https://doi.org/10.1177/1609406917733847

Nurmi, J. (2004). Socialization and self-development: Channeling, selection, adjustment and reflection. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (2nd ed., pp. 85-124). Wiley.

Nyasani, E., Sterberg, E., & Smith, H. (2009). Fostering children affected by AIDS in Richards Bay, South Africa: A qualitative study of grandparents' experiences. *African Journal of AIDS Research*, *8*(2), 181-192. https://doi.org/10.2989/AJAR.2009.8.2.6.858

Nyumba, T. O., Wilson, K., Derrick, C. J., & Mukherjee, N. (2018). The use of focus group discussion methodology: Insights from two decades of application in conservation. *Methods in Ecology and Evolution*, *9*(1), 20-32. https://doi.org/10.1111/2041-210X.12860

Odendaal, N. D., & Moletsane, M. (2011). Use of indigenous stone play in child psychological assessment. *Journal of Psychology in Africa*, *21*(4), 623-626. https://doi.org/10.1080/14330237.2011.10820510

Ogina, T. A. (2012). The use of drawings to facilitate interviews with orphaned children in Mpumalanga province, South Africa. *South African Journal of Education*, *32*(4), 428-440. https://hdl.handle.net/10520/EJC126976

Ogina, T. A., & Nieuwenhuis, J. (2010). Gaining access to the experiences of orphaned children – A draw-write and narrate approach. *Qualitative Research Journal*, *10*(2), 51-64. https://search-proquest-com.uplib.idm.oclc.org/docview/881185871?accountid=14717

Oldfield, J., Stevenson, A., Ortiz, E., & Haley, B. (2018). Promoting or suppressing resilience to mental health outcomes in at risk young people: The role of parental and peer attachment and school connectedness. *Journal of Adolescence, 64*, 13-22. https://doi.org/10.1016/j.adolescence.2018.01.002

© University of Pretoria

Olsson, C. A., Bond, L., Burns, J. M., Vella-Brodrick, D. A., & Sawyer, S. M. (2003). Adolescent resilience: A concept analysis. *Journal of Adolescence*, *26*(1), 1-11. https://doi.org/10.1016/S0140-1971(02)00118-5

Olsson, E. (2009). The role of relations: Do disadvantaged adolescents benefit more from high-quality social relations? *Acta Sociologica*, *52*(3), 263-286. https://doi.org/10.1177/0001699309339802

Ostaszewski, K., & Zimmerman, M. A. (2006). The effects of cumulative risks and promotive factors on urban adolescent alcohol and other drug use: A longitudinal study of resiliency. *American Journal of Community Psychology*, *38*(3-4), 251-262. https://doi.org/10.1007/s10464-006-9076-x

Packer-Muti, B. (2010). Conducting a focus group. *The Qualitative Report*, *15*(4), 1023-1026. https://search-proquest-com.uplib.idm.oclc.org/docview/757177709?accountid=14717

Panter-Brick, C. (2015). Culture and resilience: Next steps for theory and practice. In L. C. Theron, L. Liebenberg & M. Ungar (Eds.), *Youth resilience and culture: Commonalities and complexities* (pp. 233-244). Springer.

Panter-Brick, C., & Eggerman, M. (2011). Understanding culture, resilience and mental health: The production of hope. In M. Ungar (Ed.), *The social ecology of resilience* (pp 369-386). Springer.

Panter-Brick, C., & Leckman, J. F. (2013). Editorial commentary: Resilience in child development interconnected pathways to wellbeing. *Journal of Child Psychology and Psychiatry*, *54*(4), 333-336. https://doi.org/10.1111/jcpp.12057

Panter-Brick, C., Hadfield, K., Dajani, R., Eggerman, M., Ager, A., & Ungar, M. (2018). Resilience in context: A brief and culturally grounded measure for Syrian refugee and Jordanian host-community adolescents. *Child Development, 89*(5), 1803–1820. https://doi.org/10.1111/cdev.12868

© University of Pretoria

Patton, G. C., Sawyer, S. M., Santelli, J.S., Ross, D. A., Afifi, R., Allen, N. B, Arora, M., Azzopardi, P., Baldwin, W., Bonell, C., Kakuma, R., Kennedy, E. Mahon, J., McGovern, T. Mokdad, A. H., Patel, V., Petroni, S., Reavley, N., Taiwo, K., ... Viner, R. M. (2016). Our future: The Lancet commission on adolescent health and well-being. *The Lancet, 387*(10036). http://dx.doi.org/10.1016/S0140-6736(16)00579-1

Patton, W., & McMahon, M. (2014). *Career development and systems theory: Connecting theory and practice* (Vol. 2). Springer.

Pauw, C., Garland, R. M., Oosthuizen, R., Albers, P., John, J., & Wright, C. Y. (2011). Air quality and human health among a low income community in the Highveld priority area. *Clean Air Journal / Tydskrif vir Skoon Lug*, *20*(1), 12-20. https://hdl.handle.net/10520/EJC27356

Pearce, M. J., Little, T. D., & Perez, J. E. (2003). Religiousness and depressive symptoms among adolescents. *Journal of Clinical Child and Adolescent Psychology*, *32*(2), 267-276. https://doi.org/10.1207/S15374424JCCP3202_12

Pelser, E. (2008). Learning to be lost: Youth crime in South Africa. *Discussion papers for the Human Sciences Research Council (HSRC) Youth Policy Initiative*, 1-14.

Petersen, I., Bhana, A., Myeza, N., Alicea, S., John, S., Holst, H., McKay, M., & Mellins, C. (2010). Psychosocial challenges and protective influences for socio-emotional coping of HIV+ adolescents in South Africa: A qualitative investigation. *AIDS Care*, *22*(8), 970-978. https://doi.org/10.1080/09540121003623693

Petkova, V., Lockie, S., Rolfe, J., & Ivanova, G. (2009). Mining developments and social impacts on communities: Bowen basin case studies. *Rural Society, 19*, 211-228. http://dx.doi.org/10.5172/rsj.19.3.211

Phasha, T. N. (2010). Educational resilience among African survivors of child sexual abuse in South Africa. *Journal of Black Studies*, *40*(6), 1234-1253. https://doi.org/10.1177/0021934708327693

© University of Pretoria

Pheto, B. (2018, December 6). High school pupils battle it out for the title of top researchers. *Sunday Times Live.* https://www.timeslive.co.za/news/south-africa/2018-12-06-high-school-pupils-battle-it-out-for-the-title-of-top-researchers/

Pienaar, A., Swanepoel, Z., Van Rensburg, H., & Heunis, C. (2011). A qualitative exploration of resilience in pre-adolescent aids orphans living in a residential care facility. *Sahara-J: Journal of Social Aspects of HIV/AIDS, 8*(3), 128-37. https://doi.org/10.1080/17290376.2011.9724995

Pienaar, E. (2014, April 29). Poor people not considered. *The Ridge Times*. https://ridgetimes.co.za/13093/poor-people-not-considered/

Pillay, J. (2014). Challenges educational psychologists face working with vulnerable children in Africa: Integration of theory and practice. In T. Corcoran (Ed.). *Psychology in education: Critical theory-practice* (pp. 95-112). Sense.

Pinkerton, J., & Dolan, P. (2007). Family support, social capital, resilience and adolescent coping. *Child & Family Social Work*, *12*(3), 219-228. https://doi.org/10.1111/j.1365-2206.2007.00497.x

Polit, D.F., & Beck, C.T. (2014). *Essentials of nursing research: Appraising evidence for nursing practice* (8th ed.). Wolters Kluwer.

