Teachers' perceptions of a health promotion intervention in at-risk school communities

Ruzaika Shaik Mahomed

2018

Teachers’ perceptions of a health promotion intervention in at-risk school communities

by

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Submitted in partial fulfilment of the requirements for the degree

MAGISTER EDUCATIONIS
(Learning Support, Guidance and Counseling)

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PRETORIA
2018

ETHICS STATEMENT

The author, whose name appears on the title page of this dissertation, has obtained, for the research described in this work, the applicable research ethics approval. I (Ruzaika Shaik Mahomed), declare that I have 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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Ruzaika Shaik Mahomed
September 2018

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ETHICAL CLEARANCE CERTIFICATE

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Faculty of Education

RESEARCH ETHICS COMMITTEE

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DEGREE AND PROJECT	M.Ed Teachers' perceptions of a health promotion intervention in at-risk school communities
INVESTIGATOR	Ms Ruzaika Shaik Mahomed
DEPARTMENT	Educational Psychology
APPROVAL TO COMMENCE STUDY	30 November 2017
DATE OF CLEARANCE CERTIFICATE	17 September 2018

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

- Compliance with approved research protocol,
- No significant changes,
- Informed consent/assent,
- Adverse experience or undue risk,
- Registered title, and
- Data storage requirements.

DECLARATION OF ORIGINALITY

I Ruzaika Shaik Mahomed (student number 11048213), hereby declare that this dissertation titled **“Teachers perceptions of a health promotion intervention in at-risk school communities”** which I hereby submit for the degree Masters in Learning support, Guidance and Counseling at the University of Pretoria, is my own work and has not been previously submitted by me for a degree at this or any other tertiary institution.

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Ruzaika Shaik Mahomed
September 2018

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LANGUAGE EDITOR DISCLAIMER

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27 September 2018

To Whom It May Concern:

Hereby I, Marisa Freya Honey, declare that I am a full-time editor and translator with 19 years' experience of, among other things, editing theses, dissertations and journal articles. I also wish to state that I undertook a linguistic edit of the dissertation, *Teachers' Perceptions of a Health Promotion Intervention in At-risk School Communities*, on behalf of Ruzaika Shaik Mahomed, and made suggestions for corrections to be made. If these corrections were implemented, this would have ensured language of a good quality.

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The latter degree had a large bilingual (Afrikaans and English) editing component.

Please feel free to contact me should you have any queries.

Kind regards

Marisa Honey

ACKNOWLEDGMENTS

- First and foremost, it will be inappropriate if I do not thank my Creator who provided the platform for me to pursue my chosen career. Without His grace nothing is possible in this life. Thank you, Lord, for granting me the perseverance to stay the course and achieve my goal.
- To my parents, you deserve enormous credit for supporting me throughout my journey and encouraging me, especially in the difficult hours when you instilled self-belief.
- Appreciation also goes to my brother and sister in law (graduates of the University of Pretoria) who kept track of my progress throughout my studies.
- A big thank you to Mrs. Karien Botha, under whose supervision the journey began. Your oversight contributed in no small measure towards my success.
- I am enormously grateful to my co-supervisors, Professor Liesel Ebersöhn and Dr Safia Mohamed who had to step in at the eleventh hour due to unforeseen circumstances. Your input and continuous encouragement and appraisal of my work helped me cross the finishing line.
- Many thanks also to my language editor, Marisa Honey and technical editor Mrs Adrie van Dyk for their respective roles regarding the completion of this dissertation.
- And lastly, thank you to Professor Ronel Ferreira and Professor Ina Joubert for your support and motivation. Your constant encouragement held great value in completing this dissertation.

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ABSTRACT / KEYWORDS

Despite health promotion interventions having been implemented in some low-income settings, there is very little evidence reporting on the need for school-based health promotion interventions in urban at-risk communities in South Africa. The purpose of this study was to explore and describe teachers' perceptions of a health promotion intervention in at-risk school communities, in terms of nutritional needs, physical health needs and socio-emotional health needs. This study forms part of a broader health promotion project which aims to facilitate health and well-being in urban at-risk primary school communities, with the prime goal of social change.