Pope, A. C., & Dockery, D. W. (2006). Health effects of fine particulate air pollution: Lines that connect. *Journal of the Air and Waste Management Association, 56*(6), 709-742. https://doi.org/10.1080/10473289.2006.10464485

Pope, C. A., Ezzati, M., & Dockery, D. W. (2009). Fine-particulate air pollution and life expectancy in the United States. *New England Journal of Medicine, 360*(4), 376-386. http://dx.doi.org.uplib.idm.oclc.org/10.1056/NEJMsa0805646

Pretorius, B., Bak, M., & Soji, Z. (2015). Coping strategies and resilience in youth-headed households – the case of the Nelson Mandela Metro. *Africa Insight*, *44*(4), 124-141. https://hdl.handle.net/10520/EJC180679

© University of Pretoria

Pretorius, I. (2015). *Impacts and control of coal-fired power station emissions in South Africa* [Doctoral dissertation, North-West University]. http://hdl.handle.net/10394/20503

Pretorius, T., & Theron, L. (2018). 'A Pillar of Strength': Empowering women and the resilience of township-dwelling adolescents. *Young*, *27*(4), 373-394. https://doi.org/10.1177/1103308818795081

Price, J. H., & Murnan, J. (2004). Research limitations and the necessity of reporting them. *American Journal of Health Education*, *35*(2), 66-67. https://search-proquest-com.uplib.idm.oclc.org/docview/212630719?accountid=14717

Pritchett, R., Rochat, S. J. J., Tomlinson, M., & Minnis, H. (2013). Risk factors for vulnerable youth in urban townships in South Africa: The potential contribution of reactive attachment disorder. *Vulnerable Children and Youth Studies, 8*(4), 310-320. https://doi.org/10.1080/17450128.2012.756569

Punch, S. (2002). Research with children: the same or different from research with adults? *Childhood*, *9*(3), 321-341. https://doi.org/10.1177/0907568202009003005

Raftopoulos, M., & Bates, G. (2011). 'It's that knowing that you are not alone': The role of spirituality in adolescent resilience. *International Journal of Children's Spirituality*, *16*(2), 151-167. https://doi.org/10.1080/1364436X.2011.580729

Raghavan, S., & Sandanapitchai, P. (2020). The relationship between cultural variables and resilience to psychological trauma: A systematic review of the literature. *Traumatology*. https://doi.org/10.1037/trm0000239

Ramose, M. (2015). Ecology through Ubuntu. In R. Meinhold (Ed.), *Environmental values: Emerging from cultures and religions of the ASEAN region* (pp. 69-76). Assumption University of Thailand.

Ratele, K. (2019). *The world looks like this from here: Thoughts on African psychology*. Wits University Press.

© University of Pretoria

Reitz, A. K., Zimmermann, J., Hutteman, R., Specht, J., & Neyer, F. J. (2014). How peers make a difference: The role of peer groups and peer relationships in personality development. *European Journal of Personality*, *28*(3), 279-288. https://doi.org/10.1002/per.1965

Rice, F., & Dolgin, K. (2005). *The adolescent: Development, relationships, and culture* (11th ed.). Allyn & Bacon.

Robin, L., & Omar, H. A. (2014). Adolescent bereavement. In J. Merrick, A. Tenenbaum & H. A. Omar (Eds.), *School, adolescence, and health issues* (pp. 97-108). Nova Science Publishers.

Romero, R., Hall, J., & Cluver, L. (2019). Exposure to violence, teacher support, and school delay amongst adolescents in South Africa. *British Journal of Educational Psychology*, *89*(1), 1-21. https://doi.org/10.1111/bjep.12212

Rosenbaum, L. (2017). *Exploring the social ecological factors that contribute to the resilience of adolescents living with HIV in South Africa: A photovoice study* [Unpublished Doctoral dissertation]. The Chicago School of Professional Psychology.

Rowe, W. E. (2014). Positionality. In D. Coghlan & M. Brydon-Miller (Eds.). *The SAGE encyclopedia of action research* (pp. 168-170). SAGE. https://doi.org/10.4135/9781446294406

Rutter, M. (2001). Psychosocial adversity: Risk, resilience and recovery. In J. M. Richman & M. W. Fraser (Eds.), *The context of youth violence: Resilience, risk, and protection* (pp. 13-41). Praeger.

Rutter, M. (2013). Annual research review: Resilience – clinical implications. *Journal of Child Psychology and Psychiatry*, *54*(4), 474-487. https://doi.org/10.1111/j.1469-7610.2012.02615.x

Ryan, J., Roman, N. V., & Okwany, A. (2015). The effects of parental monitoring and communication on adolescent substance use and risky sexual activity: A systematic review. *The Open Family Studies Journal*, *7*(1), 12-17. https://doi.org/10.2174/1874922401507010012

© University of Pretoria

RYSE Project. (n.d.). *Project overview.* http://ryseproject.org/about/

Sameroff, A., Morrison Gutman, L., & Peck, S. C. (2003). Adaptation among youth facing multiple risks: Prospective research findings. In S. S. Luthar (Ed.), *Resilience and vulnerability: Adaptation in the context of childhood adversities* (pp. 364-391). Cambridge University Press.

Sanders, J., Munford, R., & Liebenberg, L. (2016). The role of teachers in building resilience of at risk youth. *International Journal of Educational Research*, *80*, 111-123. https://doi.org/10.1016/j.ijer.2016.10.002

Sawyer, S. M., Azzopardi, P. S., Wickremarathne, D., & Patton, G. C. (2018). The age of adolescence. *The Lancet: Child & Adolescent Health*, *2*(3), 223-228. https://doi.org/10.1016/S2352-4642(18)30022-1

Schlenker, W., & Walker, W. R. (2011). *The effect of airports on air quality and respiratory problems* (Working paper). Columbia University.

Schurink, W., Fouché, C. B., & De Vos, A. S. (2014). Qualitative data analysis and interpretation. In A. S. de Vos, H. Strydom, C. B. Fouché & C. S. L. Delport (Eds.), *Research at grass roots: For the social sciences and human service professions* (4th ed., pp. 397-423). Van Schaik.

Schwartz, K. D., Theron, L. C., & Scales, P. C. (2017). Seeking and finding positive youth development among Zulu youth in South African townships. *Child Development*, *88*(4), 1079-1086. https://doi.org/10.1111/cdev.12869

Schwarz, B., Mayer, B., Trommsdorff, G., Ben-Arieh, A., Friedlmeier, M., Lubiewska, K., Mishra, R., & Peltzer, K. (2012). Does the importance of parent and peer relationships for adolescents' life satisfaction vary across cultures? *The Journal of Early Adolescence*, *32*(1), 55-80. https://doi.org/10.1177/0272431611419508

Scorgie, F., Baron, D., Stadler, J., Venables, E., Brahmbhatt, H., Mmari, K., & Delany-Moretlwe, S. (2017). From fear to resilience: Adolescents' experiences of violence in inner-city Johannesburg, South Africa. *BMC Public Health*, *17*(3), 441-454. https://doi.org/10.1186/s12889-017-4349-x

© University of Pretoria

Seidman, E., & Pedersen, S. (2003). Holistic contextual perspectives on risk, protection, and competence among low-income and urban adolescents. In S. Luthar (Ed.), *Resilience and vulnerability: Adaptation in the context of childhood adversities* (pp. 318-342). Cambridge.

Seiffge-Krenke, I. (2013). *Stress, coping, and relationships in adolescence*. Psychology Press.

Sekhampu, T. J. (2013). Determinants of poverty in a South African township. *Journal of Social Science, 34*(2), 145-153. https://doi.org/10.1080/09718923.2013.11893126

Seligman, M. E. P. (2002). Positive psychology, positive prevention, and positive therapy. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (p. 3–9). Oxford University Press.

Semrud-Clikeman, M., & Ellison, P. A. T. (2009). *Child neuropsychology: Assessment and interventions for neurodevelopmental disorder* (2nd ed.). Springer.

Sguazzin, A. (2019, July 28). Sasol's South Africa plants threatened by emission standards. *Bloomberg.* https://www.bloomberg.com/news/articles/2019-07-28/sasol-s-south-african-plants-threatened-by-emission-standards.

Shaffer, D. R., & Kipp, K. (2013). *Developmental psychology: Childhood and adolescence*. Cengage Learning.