Phenomenology was utilized as meta-theoretical lens and a qualitative research approach was followed. I selected Bronfenbrenner's Bio-ecological systems theory and Vygotsky's socio-cultural theory of human development as the guiding framework for this study. The existing data utilised for this study forms part of the Educational Psychology dataset of two cohorts of Grade 1 to 3 teachers' (2016) in the broader health promotion project. A descriptive case study design was employed to purposefully select PRA data of n=17 teachers from two urban at-risk primary schools in the Pretoria area. The data set and data sources included visual data, namely; PRA-based posters, photographs and field notes.

Following a primary inductive thematic analysis, three themes and related subthemes emerged. The first theme relates to teachers' perspectives of contextual needs that necessitate a school-based health promotion intervention. Teachers discuss needs in the educational context as well as needs in the family context that necessitate a school-based health promotion intervention. Secondly, content for a school-based health promotion based on the contextual needs was identified as a theme, indicating that teachers displayed a clear understanding of health promotion and what should be included in a health promotion intervention. The third theme highlights teachers need for pre-service and in-service health promotion training as well as teachers' perspectives on the need for caregiver training in health promotion.

The findings of my research indicate that teachers perceive learner's poor lifestyle habits to be a result of adversity occurring primarily in the family context. Further, the research reflects that by identifying the relevant needs of the at-risk school community, in terms of food consumption practices, physical fitness and socio-emotional behaviour, may in turn effect change in informing a school-based health promotion intervention.

Key words

- At-risk school communities
- Foundation phase learners
- Health Promotion
- Nutrition education
- Participatory Reflection and Action
- Phenomenology
- Physical health education
- School-based health promotion intervention
- Single descriptive case study
- Socio-emotional health
- Teachers
- Urban primary school

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ABBREVIATIONS

AIDS.....................Acquired Immune Deficiency Syndrome
CBO ....Community Based Organisation
CSTL....................Care and Support for Teaching and Learning
DBE......................Department of Education
DoBE....................Department of Basic Education
DHET ....Department of Higher Education and Training
HIV ....Human Immunodefiency Virus
HPSF ....Health Promoting Schools Framework
ISHP.....................Integrated School Health Programme
KYBP ....Know Your Body Programme
LMIC ....Low and/or Middle-Income Countries
NCD ....Non-communicable Disease
NCS/CAPS...........National Curriculum Statement/ Curriculum and Assessment Policy Statement
NGO.....................Non-governmental Organisation
NSNP...................National School Nutrition Programme
OXFAM ....Oxford Committee for Famine Relief
PRA......................Participatory Reflection and Action
UNAIDS ....Joint United Nations Programme on HIV and AIDS
UNESCO..............United Nations Educational, Scientific and Cultural Organisation
WHO ....World Health Organisation

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CHAPTER ONE
INTRODUCTION TO THE STUDY

1.1 INTRODUCTION

Various illnesses arise in early childhood as a result of exposure to a number of social ills in an insalubrious environment, in response to which the child exhibits inadequate developmental and biological responses to that specific environment. Responses, however, vary among individuals and are greatly influenced by developmental or life-course factors (World Health Organization, 2016). Inferences (Atinmo, Mirmiran, Oyewole, Belahsen & Serra-Majem, 2009; Altman, Hart & Jacobs, 2009) show that sub-Saharan Africa, and more specifically South Africa, has the highest percentage of people living in poverty, with almost half of the population living below the breadline. Despite South Africa being an upper middle-income country with the largest economy in Africa (World Bank, 2017), the nation is still afflicted by widespread poverty and hunger (Burchi, Fanzo & Frison, 2011). Not only is household food insecurity inextricably linked to poverty and hunger in both rural and urban poor communities, but it is also a major cause of serious ill-health and unproductivity (Ke & Ford-Jones, 2015).

With globalisation and urbanisation, South Africans have been exposed to two ends of the nutritional health spectrum – undernutrition and overnutrition. While undernutrition is highly prevalent in most underprivileged communities, the latter has become increasingly common in high-, low- and middle-income countries. The availability of inexpensive take-out foods, which are high in calories and low in nutrients; a reduction in physical activities both in and out of school; as well as convenient means transportation in urban communities, contribute to perpetuating the obesogenic environment (World Health Organization, 2016). According to Hammond and Dubé (2012), there is no uncertainty that food and nutritional insecurity hold major consequences for society, including poverty, undernutrition and obesity-related diseases, and susceptibility to infectious diseases.

In the light of this, the health-promoting schools approach is a response to interventions that aim to encourage the adoption of a lifestyle that yields optimum health, creates an environment that supports and inspires the development of a healthy lifestyle, and empowers learners, their families and school personnel to achieve better and healthier living conditions as a whole community (Buijs, 2009). Thus, to contribute to the development of a school-based health promotion intervention, the current study

explored teachers' perceptions of a school-based health promotion intervention in two at-risk school communities.

In this chapter, I provide an overview of the study conducted. I begin by highlighting the background to the study, followed by a discussion of the rationale and purpose of the study. Thereafter, I present my research questions, state my working assumptions and clarify the key concepts of the study. The paradigmatic perspectives selected in guiding the current study are elucidated. I then briefly highlight the sampling of data, as well as the data analysis process. I conclude this chapter with the ethical considerations and quality criteria that applied to the study, and also outline the subsequent chapters of the study.

1.2 BACKGROUND TO THE STUDY

The current study forms part of a broader NRF-funded research project by the University of Pretoria in collaboration with Fordham University in New York City (USA). The broader research project focuses on a school-based health promotion intervention with the aim of facilitating social change and securing development as a potential outcome. More specifically, it aims to address nutrition-related practices, physical fitness and the psycho-social well-being of Grade 1 to 3 learners in two at-risk school communities in Pretoria, Gauteng. The planning and development of the school-based health promotion intervention was informed by perspectives from female teachers (n = 17) in two urban at-risk primary schools, on their understanding of school-based health promotion. Data sources included PRA-based activities (Appendix A), as well as field notes from a researcher[1] (Appendix B).

The development and implementation of the school-based health promotion intervention are defined by a series of stages:

- Stage 1: Acquiring baseline information from teachers regarding learners' eating habits, physical fitness and socio-emotional well-being.
- Stage 2: Planning and development of the actual school-based health promotion intervention.
- Stage 3: Implementing the school-based health promotion intervention.
- Stage 4: Assessing the outcome of the implemented school-based health promotion intervention.

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[1] I did not form part of the research team that generated the data for the broader research project in 2016. In my study, I am working with a subset of the dataset of the broader study. Hence, I conducted primary inductive thematic analysis of existing data.

- Stage 5: Reporting on the findings and reviewing the potential for implementing the school-based health promotion in similar settings (i.e. in at-risk school communities).

This study formed part of the first stage of the broader research project and focused specifically on teachers' perceptions of a health promotion intervention for Grade 1 to 3 learners in at-risk school communities in order to inform the planning and development of the school-based health promotion intervention.

1.3 RATIONALE

There are numerous factors that could affect and potentially hamper young learners' nutritional, physical and psycho-social well-being. Household income plays a crucial role in rearing a child and ensuring the healthy development of the child (Biggeri & Mehrotra, 2011). Learners who are born into families of affluence have access to a substantial number of resources and greater privileges, such as secure living conditions and greater access to a range of opportunities and services, whereas learners who reside in income-restrained communities are exposed to numerous social ills and are placed at a higher risk for poorer health outcomes. Thus, poverty during childhood has a more significant impact on health in adulthood (Biggeri & Mehrotra, 2011; Gupta, De Wit & McKeow, 2007). Poverty moves beyond the boundaries of economic burden and political discourse, as it is also an ethical issue, as well as a matter of social justice. In South Africa, there are four concurrent epidemics, with HIV and AIDS and obesity affecting the greater half of the population (Coovadia, Jewkes, Barron, Sanders, & McIntyre, 2009). Although obesity and HIV and AIDS are classified differently, both appear to be a direct cause of morbidities in childhood.

Apart from the associated physical challenges, behavioural and emotional difficulties are manifest in both obesity and HIV and AIDS-related illness. Stigmatisation, depression, social anxiety disorders and a decreased self-autonomy have an effect on the social integration of the child in society or the community in which the individual lives and leads to poor educational performance. HIV and AIDS- and nutrition-related disorders are closely linked to mental disorders, entailing extended health and economic consequences. The onset of widespread disease impacts severely on national as well as global labour markets, placing a heavy burden on healthcare systems (e.g. lack of provision to all citizens), the family (e.g. child-headed households), the employer (e.g. a less-productive workforce), and therefore on society as a whole (World Health Organization, 2016)

Obesity and the risk for metabolic disease were presumed to be most common amongst adults (Brophy et al., 2009). However, recent studies (Kimani-Murage et al., 2010; Moselakgomo, Shaw, & Goon, 2012) indicate that childhood obesity, and thereby the risk for paediatric metabolic syndrome, are major global health concerns that are now drawing much attention in low- and middle-income countries. Moselakgomo et al. (2012) established that, in 2010, approximately 43 million learners globally were overweight or obese, whereas 92 million were already at risk of obesity. In South Africa, it is expected that at least 22.8% of learners will be obese by 2020. According to the World Health Organization (2016), more than 41 million learners under the age of five currently are affected by overweight and obesity, with the majority of these learners residing in low- and middle-income countries.