Shandro, J. A., Veiga, M. M., Shoveller, J., Scoble, M., & Koehoorn, M. (2011). Perspectives on community health issues and the mining boom-bust cycle. *Resources Policy, 36*,178-186. http://dx.doi.org/10.1016/j.resourpol

Sharer, M., Cluver, L., Shields, J. J., & Ahearn, F. (2016). The power of siblings and caregivers: Under-explored types of social support among children affected by HIV and AIDS. *Aids Care*, *28*, 110-117. https://doi.org/10.1080/09540121.2016.1178942

Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, *22*(2), 63-75. https://doi-org.uplib.idm.oclc.org/10.3233/EFI-2004-223-401

© University of Pretoria

Shezi, B., & Wright, C. Y. (2018). Household air pollution exposure and respiratory health outcomes: a narrative review update of the South African epidemiological evidence. *Clean Air Journal*, *28*(1), 43-56. http://dx.doi.org/10.17159/2410-972x/2018/v28n1a11

Silverman, D. (2014). *Interpreting qualitative data* (5th ed.) SAGE.

Silverman, M. N., & Deuster, P. A. (2014). Biological mechanisms underlying the role of physical fitness in health and resilience. *Interface Focus*, *4*(5). https://doi.org/10.1098/rsfs.2014.0040

Singh, S., & Naicker, P. (2019). Development of resilience in teenage mothers within contextual realities of poor rural South Africa. *Journal of Poverty*, *23*(7), 559-575. https://doi.org/10.1080/10875549.2019.1616038

Sithole, S. (2019). Community support and the resilience of youth in stressed environments. [Master's mini-dissertation]. University of Pretoria.

Skop, M. (2016). The art of body mapping: A methodological guide for social work researchers. *Aotearoa New Zealand Social Work*, *28*(4), 29-43. http://dx.doi.org/10.11157/anzswj-vol28iss4id295

Skovdal, M., & Daniel, M. (2012). Resilience through participation and coping-enabling social environments: The case of HIV-affected children in sub-Saharan Africa. *African Journal of AIDS Research, 11*(3), 153-164. https://doi.org/10.2989/16085906.2012.734975

Skovdal, M., Ogutu, V. O., Aoro, C., & Campbell, C. (2009). Young carers as social actors: Coping strategies of children caring for ailing or ageing guardians in Western Kenya. *Social science & medicine*, *69*(4), 587-595. https://doi.org/10.1016/j.socscimed.2009.06.016

Smetana, J. G. (2010). *Adolescents, families, and social development: How teens construct their worlds*. Wiley.

© University of Pretoria

Smit, S., Wood, L., & Neethling, M. (2015). Helping learners think more hopefully about life after school: The usefulness of participatory visual strategies to make career education more contextually relevant. *Perspectives in Education*, *33*(3), 121-140. https://hdl.handle.net/10520/EJC178495

Soji, Z., Pretorius, B., & Bak, M. (2015). Coping strategies and resilience in youth-headed households – the case of the Nelson Mandela Metro. *Africa Insight*, *44*(4), 124-141. https://hdl.handle.net/10520/EJC180679

Sommer, J., Hinsberger, M., Elbert, T., Holtzhausen, L., Kaminer, D., Seedat, S., Madikane, S., & Weierstall, R. (2017). The interplay between trauma, substance abuse and appetitive aggression and its relation to criminal activity among high-risk males in South Africa. *Addictive Behaviors*, *64*, 29-34. https://doi.org/10.1016/j.addbeh.2016.08.008

Sotuku, N., & Duku, E. (2015) Ethics in human science research. In C. Okeke & M. van Wyk (Eds.), *Educational research: An African approach* (pp. 112-130). Oxford University Press.

Southerland, J. L., Zheng, S., Dula, M., Cao, Y., & Slawson, D. L. (2016). Relationship between physical activity and suicidal behaviors among 65,182 middle school students. *Journal of Physical Activity and Health*, *13*(8), 809-815. https://doi.org/10.1123/jpah.2015-0315

Spear, H. J., & Kulbok, P. (2004). Autonomy and adolescence: A concept analysis. *Public Health Nursing*, *21*(2), 144-152. https://doi.org/10.1111/j.0737-1209.2004.021208.x

Stanger, C. (2011). *Research methods for the behavioural sciences* (4th ed.). Wadsworth.

Statistics South Africa. (2011). *Census 2011.* https://www.statssa.gov.za/publications/P03014/P030142011.pdf

Statistics South Africa. (2018). *Demographic profile of adolescents in South Africa.* http://www.statssa.gov.za/publications/Report%2003-00-10/Report%2003-00-102016.pdf

© University of Pretoria

Steyn, M., & Van Zyl, M. (2009). *The prize and the price: Shaping sexualities in South Africa*. HSRC.

Strydom, H. (2014). Sampling in the quantitative paradigm. In A. S. de Vos, H. Strydom, C. B. Fouché, & C. S. L. Delport (Eds.), *Research at grass roots: For the social sciences and human service professions* (4th ed., pp. 222-235). Van Schaik.

Strydom, H., & Delport, C. S. L. (2014). Sampling and pilot study in qualitative research. In A. S. de Vos, H. Strydom, C. B. Fouché, & C. S. L. Delport (Eds.), *Research at grass roots: For the social sciences and human service professions* (4th ed., pp. 390-396). Van Schaik.

Stuckey, H. L. (2015). The second step in data analysis: Coding qualitative research data. *Journal of Social Health and Diabetes*, *3*(1), 7-10. https://doi.org/10.4103/2321-0656.140875

Swart, A., & Pettipher, R. (2016). A framework for understanding inclusion. In E. Landsberg (Ed.), *Addressing barriers to learning: A South African perspective* (pp.3-28). Van Schaik.

Swartz, S., Harding, J., & De Lannoy, A. (2012). "Ikasi style" and the quiet violence of dreams: A critique of youth belonging in post-apartheid South Africa. *Comparative Education, 48*(1), 27-40. https://doi.org/10.1080/03050068.2011.637761

Terre Blanche, M., Kelly, K., & Durrheim, K. (2006). Why qualitative research? In M. Terre Blanche, K. Durrheim & D. Painter (Eds.), *Research in practice*. University of Cape Town Press.

Thabethe, N. D., Engelbrecht, J. C., Wright, C. Y., & Oosthuizen, M. A. (2014). Human health risks posed by exposure to PM10 for four life stages in a low socio-economic community in South Africa. *The Pan African Medical Journal*, *18*, 206-206. https://doi.org/10.11604/pamj.2014.18.206.3393

Theron, L. C. (2007). Uphenyo ngokwazi kwentsha yasemalokishini ukumelana nesimo esinzima: A South African study of resilience among township youth. *Child and Adolescent Psychiatric Clinics of North America*, *16*(2), 357-375. https://doi.org/10.1016/j.chc.2006.12.005

© University of Pretoria

Theron, L. C. (2012). Resilience research with South African youth: Caveats and ethical complexities. *South African Journal of Psychology*, *42*(3), 333-345. https://doi.org/10.1177/008124631204200305

Theron, L. C. (2016a). Researching resilience: Lessons learned from working with rural, Sesotho-speaking young people. *Qualitative Research, 16*(6), 720-737. https://doi.org/10.1177/1468794116652451

Theron, L. C. (2016b). The everyday ways that school ecologies facilitate resilience: Implications for school psychologists. *School Psychology International*, *37*(2), 87-103. https://doi.org/10.1177/0143034315615937

Theron, L. C. (2016c). Toward a culturally and contextually sensitive understanding of resilience: Privileging the voices of Black, South African young people. *Journal of Adolescent Research*, *31*(6), 635-670. https://doi.org/10.1177/0743558415600072

Theron L.C. (2018). Teacher championship of resilience: Lessons from the Pathways to Resilience Study, South Africa. In M. Wosnitza, F. Peixoto, S. Beltman & C. Mansfield (Eds.), *Resilience in education* (pp. 203-217). Springer.

Theron, L. C. (2019). Championing the resilience of sub-Saharan adolescents: Pointers for psychologists. *South African Journal of Psychology*, *49*(3), 325-336. https://doi.org/10.1177/0081246318801749

Theron, L. C. (2020). Adolescent versus adult explanations of resilience enablers: A South African study. *Youth & Society*, *52*(1), 78-98. https://doi.org/10.1177/0044118X17731032

Theron, L. C., & Donald, D. R. (2012). Educational psychology and resilience in developing contexts: A rejoinder to Toland and Carrigan (2011). *School Psychology International*, *34*(1), 51-66. https://doi.org/10.1177/0143034311425579

Theron, L. C., & Dunn, N. (2010). Enabling white, Afrikaans-speaking adolescents towards post-divorce resilience: Implications for educators. *South African Journal of Education, 30*(2), 231-244. https://hdl.handle.net/10520/EJC32234

© University of Pretoria

Theron, L. C., & Engelbrecht, P. (2012). Caring teachers: Teacher–youth transactions to promote resilience. In M. Ungar (Ed.), *The social ecology of resilience: A handbook of theory and practice* (pp. 265-280). Springer.

Theron, L. C., & Jefferis, T. C. (2015). Community-based participatory video: Exploring and advocating for girls' resilience. *Perspectives in Education*, *33*(4), 75-91. https://hdl.handle.net/10520/EJC185869

Theron, L. C., & Liebenberg, L. (2015). Innovative qualitative explorations of culture and resilience. In L. C. Theron, L. Liebenberg & M. Ungar (Eds.), *Youth resilience and culture: Commonalities and complexities* (pp. 203-215). Springer.

Theron, L. C., & Phasha, N. (2015). Cultural pathways to resilience: Opportunities and obstacles as recalled by black South African students. In L. C. Theron, L. Liebenberg & M. Ungar (Eds.), *Youth resilience and culture* (pp. 51-65). Springer.

Theron, L. C., & Theron, A. (2010). A critical review of studies of South African youth resilience, 1990-2008. *South African Journal of Science*, *106*(7-8), 1-8. https://doi-org.uplib.idm.oclc.org/10.4102/sajs.v106i7/8.252

Theron, L. C., & Theron, A. (2013). Positive adjustment to poverty: How family communities encourage resilience in traditional African contexts. *Culture & Psychology*, *19*(3), 391-413. https://doi.org/10.1177/1354067X13489318

Theron, L. C., & Theron, A. M. (2014). Education services and resilience processes: Resilient black South African students' experiences. *Children and Youth Services Review*, *47*, 297-306. https://doi.org/10.1016/j.childyouth.2014.10.003

Theron, L. C., & Ungar, M. (2019). Adolescent resilience in the face of relentless adversity: The role of strong, black women. In I. Eloff (Ed.), *Handbook of quality of life in African societies* (pp. 97-111). Springer.

Theron, L. C., & Van Rensburg, A. (2018). Resilience over time: Learning from school-attending adolescents living in conditions of structural inequality. *Journal of Adolescence*, *67*, 167-178. https://doi.org/10.1016/j.adolescence.2018.06.012

© University of Pretoria

Theron, L. C., Cameron, C. A., Didkowsky, N., Lau, C., Liebenberg, L., & Ungar, M. (2011). A "day in the lives" of four resilient youths: Cultural roots of resilience. *Youth & Society, 43*(3), 799-818. https://doi.org/10.1177/0044118X11402853

Theron, L. C., Liebenberg, L., & Malindi, M. (2014). When schooling experiences are respectful of children's rights: A pathway to resilience. *School Psychology International, 35*(3), 253-265. https://doi.org/10.1177/0142723713503254

Theron, L. C., Theron, A. M., & Malindi, M. J. (2013). Toward an African definition of resilience: A rural South African community's view of resilient Basotho youth. *Journal of Black Psychology*, *39*(1), 63-87. https://doi.org/10.1177/0095798412454675

Tobin, G. A., & Begley, C. M. (2004). Methodological rigour within a qualitative framework. *Journal of Advanced Nursing, 48*, 388-396. https://doi.org/10.1111/j.1365-2648.2004.03207.x

Toska, E., Cluver, L. D., Boyes, M. E., Isaacsohn, M., Hodes, R., & Sherr, L. (2017). School, supervision and adolescent-sensitive clinic care: Combination social protection and reduced unprotected sex among HIV-positive adolescents in South Africa. *AIDS and Behavior*, *21*(9), 2746-2759. https://doi.org/10.1007/s10461-016-1539-y

Tracy, S. J. (2013). *Qualitative research methods: Collecting evidence, crafting, analysis, communicating impact.* Wiley.

Tshishonga, N. S. (2019). The effects of intergenerational poverty and unemployment on South African township youth. In N. S. Tshishonga, *Participation of young people in governance processes in Africa* (pp. 1-21). IGI Global.

UNESCO. (2000). *Education for all: Meeting our collective commitments. Notes on the Dakar Framework for Action*. World Education Forum.

Ungar, M. (2003). Qualitative contributions to resilience research. *Qualitative Social Work*, *2*(1), 85-102. https://doi.org/10.1177/1473325003002001123

© University of Pretoria

Ungar, M. (2004). A constructionist discourse on resilience: Multiple contexts, multiple realities among at-risk children and youth. *Youth & Society*, *35*(3), 341-365. https://doi.org/10.1177/0044118X03257030

Ungar, M. (2011). The social ecology of resilience: Addressing contextual and cultural ambiguity of a nascent construct. *American Journal of Orthopsychiatry, 81*(1), 1-17. https://doi.org/10.1111/j.1939-0025.2010.01067.x

Ungar, M. (2012a). Researching and theorizing resilience across cultures and contexts. *Preventive Medicine*, *55*(5), 387–389. https://doi.org/10.1016/j.ypmed.2012.07.021

Ungar, M. (2012b). Social ecologies and their contribution to resilience. In M. Ungar (Ed.), *The social ecology of resilience* (pp. 13-32). Springer.

Ungar, M. (2013). Resilience, trauma, context, and culture. *Trauma, Violence, & Abuse,14*(3), 255-266. https://doi.org/10.1177/1524838013487805

Ungar, M. (2015). Practitioner review: Diagnosing childhood resilience – a systemic approach to the diagnosis of adaptation in adverse social and physical ecologies. *Journal of Child Psychology and Psychiatry*, *56*(1), 4-17. https://doi.org/10.1111/jcpp.12306

Ungar, M., Brown, M., Liebenberg, L., & Othman, R. (2007). Unique pathways to resilience across cultures. *Adolescence*, *42*(166), 287-310. https://search-proquest-com.uplib.idm.oclc.org/docview/195945008?accountid=14717

Ungar, M., Connelly, G., Liebenberg, L., & Theron, L. (2019). How schools enhance the development of young people's resilience. *Social Indicators Research*, *145*(2), 615-627. https://doi.org/10.1007/s11205-017-1728-8

Vaismoradi, M., Jones, J., Turunen, H., & Snelgrove, S. (2016). Theme development in qualitative content analysis and thematic analysis. *Journal of Nursing Education and Practice,* 6(5), 100-110. http://dx.doi.org/10.5430/jnep.v6n5p100

© University of Pretoria

Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing & Health Sciences*, *15*(3), 398-405. https://doi.org/10.1111/nhs.12048

Van Aswegen, R. (2019). Family enablers of the resilience of youth living in industrialised communities. [Master's mini-dissertation]. University of Pretoria.