While the extent of the HIV and AIDS pandemic varies between countries and regions (Keikelame, Murphy, Ringheim & Woldehanna, 2010; Loening-Voysey, 2002), the morbidity and mortality rates are found to be the highest in low-middle-income countries (Heath, Donald, Theron & Lyon, 2014). In South Africa, the epidemic is intensified by a number of contextual factors, such as poor access to essential and public healthcare services, socioeconomic inequalities, poverty, gender-based and sexual violence, high mobility, lack of basic amenities, such as poor housing facilities and restricted or no electricity and water for most citizens, particularly in impoverished communities (Bhana, 2007; Keikelame et al., 2010; UNAIDS, 2011). Akwara et al. (2010) are of the opinion that learners below the age of 18 who are directly confronted by HIV and AIDS are most vulnerable due to poverty-related factors.

According to Kieling et al. (2011), psycho-social and mental health comprise a growing cause of concern among young learners globally. Neuropsychiatric conditions, as one of the leading causes adding to the global burden of disease, are found in at least 10 to 20% of learners worldwide who are affected by mental health problems. However, young learners in low- and middle-income countries experiencing mental health difficulties are often identified as having a chronic illness and never receive any treatment (World Health Organization, 2013). Patel, Flisher, Hetrick, and McGorry (2007) found that 75% of adults diagnosed with a mental condition revealed slight symptoms of the condition before the age of 24. This indicates that the onset of a mental condition can be determined by particular causative risk factors early in life, which may not, however, be easily diagnosed in the early childhood years (Patel et al., 2007).

Universally, the purpose of education is to produce fully able and competent members of society. Hence, the most obvious explanation for the partnership between health

and education is that education itself holds countless benefits and enhances the overall quality of life, exposing the individual to pathways for better health (Haycock, 2010; Zimmerman, Woolf & Haley, 2014). Ross and Wu (1995) provide three theoretical explanations for the association between educational and good health. Firstly, well-educated individuals are more likely to be economically stable, i.e. they are employed on a full-time basis, possibly have higher wages and are less likely to be in financial difficulty. Secondly, it is believed that well-educated individuals have better access to social-psychological and other resources. These individuals have a high sense of personal control and may have stronger social networks (Zimmerman et al., 2014). Lastly, individuals who have received a good education are more inclined to live a healthier lifestyle then those who have been poorly educated, by making healthier lifestyle choices and eliminating or avoiding bad habits such as smoking, drinking and sedentary behaviours (Li & Powdthavee, 2015; Ross & Wu, 1995).

According to the World Health Organization (2017, p. 1), health needs to be understood as a positive concept that is maintained through peace, shelter, education, food, income, a stable eco-system, sustainable resources, social justice, and equity. These are recognised as fundamental conditions or prerequisites that support health and through which health can also be improved. Health, in essence, serves as the spinal structure in the development of the whole child, therefore without putting health at the forefront, learning and teaching can simply not be maximised effectively (Maphalala & Adams, 2016). Although there are several definitions of health and it can be understood differently in varying contexts, this research study views health as a complete state of physical, mental and social well-being, as defined by the World Health Organization (Maphalala & Adams, 2016).

Although health-promoting schools is a fairly new approach in South African society (Onya, 2007), the literature has shown that, over nearly two decades, government, local schools, non-governmental organisations (NGOs), teachers, as well as parents and students have been informed about health promotion in order to form partnerships that will allow access to school-based learning opportunities that may prove to be more effective in reaching communities at large (Buijs, 2009; Macnab, 2012). South Africa is a country with great diversity and many social ills, hence collaboration has to be inter-sectoral, as the factors that contribute significantly to health and well-being lie beyond the health sector (Perez et al., 2013). Based on this understanding, health promotion services offering support have proliferated among national NGOs and community-based organisations (CBOs). but have not been fully executed by national government as part of the agenda (Onya, 2007).