Van Breda, A. D. (2010). Possible selves: Group work with young people in a South African township. *Practice: Social Work in Action*, *22*(3), 181-192. https://doi.org/10.1080/09503153.2010.485678

Van Breda, A. D. (2015). Journey towards independent living: A grounded theory investigation of leaving the care of Girls & Boys Town, South Africa. *Journal of Youth Studies*, *18*(3), 322-337. https://doi.org/10.1080/13676261.2014.963534

Van Breda, A. D. (2017). A comparison of youth resilience across seven South African sites. *Child & Family Social Work*, *22*(1), 226-235. https://doi.org/10.1111/cfs.12222

Van Breda, A. D. (2018). Resilience of vulnerable students transitioning into a South African university. *Higher Education*, *75*(6), 1109-1124. https://doi.org/10.1007/s10734-017-0188-z

Van Breda, A. D., & Dickens, L. (2017). The contribution of resilience to one-year independent living outcomes of care-leavers in South Africa. *Children and Youth Services Review*, *83*, 264-273. https://doi.org/10.1016/j.childyouth.2017.11.009

Van Breda, A. D., & Theron, L. C. (2018). A critical review of South African child and youth resilience studies, 2009–2017. *Children and Youth Services Review*, *91*, 237-247. https://doi.org/10.1016/j.childyouth.2018.06.022

Van Rensburg, A. C., Theron, L. C., Rothmann, S., & Kitching, A. (2013). The relationship between services and resilience: A study of Sesotho-speaking youths. *The Social Work Practitioner-Researcher, 25*(3), 286-308. http://hdl.handle.net/10394/13298

© University of Pretoria

Van Rensburg, A., Theron, L., & Rothmann, S. (2018). Adolescent perceptions of resilience promoting resources: The South African pathways to resilience study. *South African Journal of Psychology, 48*(1), 73-85. doi:10.1177/0081246317700757

Van Rensburg, E., & Barnard, C. (2005). Psychological resilience among sexually-molested girls in the late middle-childhood: A case study approach. *Child Abuse Research in South Africa*, *6*(1), 1-12. https://hdl.handle.net/10520/EJC24294

Van Schalkwyk, I., & Wissing, M. P. (2010). Psychosocial well-being in a group of South African adolescents. *Journal of Psychology in Africa*, *20*(1), 53-60. https://doi.org/10.1080/14330237.2010.10820342

Van Wyk, M. (2016). Afrocentricity is a research philosophy. In C. Okeke & M. van Wyk (Eds.), *Educational research: An African approach* (pp. 3-18). Oxford University Press.

Van Wyk, M. & Taole, M. (2016). Research design. In C. Okeke & M. van Wyk (Eds.), *Educational research: An African approach* (pp. 164-185). Oxford University Press

Vermeulen, T., & Greeff, A. P. (2015). Family resilience resources in coping with child sexual abuse in South Africa. *Journal of Child Sexual Abuse*, *24*(5), 555-571. https://doi.org/10.1080/10538712.2015.1042183

Visser, M., & Routledge, L. A. (2007). Substance abuse and psychological well-being of South African adolescents. *South African Journal of Psychology*, *37*(3), 595-615. https://doi.org/10.1177/008124630703700313

Vogel, H. M. (2001). Coping skills for street children. *Educare*, *30*(1), 229-248. https://hdl.handle.net/10520/EJC31723

Walsh, F. (2003). Crisis, trauma, and challenge: A relational resilience approach for healing, transformation, and growth. *Smith College Studies in Social Work, 74*(1), 49-71. https://doi.org/10.1080/00377310309517704

© University of Pretoria

Walsh, F. (2007). Traumatic loss and major disasters: Strengthening family and community resilience. *Family Process*, *46*(2), 207-227. https://doi.org/10.1111/j.1545-5300.2007.00205.x

Walsh, F. (2016). Applying a family resilience framework in training, practice, and research: Mastering the art of the possible. *Family Process*, *55*(4), 616-632. https://doi.org/10.1111/famp.12260

Wang, L., Bruce, C., & Hughes, H. (2011). Sociocultural theories and their application in information literacy research and education. *Australian Academic & Research Libraries*, *42*(4), 296-308. https://doi.org/10.1080/00048623.2011.10722242

Ward, C., Martin, E., Theron, C., & Distiller, G. (2007). Factors affecting resilience in children exposed to violence. *South African Journal of Psychology, 37*(1), 165-187. https://doi.org/10.1177/008124630703700112

Werner, E. E. (2013). What can we learn about resilience from large-scale longitudinal studies? In S. Goldstein & R. B. Brooks (Eds.), *Handbook of resilience in children* (2nd ed., pp. 87-102). Springer.

Wild, L. G. (2018). Grandparental involvement and South African adolescents' emotional and behavioural health: a summary of research findings. *Contemporary Social Science*, *13*(2), 232-245. https://doi.org/10.1080/21582041.2017.1422536

Wild, L., & Gaibie, F. (2014). Grandparental involvement and South African adolescents' psychological well-being. *Journal of Intergenerational Relationships, 12*(4), 425-441. https://doi.org/10.1080/15350770.2014.961871

Wild, L., Flisher, A., & Robertson, B. (2011). Risk and resilience in orphaned adolescents living in a community affected by AIDS. *Youth & Society, 45*(1), 140-162. https://doi.org/10.1177/0044118X11409256

Williams, N., Reeves, P., Cox, E., & Call, S. (2004). Creating a social work link to the burn community: A research team goes to burn camp. *Social Work in Health Care, 38*(3), 81-103. https://doi.org/10.1300/J010v38n03_05

© University of Pretoria

Wills, G., & Hofmeyr, H. (2019). Academic resilience in challenging contexts: Evidence from township and rural primary schools in South Africa. *International Journal of Educational Research*, *98*, 192-205. https://doi.org/10.1016/j.ijer.2019.08.001

Witter, R., McKenzie, L., Towle, M., Stinson, K., Scott, K., Newman, L., & Adgate, J. (2010). *Health impact assessment for Battlement Mesa, Garfield County Colorado.* University of Colorado.

Wong, F. Y., Huang, Z. J., DiGangi, J. A., Thompson, E. E., & Smith, B. D. (2008). Gender differences in intimate partner violence on substance abuse, sexual risks, and depression among a sample of South Africans in Cape Town, South Africa. *AIDS Education and Prevention*, *20*(1), 56-64. https://doi.org/10.1521/aeap.2008.20.1.56

Wood, L., & Goba, L. (2011). Care and support of orphaned and vulnerable children at school: Helping teachers to respond. *South African Journal of Education*, *31*(2). https://hdl.handle.net/10520/EJC32269

Wood, R., Liang, H., Wu, H., Middelkoop, K., Oni, T., Rangaka, M. X., Wilkinson, R. J., Bekker, L., & Lawn, S. D. (2010). Changing prevalence of TB infection with increasing age in high TB burden townships in South Africa. *International Journal of Tuberculosis and Lung Disease, 14*(4), 406-412. https://www.researchgate.net/publication/41759813_Changing_Prevalence_of_Tuberculosis_Infection_with_Increasing_age_in_High-burden_Towanships_in_South_Africa

Woolfolk, A., & Perry, N. (2014). *Child and adolescent development*. Pearson.

Woollett, N., Cluver, L., Hatcher, A. M., & Brahmbhatt, H. (2016). “To be HIV positive is not the end of the world”: Resilience among perinatally infected HIV positive adolescents in Johannesburg. *Children and Youth Services Review, 70*, 269-275. https://doi.org/10.1016/j.childyouth.2016.09.039

© University of Pretoria

Wright, C. Y., Kapwata, T., Wernecke, B., Garland, R. M., Nkosi, V., Shezi, B., Landman, W. A., & Mathee, A. (2019). Gathering the evidence and identifying opportunities for future research in climate, heat and health in South Africa: The role of the South African Medical Research Council. *South African Medical Journal*, *109*(11b), 20-24. https://doi.org/10.7196/SAMJ.2019.v109i11b.14253

Wright, M. O. & Masten, A. S. (2015). Pathways to resilience in context. In L. C Theron, L. Liebenberg & M. Ungar (Eds.) *Youth resilience and culture: Commonalities and complexities* (pp. 3-22). Springer.

Yendork, J. S., & Somhlaba, N. Z. (2014). Stress, coping and quality of life: An exploratory study of the psychological well-being of Ghanaian orphans placed in orphanages. *Children and Youth Services Review*, *46*, 28-37. https://doi.org/10.1016/j.childyouth.2014.07.025

Yin, R. K. (2016). *Qualitative research from start to finish* (2nd ed.). Guilford Press.

Zautra, A. J. (2014). Resilience is social, after all. In M. Kent, M. C. Davis & J. W. Reich (Eds.), *The resilience handbook: Approaches to stress and* trauma (pp. 185-196). Routledge.

Zimmerman, M. A., Stoddard, S. A., Eisman, A. B., Caldwell, C. H., Aiyer, S. M., & Miller, A. (2013). Adolescent resilience: Promotive factors that inform prevention. *Child Development Perspectives*, *7*(4), 215-220. https://doi.org/10.1111/cdep.12042

Zolkoski, S. M., & Bullock, L. M. (2012). Resilience in children and youth: A review. *Children and Youth Services Review*, *34*(12), 2295-2303. https://doi.org/10.1016/j.childyouth.2012.08.009

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ADDENDA

Addendum A

Flyer for recruitment

Looking for volunteers

Are you:

- **15-24** years old,
- Living in **the eMbalenhle area,** Mpumalanga,
- **affected (negatively or positively)** by the **petrochemical industry** and
- OK speaking, writing and reading **English**?