A major setback in the development of sustainable health promotion programmes in South Africa is the lack of adequate organisational structure within the national and provisional government (National Health Laboratory Service, 2018). In this regard, Onya (2007) points out that the National Health Promotion Policy developed in 1997 has to date been implemented at cluster level. Disparities occur at the provincial level, as there is only one practitioner in each province, or service delivery operates with skeleton staff. This indicates that there is a lack of infrastructure for and training of health promotion practitioners (National Health Laboratory Service, 2018). A National Health Promotion Strategy was developed, with goals advocating for health promotion through intervention and involving various stakeholders. This was to be met between the years 2015 to 2019. Although efforts to implement interventions have been partially withstanding, there is still a need for well-coordinated monitoring and evaluation of health promotion services (Department of Health, 2014; Onya, 2007).

The burden of infectious and non-infectious diseases affecting learners of school-going age weighs heavily on education. However, while illness has the potential to severely affect education, education can be used as an expansive tool to prevent ill-health and improve learners' health and well-being, which will have great benefits for learners' future growth outcomes in terms of holistic development (Bundy, 2011, p. 59).

Schools play a vital role in the health and well-being of young learners (Jourdan, 2011). Although Life Skills forms part of the National Curriculum Statements (CAPS) as a core subject, teachers say that they are not necessarily equipped to promote health (Peu, Napoles, Wenhold, Mostert-Wentze, & Seane, 2010). According to Schenker (2016), teachers are critical role players in delivering health education to learners, and therefore teachers need to be well equipped with essential knowledge and skills to teach health education in an equitable manner. Peu, Mataboge, Ladzani, Wessels, Mostert-Wentzel and Seane (2015) state that empowering teachers is a first step in delivering health education. In an earlier study, Peu et al. (2010) indicated that a health education training programme for teachers is required to better educate young minds on various health topics. Jourdan (2011) emphasises that training can help bring about a more organised teaching programme, rather than adding to the curriculum content.

1.4 PURPOSE OF THE STUDY

The purpose of the current study was to explore and describe (Mouton, 2001) female teachers' (n = 17) perceptions of a school-based health promotion intervention for Grade 1 to 3 learners in two conveniently selected resource-constrained communities by utilising teachers' voices and opinions about school-based health promotion

interventions. I intended to identify themes regarding the teachers' perceptions that emerged during participation in the initial school-based health promotion project. I also aimed to gain insight into how teachers' perceptions of school-based health promotion may inform future school-based health promotion intervention projects in resource-constrained South African school communities.

1.5 RESEARCH QUESTIONS

My study was guided by the following primary research question:

How can the perspectives of primary school teachers on the health promotion needs of learners inform the development of a school-based health promotion intervention?

In order to address the primary research question, I was guided by the following secondary research questions:

- Why do teachers think a school-based health promotion intervention is needed?
- What do primary school teachers think need to be included in a school-based health promotion intervention?
- Who do teachers think will be role players in the implementation of a school-based health promotion intervention?
- Which health promotion needs do teachers think are extra-curricular and which form part of the curriculum?

1.6 WORKING ASSUMPTIONS

Based on a review of the existing literature, I approached the current study against the following assumptions:

- Teachers have expert practitioner knowledge of health education and play a vital role in promoting healthy lifestyles for children at a young age.
- Teachers are able to promote healthy lifestyle practices through the curriculum at the school level, and incorporating topics on nutrition, physical activity and psycho-social well-being in the school curriculum is valuable when guided by teachers.
- Teachers obtain knowledge and skills through enactive processes, which is learning through interactive personal experiences. Thus, with whole-school

support, teachers can successfully guide the development of a school-based health promotion intervention.

- Teachers have experience with learners who display symptoms of, and who have been diagnosed with, a communicable or non-communicable disease and therefore have a strong understanding of the need for a school-based health promotion intervention.

1.7 CLARIFICATION OF KEY CONCEPTS

In this section, I clarify the key concepts that guided this study.

1.7.1 Teachers

The Department of Basic Education (2011) refers to a 'teacher' as any individual holding a school-based occupation, with the primary responsibility of classroom teaching at a school. A teacher is one who will begin their career as specialist in a specific phase (level of schooling) and/or subject, or a combination of both (Department of Basic Education, 2011). Within the current study, teachers refers to teachers of Grade 1 to 3 learners from the two at-risk school communities. The participating teachers were form teachers or extramural teachers of Grade 1 to 3 learners within the at-risk school communities.