Do you want to spend time **helping researchers** learn about **what helps young people in communities affected by the petrochemical industry to do OK in life?**

If you answered yes to all of the above,

please ask the person who gave you this advert

for more information about the research project.

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Addendum B

Audit Trail to Illustrate Inductive Data Analysis of Time 3 Data

Bodymapping

Extract 1

Tshego: Ja I make friends everywhere I go, hence why I said being multilingual is a superpower for me. 'Cos it's easier for me to interact with different people hence I am able to have different ideas.

(Part of this interview was omitted for the purposes of this Addendum)

Tshego: Yea! Laduma! So what happened with the group was that there were young people there was different kinds of people and they all had responsibilities you know some had to go to school and some had to go to work so that limited our time together as well. So I sit down and I realise that everything that I try to do keeps on failing you know because nobody has the time you know, I decided that I would move to Joburg because that's where its happening there. I went there and I lived with my aunt. So what I did was I asked for a transfer, I transferred from the Spur that I was working at here in Secunda and then I went to a Spur in Kempton Park, I lived in Thembisa. So there I got exposed to older people. Now, there we had people who worked as waitresses to feed their families to pay for rent and all that. Ja. So that also pushed me cos I had nothing to lose and watching people who had so much to live for push harder and harder everyday also gave me motivation that "you can do this" because if you go to a restaurant and you find people working there you're going to find different people, you're going to find people in the kitchen, you're going to find people on the floor you're going to find people everywhere (yabo) so all those people are people from different places most of the people there were people from Zimbabwe and you know people from Zimbabwe and their survival skills. (Yabo) So that's where I learnt not to ever sit down. Um… I came back that December, 2017, and then 2018, March that was when… between December 2017 and March 2018 that was when I sat down to reevaluate what was happening in my life because I couldn't go to school again in 2018 (yabo) so I went a got a job somewhere else. Crawdaddy's, in… So from March until October I was a waitress at Crawdaddy's and now Crawdaddy's you've got people from … Um… I don't know how to put this… Um… Being a waitress you serve a lot of different people, you know you serve Indians, you serve people from Kasi, you know you serve people who live in the

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suburbs, you know. So being able to interact with those people also gave me a sense of they gave me a home. And people… I can't compare my life to other people's lives.

Extract 2

Zulu: So I even I have seen people… In my relationship to substances I have seen people who have had such encounters with differently traditional healers and stuff like that, their relationship with substances, relationship with each other and other people, it was different, so I saw there was a gap, there was a difference between the two things and I saw it played a huge role in my adaptation to the place or to my relationship to the place.

Draw-write-talk

Extract 1

Gugu**:** … doing things as a family so we know that religion whatever religion, one thing religion teaches is faith you get and then by teaching faith they just teaching you to have like have that thing that it's gonna be okay at some point you know, everything is gonna fine, you gonna be okay at some point or you do have, there's obstacles in the way, something good is gonna happen so like religion helps in a way to vent you know, in a deeper spiritual level and then my second uhm diagram is okay, uhm it's this one uh laughing so laughing helps like laughter is the best medicine so what it does is, whenever you make, okay here in eMba there's a lot of things that happen but we laugh about it now like okay we burnt the mall, we laugh about it now like it was hard during that time but then laughter helps you relate to it, it helps everyone kinda join in and laugh about the difficulty and not take them so hard ja and in a way we come up with solutions you know through a good way through laughter if I can put it like that and then the other one is written 'stukkie and lanie' so me and my friends, I call all of my girlfriends stukkies and then all of my guy friends are lanies so my my my friends most of them are here from eMba some of them I moved with to Pretoria so we always talk about where we come from to people and we always laugh about it, the way we paint this picture that you know where we from its very it's very I don't know funny, like how we grew up you know so I feel like your friends also, because they relate to the whole situation like I said earlier we used to talk about the electricity, that at some point they don't have electricity we do, and then it's their turn like that like that so we'd talk about those kinda things so they'd also understand in that friendship type of level and then lastly it's uhm not lastly me I make things okay when you

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think that it's gonna be okay then it's gonna be okay you know, at some point it's your mind set so uhm if you think you're gonna make it then you gonna make it, there's nothing that can change your mind then lastly my my my family, my siblings make it okay because uh they just like me you know so whatever I talk about most of the time they also relate to it and then my parents also supportive parents you know so they make it okay because I can talk to my parents about whatever and they'll be there as a support structure, they'll be there to guide me, they'll be there every step of the way if I can put it like that so ja these are the things that make it okay.

Extract 2

Lwande: no man don't be like that… laughter… okay so I have this house with 3 people in it, the older one being me, my sister and my brother, well I believe my family makes it okay for me eh I believe I speak for most young people because our families are our pillar of strength so for me it's my siblings, they are my family so they are very positive people by the way so when we are at home we never focus on the negatives and I'm an antisocial freak, I do not have friends, I just have people that I talk to coz for one reason, in matric okay even in matric I didn't have much friends but when I was in high school I had friends and every time maybe if we fail coz I remember I failed grade 11 and all of my friends, instead of feeling sad that we failed we were like yoh we all failed and then laughed it off so I feel that being around people more, okay it's a good thing to be around people but then for me it has never worked out for me coz if I'm going through hardship and then I see someone else is going through the same things I now make it okay like oh I'm not the only one so hence I said my superpower is sleeping coz there I get to be alone, I examine myself and my situation, instead of feeling comfortable around it, I tried or try rather uh to come up with solutions, how to make it okay rather than feeling comfortable in a bad situation.

Extracts that appeared to address my research question	Open code	Axial code/ Candidate themes

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Ja I make friends everywhere I go, hence why I said being multilingual is a superpower for me. 'Cos it's easier for me to interact with different people hence I am able to have different ideas.	Friends_give different ideas that could lead to a "successful life"	Broadening perspectives or inspiring solutions
I went there and I lived with my aunt.	Aunt_ giving her a place to stay	Promotes physical health or fulfils basic needs
Watching [colleagues] who had so much to live for push harder and harder everyday also gave me motivation that "you can do this"	Colleagues_ watching these people motivated her to work harder	Encouraging grit and perseverance
so all those people are people from different places most of the people there were people from Zimbabwe and you know people from Zimbabwe and their survival skills. (Yabo) So that's where I learnt not to ever sit down.	Colleagues_ model perseverance	Encouraging grit and perseverance
So being able to interact with those [customers] also gave me a sense of they gave me a home.	Customers (different races/classes)_ interacting with them "gave me a sense of home" (belonging)	Extend emotional comfort and affective caring
[Peers] who have had such encounters with differently traditional healers and stuff like that, their relationship with substances, relationship with each other and other people, it was different, so I saw there was	Peers_ observed their mistakes and noted how the choices he has made have benefitted him	Encouraging grit and perseverance

a gap, there was a difference between the two things and I saw it played a huge role in my adaptation to the place or to my relationship to the place.	throughout his life, this motivates him to continue on this path	
my friends most of them are here from eMba some of them I moved with to Pretoria so we always talk about where we come from to people and we always laugh about it	Friends_ provides sense of comradery because they "relate to the whole situation"	Extend emotional comfort and affective caring
my siblings make it okay because uh they just like me you know so whatever I talk about most of the time they also relate to it	Siblings_ can relate to the things she talks about	Extend emotional comfort and affective caring
parents also supportive parents you know so they make it okay because I can talk to my parents about whatever and they'll be there as a support structure, they'll be there to guide me, they'll be there every step of the way if I can put it like that	Parents_ they support and guide her "every step of the way"	Extend emotional comfort and affective caring
family makes it okay for me eh I believe I speak for most young people because our families are our pillar of strength	Family_ her "pillar of strength"	Extend emotional comfort and affective caring
my siblings, they are my family so they are very positive people by the way so when we are at home we never focus on the negatives	Siblings_ very positive people, helps her to avoid focusing on the negatives	Extend emotional comfort and affective caring

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I had friends….If we fail coz I remember I failed grade 11 and all of my friends, instead of feeling sad that we failed we were like yoh we all failed and then laughed it off so I feel that being around [friends]… Okay it's a good thing	Friends_ helped her deal with failing grade 11 by laughing with her	Extend emotional comfort and affective caring

Inclusion and Exclusion Criteria

Candidate Theme	Inclusion Criteria	Exclusion Criteria
Extend emotional comfort and affective caring	This theme includes any data that refers to relationships that provides comfort and caring in the form of support, love (sense of belonging), and trust. Also including the provision of a safe emotional space where they are steered away from focusing on the negatives towards positive thinking and engaging in positive activity (e.g., organised religion, education).	This theme excludes any data that refers a relationship that provides care in the form of informational or pragmatic caring. Additionally, it excludes any relationship that provides comfort to the extent where the adolescent becomes dependent.
Broadening perspectives or inspiring solutions	This theme includes any data that refers to a relationship that provides social networks that provide advice or increase access to different cultures or alternative worldviews which results in a	This theme excludes any data that refers to a relationship that provides perspectives on hardship (e.g., a more positive interpretation of hardship or encouragement not to focus on the negative) or promotes passive acceptance of dissatisfying

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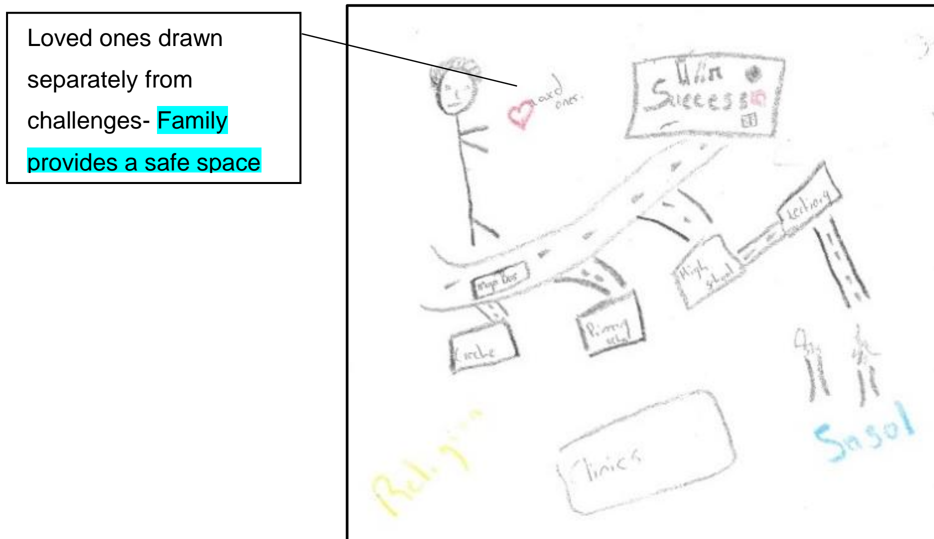
	resource used to succeed or guidance towards a solution.	circumstances. Additionally it excludes any social connections that coerce the adolescent to use specific solutions.
Encouraging grit and perseverance	This theme includes any data that refers to a relationship that encourages tenacity and motivation to persevere.	This theme excludes any data that refers to a relationship that motivates perseverance in behaviour that is antisocial.
Promotes physical health or fulfils basic needs	This theme includes any data that refers to a relationship that provides support which promotes physical health via access to medication and healthy food.	This theme excludes any data that refers to a relationship with a caregiver that provides access to basic resources that are excessive or unhealthy e.g. sugary food.

Figure 33

Sample of inductive data analysis of visual data



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Addendum C

Audit Trail to Illustrate Deductive Data Analysis of Time 1 Data

Bodymapping

Time 1

Extract 1

Thulani: Um, eish... I think it explains a lot, like what you see. 'Cause um from the mind, from the mind I read books. We usually sit together, me and Simphiwe. He stays back opposite my house, so we read a lot of books yeah. So, helps to, you know renew our minds and help get more knowledge about how we can take care of ourselves. Um, also write poetry, so ja. A lot so, our lungs are not quite good, inhaling a lot of... and black people are burning a lot of tires there, a lot of strikes.

Draw-Write-Talk

Time 1

Extract 1

Sparky: I just included the whole community which is basically like one huge family, because they actually, they basically hold together to actually not be affected by what is happening around them. Ja. That's what I wanted to say.

Extracts that appeared to address my research question	Linked theme
…we read a lot of books yeah. So, helps to, you know renew our minds and help get more knowledge about how we can take care of ourselves.	Broadening perspectives or inspiring solutions
whole community which is basically like one huge family, because…they basically hold together to actually not be	Extending emotional comfort and affective caring

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affected by what is happening around them.	

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Addendum D

Excerpt of Researcher Diary: Data Generation

16 March 2019

Reflecting on my experience of working with a co-facilitator:

I was privileged to have a very capable co-researcher who assisted me throughout the data gathering process. We had received training before we visited the research site and because she had already visited the site, she informed me about what I could expect from the day. I found this and her presence during the day to be reassuring. She was also very helpful and assisted with setting up the venue. It was useful to have a co-researcher completing the same tasks as me as this helped me to ensure I was staying on track timewise. However, the group of participants with my co-researcher completed their final task before my group. Although it was only a few minutes earlier, I observed that the participants in my group became more eager to finish up the discussion once they saw the other participants leaving the venue. Fortunately, I had already reached data saturation at this point. It was beneficial to have someone to reflect on this process with and I am grateful for all her effort in ensuring she obtained rich data from her group of participants.

Reflection on my experience throughout the data generation process:

I felt excited to begin the data generation process. It was also my first trip to eMbalenhle ("the pretty flower") so I was not sure about what to expect. I was eager to learn more from the adolescents' experiences on which I would be basing my study of limited scope. However, I was nervous about the number of participants who would attend on the day and whether or not there would be an adequate distribution of gender, age and mother- tongue. When the participants began to arrive I was relieved to realise that they were comfortable communicating with me in English and I was able to develop a good rapport with many of the participants before the data generation process began. I found the adolescents seemed more relaxed after this. I also observed that having other adolescents that they recognised to chat to and catch up with was also an asset which assisted this process. During the data generation process I thoroughly enjoyed getting to know the adolescents and I feel as though, had I had more time, I would have enjoyed getting to know them even better. I was inspired by their resilience and I feel my brief time with them has really made a lasting impact on the way I view resilience in context. Once the data generation was complete, I

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formulated an initial impression of my conversations with the participants. Relational resilience enablers such as relationships with their relatives, their friends and their church community were prominent in their drawings, written pieces and their stories. I am interested to see if these were also prominent with my co-researcher's participants and how these relationships enabled their resilience across the two groups when I complete the analysis.

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Addendum E
Consent form

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education

PARTICIPANT INVITATION AND CONSENT FORM – Activity 2
(Young Adults)

We invite you to participate in a project called: *Patterns of Resilience among Youth in Communities that Depend on Oil and Gas Production and Those Coping with Climate Change*.

Who are we?

We are researchers from the University of Pretoria (South Africa), Dalhousie University (Canada), Royal Roads University (Canada) and Khulisa Social Solutions (South Africa). Our contact details are at the end of this letter if you need them.

What are we doing in this project?

Broadly, we want to learn from you (and other people from the Secunda area) what makes it possible for people to be OK in life when they live in communities which are involved in the oil and gas (petrochemical) industry. We will do the same with people living in North American communities which are involved in and challenged by the petrochemical industry. We will use this information to better understand what makes it possible for people to be healthy and to feel good. We want to use this understanding to make it possible for more people who live in communities involved in the petrochemical industry to be healthy and feel good.

The Research Ethics Committee of the Faculty of Education, University of Pretoria has said it is OK for us to do this study (UP 17/05/01). They know we will work carefully using South Africa's and international ethical rules (this is actually called the guidelines and principles of the international Declaration of Helsinki and the ethical guidelines of the National Health Research Ethics Council). The committee will maybe want to look at the forms you sign (if you say yes to being in this study) to check that we did everything in the right way.