1.7.2 Perceptions

According to Lewis (2001, p. 272), perception is an "understanding of the world constructed from information obtained by means of the senses". Perceptions are formed through an active process of selecting, organising and interpreting information received by the brain through the senses from the external world. Thus, individual perceptions vary, as people may experience the same setting or conditions in drastically different ways, depending on their own needs (Coghlan & Brydon-Miller, 2014). In this study, perception refers to the ways in which teachers display an awareness of the need for a school-based health promotion intervention, through their senses of experience and interpretations from within their contextual environment.

1.7.3 Health-promotion intervention

Health promotion can be defined as a process of enabling people to increase their control over, and to improve, their health, well-being and quality of life (World Health Organization, 2017). In view of this, health is seen as a process over the lifespan and as a resource for well-being. The focus of health promotion is not only concerned with

change in behavioural outcomes, but rather also extends towards a wide range of social and environmental interventions (Miglioretti, Velasco, Celata, & Vecchio, 2012).

As the term intervention encompasses a number of strategies or actions carried out in order to bring about a specific outcome (Jourdan, 2011), health promotion intervention programmes are not only focused on disease prevention and the avoidance of premature death, but are also projected towards making health an essential resource in life (Miglioretti et al., 2012). Thus, to sustain health promotion action, citizen participation is crucial (World Health Organization, 1998). For the purpose of this study, a health promotion intervention programme relates to the strategies or actions that need to be taken in order to develop a school-based nutrition and physical activity intervention programme within an at-risk school setting.

1.7.4 At-risk school communities

According to the Glossary of Education Reform (2013), the concept at-risk refers to learners in a school who have a greater chance of school failure due to poor educational attainment. Indicators that place a learner at risk for poor educational attainment in school include socioeconomic status, lack of resources and basic amenities, family dynamics, child-headed households or homelessness, transiency, incarceration, disability, school absence, illness, as well as community and school violence (The Glossary of Education Reform, 2013). In the context of this study, an at-risk school community refers to a school situated within a specific geographical location, where children are economically disadvantaged, there are limited resources and facilities, and learners are vulnerable to ill-health and poor academic achievement (Rakabe, 2014).

1.7.5 Primary school learners

Simkins (2013) states that a primary school typically includes pre-Grade 1 education (Grade R), Early Childhood Education between grades 1 and 3, and Senior Primary Education between grades 4 and 7. According to the Department of Basic Education (2011), a learner is described as an individual who attends either primary or secondary school with the purpose of receiving an education. In this study, primary school learners refer to any young child between the ages of seven and nine (Department of Basic Education, 2011; Joubert, Bester, Evans, & Phatudi, 2015) enrolled in an Early Childhood Education classroom in an urban at-risk primary school community.

1.7.6 Curriculum and extra-curriculum

Curriculum refers to the lessons and academic subject content taught in a school or in a specific course or programme of an academic institution. This includes the learning standards or learning objectives learners are expected to meet; the units and lessons that teachers teach; the activities given to the learners; the learning and teaching materials to be used; as well as assessment procedures to be carried out in order to achieve a specific result or outcomes (Carl, 2002; The Glossary of Educational Reform, 2015). The current curriculum followed in South African public schools is the National Curriculum and Assessment Policy Statement (NCS CAPS) (Department of Basic Education, 2011). The term extra-curricular denotes all activities that take place in addition to the prescribed curriculum content, preferably after school hours (Bartkus, Nemelka, Nemelka, & Gardner, 2012).

In this study, curriculum refers to the Grade 1 to 3 NCS CAPS, which is divided into three subject areas, namely Languages, Mathematics and Life Skills. Each subject area consists of sub-learning areas identified as the prescribed content to be followed during school hours (Department of Basic Education, 2011), whereas extra-curriculum refers to all academic or sporting activities that take place after the normal school day.

1.8 PARADIGMATIC LENSES

Besides the theoretical lenses of the study (discussed in Chapter 2), in the following section I provide an overview of the epistemological and methodological lenses that guided this study. A detailed description is provided in Chapter 3.

1.8.1 Epistemological paradigm

I relied on phenomenology as the meta-theoretical paradigm underlying my study (Cohen, Manion, & Morrison, 2018). Phenomenology aims to understand a social phenomenon from the lived experiences of participants within their social context, and the meaning they assign to these unique experiences (Nieuwenhuis, 2016). Phenomenology is based on the study of several participants with the intention of gaining an insider perspective to describe the context-specific experiences of individuals relating to a specific phenomenon (Cohen et al., 2018; Nieuwenhuis, 2016). According to Creswell (2009, p. 13), a research study under a phenomenological paradigm usually includes a small number of participants and is done through extensive and prolonged engagement with participants in order to draw patterns and relationships of meaning. In addition, Willis (2001) says that the meanings that participants assign to their lived experiences are purely subjective. My understanding

is that phenomenology as a paradigmatic lens allows for obtaining a more meaningful insight into the subjective and shared meanings individuals assign to their lived experiences of a phenomenon (Creswell, 2014), and the role social influences play in these experiences.

1.8.2 Methodological paradigm

I employed a qualitative research approach as methodological paradigm (Creswell, 2014). A qualitative research approach permits the study of a phenomenon with the aim of understanding a group of individuals' attitudes, perceptions or actions holistically through the use of description in the form of words and language (Lichtman, 2014), and not statistical or numerical values. Furthermore, following a qualitative research approach enables the researcher to understand and answer questions about a specific, socially complex phenomenon from the participants' viewpoints (Creswell, 2014; Lichtman, 2014) while remaining unobtrusive.

In the light of the implied advantages, working within a qualitative methodological paradigm allowed me to gain insight into the participants' perceptions regarding a school-based health promotion intervention, through their experiences of the phenomenon within their natural setting, in order to answer a set of questions pertaining to the phenomenon. I further regarded a qualitative research approach as useful, as it enriched my understanding of the phenomenon and enabled me to provide a vivid account of the meanings participants assign to the phenomenon through rich, detailed descriptions (Nieuwenhuis, 2016).

1.9 BRIEF OVERVIEW OF RESEARCH METHODOLOGY

Figure 1.1 presents a brief overview of the research process for this study. A more detailed explanation follows in Chapter 3.

Research design *Descriptive case study*

Convenient selection of dataset and data sources

Data sources	**Documented data**
▪ Visual data from PRA-based workshops (Appendix A)	▪ Posters compiled during PRA-based workshop
▪ Field notes of PRA-based workshops by one researcher (Appendix B)	▪ Fieldnotes from one researcher ▪ Photographs of PRA poster activity

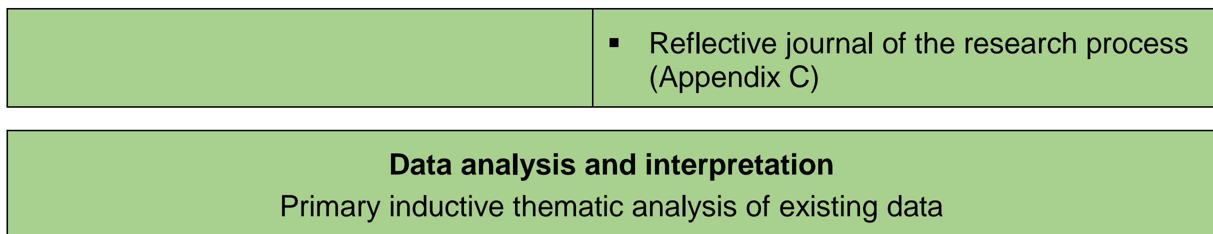

Figure 1.1: Outline of the research process

In conducting this research study, I utilised a descriptive case study as research design (Mills, Durepos, & Wiebe, 2010) to gain a deeper understanding of teachers' perceptions of school-based health promotion interventions in two at-risk school communities. From an interpretivist paradigm, a descriptive case study provided me with the opportunity to explore, analyse and understand the participants' perceptions regarding the social phenomenon through multiple perspectives (Bertram & Christiansen, 2014; Yin, 2012).

According to De Vos, Strydom, Fouche, and Delport (2011), when the aim of the research is to understand a phenomenon from within the participants' social world, a case study is necessary to capture patterns in the participants' actions, words and actions in the context of the particular case. In this respect, Cohen, Manion, and Morrison (2005, p. 181) define a descriptive case as "the study of an instance in action where the instance is bounded by a system" (Creswell, 2009). Yin (2012) explains that, when the purpose of the research is to explore and describe a series of events or a situation with reference to a specific case, the type of case study can be identified as a descriptive case study (Cohen et al., 2018).