Why are we asking you to be part of this project?

Because you

1. Are 18-24 years old, *and*
2. Are OK speaking English and can read and write in English, and
3. Live in the Secunda area, Mpumalanga, and
4. Have been affected (negatively or positively) by the petrochemical industry,
5. Were recommended as a participant for this project by someone working at Khulisa or by a member of the project's Community Advisory Panel.

Room 4-1.7, Level 4, Building
University of Pretoria, Private Bag X20
Hatfield 0028, South Africa
Tel +27 (0)12 420 1234
Fax +27 (0)12 420 5678
Email name.surname@up.ac.za
www.up.ac.za

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What do you need to know?

You can say no. If you say no, there will be no problem, you don't need to give a reason. Even if you say yes now, it is OK for you to change your mind later and stop taking part.

If something (like drug use) makes it hard for you to understand clearly what this project is about, we will not be able to let you take part.

If you say yes, what will you be asked to do?

You will be asked to participate in a research activity

Date and time	Place	Description
Date: ____________________ Time: ____________________	Embalenhle Sasol Club	We will ask you (and the other young people in your group) to use an artistic activity (we will give you everything you need to do this) that will help answer the following questions: – How does the petrochemical industry affect your life? – Are young men and women affected differently and if so how? – What does it mean for a young person to be OK when the petrochemical industry affects their life in a negative way? – What/who makes it possible for young people to be OK when the petrochemical industry affects their life in a negative way? – Are there differences in what/who makes it possible for young men and women to be OK when the petrochemical industry affects their life in a negative way, and if so how?

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We will ask your permission to audio record the above so that we can write down what you say. We will also use video cameras to record what you are saying and doing during the research. We will also take photos of you during the research; we will ask your permission to use your pictures in on social media and on our websites.

What do you get out of this?

We would like to offer you R100 as a token of our appreciation. At the end of this study, a copy of the findings will be made available to you if you would like to have them.

Can you get hurt by taking part?

We don't think that you can get hurt physically, but there are some other risks. We explain them below and what we will do to manage them.

Possible / Probable risks/discomforts	Strategies to minimise risk/discomfort
Speaking English could be tiring or difficult.	If you prefer, you can speak in your home language. We will ask members of the research team or others in your group to translate into English so that the researchers who speak English can also understand.
You will complete the activities on [date] in a group.	Because you will be part of a group, other people will know that you participated and what you said. To try and minimize outsiders knowing what you said, we will agree on group rules (e.g., treating one another respectfully; not talking to others about what specific participants said/did).
If your group chooses to use a video-activity and this video is made public, your community and many other people will know that you participated in the study.	You do not have to take part in the video. Alternatively, if you do want to take part but you don't want other people to identify you, then we can find ways of hiding your face (e.g., by wearing a mask). You can also choose whether your name is added to the credits or list of people who are in the video.

What will happen to what you write or draw or make or say during the study?

We will ask a person/people to listen to the audio-recordings of the activity that you did and type what you and the other participants have said. This person/these people will sign a form in which they promise to keep the recording private (meaning they can't tell anyone anything about what they listen to and type up). Once everything is typed up, the researchers from the University of Pretoria will delete (erase/wipe out) what was recorded.

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We (the South African and Canadian researchers working in the project) will study the typed-up version of what you and others said. We will use the information you gave us to finalize a questionnaire that we will ask about 300 young people from the Secunda area to complete. We will also use it to write about what makes it harder and easier for young people to do well in life. We will probably quote what you said/wrote or show the drawings you made when we write about what we learnt from you or when we tell others about what we learnt from you (e.g., at a conference or when we teach students). We will also compare what you tell us with what we have learnt from young people living in Canadian communities which are involved in the petrochemical industry and use this comparison to better understand how young people think about health and about feeling good.

We will keep a copy of what you said in a safe place at the University of Pretoria. We will keep the copies for 10 years. Your name will not be on any of these copies. We will allow university students who have to complete research projects about resilience, adolescents, climate change or communities dependent on petrochemical producing companies to use these copies for their research projects.

Who will see the forms you sign and what happens to them?

Only the researchers from the University of Pretoria will have access to the forms that you sign. They will store these forms for 10 years.

Will it cost you anything to take part in this study?

No, it will not cost you anything. We will pay the cost of the local bus/local taxi that you use to participate in the research activities on _____

Do you have questions to ask?

- If you have questions you can email Linda Theron at Linda.theron@up.ac.za or phone her at 012 420 6211. You can also contact Mosna Khaile at 0767756180 or email her at Khaile.mosna@up.ac.za
- You can contact the chair of the Research Ethics Committee, Prof Liesel Ebersohn on (012 422 2337) if you have any concerns or complaints that have not been adequately addressed by the researcher.
- You will receive a copy of this information and consent form for your own records.

Thank you very much for considering our invitation!

Linda and Mosna

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Declaration by participant

By signing below, I …………………………………..………….. [full name] agree to take part in a research

study named: *Patterns of Resilience Among Youth in Communities that Depend on Oil and Gas Production and Those Coping with Climate Change*.

I say that:

- I have read and understood this information and consent form and it is written in a language with which I am fluent enough and comfortable.
- I have had a chance to ask questions to both the person obtaining consent, as well as the researcher (if this is a different person), and all my questions have been adequately answered.
- I understand that taking part in this study is **voluntary** (I can say no) and I have not been pressurised to take part.
- I understand that what I contribute (what I say/write/draw) could be reproduced publicly and/or quoted.
- I reserve the right to decide whether or not my actual name or a made-up one will be used in the research. I will decide this at the end of my participation once I have a better understanding of what is involved, and once I have talked through what that would mean with the university researchers.
- I understand that I may choose to leave the study at any time and that will not be a problem. I also understand that once the findings of the study are in the process of publication I cannot withdraw what I contributed to the study.
- I may be asked to leave the study before it has finished, if the researcher feels it is in my best interests.
- I agree that photos/videos of me engaging in research activities can be put up on social media and on research websites and be used in research-related publications/conference papers.

Signed at (*place*) ....…........…………….. on (*date*) …………....……….. 2019

....

Signature of participant **Signature of witness**

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You may contact me again	**Yes**	**No**
I would like a summary of findings	**Yes**	**No**

My contact details are:

Name & Surname: ______________________________

Age: ______________________________

Male / Female: ______________________________

Postal Address: ______________________________

Email: ______________________________

Phone Number: ______________

Cell Phone Number: ______________

In case the above details change, please contact the following person who knows me well and who does not live with me and who will help you to contact me:

Name & Surname:

____

Phone/ Cell Phone Number /Email:

____

Declaration by person obtaining consent

I *(name)* ……………………………………………..……… declare that:

- I explained the information in this document to …………………………………..
- I encouraged him/her to ask questions and took adequate time to answer them.
- I am satisfied that he/she adequately understands all aspects of the research, as discussed above.
- I did/did not use an interpreter.

Signed at (*place*) ....…........……………. on (*date*) …………....……….. 2019

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....

Signature of person obtaining consent

....

Signature of witness

Declaration by researcher

I *(name)* ………………………………………….……… declare that:

- I explained the information in this document to …………………………………..
- I encouraged him/her to ask questions and took adequate time to answer them.
- I am satisfied that he/she adequately understands all aspects of the research, as discussed above

- I did/did not use an interpreter.

Signed at (*place*) ....…........…………….. on (*date*) …………....……….. 2019

....

Signature of researcher

....

Signature of witness

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Addendum F

Ethical Clearance for My Study

Faculty of Education

Ethics Committee
9 May 2019

Ms Kryseten Balshaw

Dear Ms Balshaw

REFERENCE: UP 17/06/01 Theron 18-001

This letter serves to confirm that your application was carefully considered by the Faculty of Education Ethics Committee. The final decision of the Ethics Committee is that your application has been **approved** and you may now start with your data collection. The decision covers the entire research process 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
   - Sites

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 UP 17/06/01 Theron 18-001 in any communication with the Ethics Committee.

Best wishes

Prof Liesel Ebersöhn
Chair: Ethics Committee
Faculty of Education

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