De Vos et al. (2011, p. 321) define a descriptive case study as one that "strives to describe, analyse, and interpret a particular phenomenon". This specific case study focused on a single instance, which was the unit of analysis, namely school-based health promotion interventions, and was bound to the foundation phase at two different research sites (i.e. schools). The purpose of case study research is to capture detailed, in-depth (Mills et al., 2010) descriptions of the phenomenon and individuals under investigation within the social or cultural context in which they occur (Bertram & Christiansen, 2014; Cohen et al., 2018; Salkind, 2010).

Since I aimed to gain insight into teachers' perceptions of school-based health promotion interventions in two at-risk school communities, the descriptive case study design was a suitable choice, as it is open to subjective interpretation, reflects multiple meanings, and is context dependent, thus yielding thick descriptions of the phenomenon (Given, 2008, p. 121; Potter, Von Hellens, & Nielsen, 2010). Moreover,

the specific case study design allowed me to analyse multiple textual datasets in order to produce categories, assign codes and generate themes according to consistent patterns and relationships that emerged from the data using a primary thematic analysis process (Hamilton & Corbett-Whittier, 2013).

As my study forms part of a broader NRF-funded research project at the University of Pretoria in collaboration with Fordham University in New York City (USA), I conducted primary inductive thematic analysis and interpreted all the existing datasets and resources (McMillan & Schumacher, 2014). All the datasets and data resources were collected in 2015, during the initial research project by the project leaders and field workers (McMillan & Schumacher, 2014; Mouton, 2001). Thus, all the existing datasets and resources utilised in this study have not been previously analysed for any other purpose (De Vos et al., 2011). In my study, I conducted the initial primary analysis and interpretation of the existing data as part of the broader projects' aim to facilitate social change by means of a school-based health promotion intervention. More specifically, I focused on teachers' (n = 17) perceptions of a school-based health promotion intervention in terms of Grade 1 to 3 learners' nutrition, physical fitness and psycho-social well-being in two at-risk school communities.

I relied on convenience sampling (Salkind, 2010) in selecting the datasets and data resources. Convenience sampling was appropriate for this study, as I conducted my study within a broader research project in which the data had previously been collected, but not analysed for any purpose. In addition, I made use of purposive sampling to select relevant qualitative datasets and data resources that focused on teachers' understanding of a school-based health promotion intervention.

Although purposive sampling may not be representative or generalisable, it sufficed in terms of my research, as the aim of this study was to gain an in-depth understanding of teachers' perceptions of a school-based health promotion intervention (McMillan & Schumacher, 2014). Thus, my study included all qualitative data generated during the PRA-based workshop activities in 2015 with 17 Grade 1 to 3 teacher participants from two at-risk school communities, in order to determine their perceptions of a school-based health promotion intervention.

The existing datasets and data resources include visual data (posters) compiled as part of the PRA-based activities with the 17 Grade 1 to 3 teachers, field notes, and reflective notes from the research team who collected the existing data. The PRA-based posters were generated through small group activities to capture the participating teachers' perceptions of a school-based health promotion intervention

(Chambers, 2008). I furthermore relied on the field notes that were generated during the PRA-based activities to capture their observations of the participants' participation, actions, responses, discussions, attitudes and feelings (De Vos et al., 2011). I furthermore transcribed the posters and field notes, which were translated from Afrikaans into English, to capture the written information expressed by the participants during the research process (Chambers, 2008; Nieuwenhuis, 2016). As part of my involvement in the broader research project, I also kept my own reflective journal of the research process to facilitate reflexivity in my capacity as a researcher (Ortlipp, 2008).

To identify the multiple realities of the participants represented in the data generated, and to make meaning thereof in the presentation of my findings by reflecting regularly on potential interpretations, I conducted an inductive thematic analysis of all datasets (McMillan & Schumacher, 2014). Thematic analysis is an approach that involves searching for themes that emerge in the data that are significant to the description of the phenomenon (Fereday & Muir-Cochrane, 2006).

By following an inductive process of carefully reading and re-reading of the datasets and data resources, I was able to recognise and make meaning of emerging patterns in the data with which I could come up with possible themes and categories that closely represented the phenomenon (Fereday & Muir-Cochrane, 2006; McMillan & Schumacher, 2014). To identify general possible themes and categories, I engaged in the process of coding. As I worked through the data, I encoded each meaningful segment to establish fixed themes of significance to the phenomenon. I discussed the initial results with my supervisor before interpreting, discussing and presenting the data in order to ensure a good understanding of the perceptions of the participants as they were reflected in the data (Chambers, 2008).

I found inductive thematic analysis to be appropriate for this study, as it provided me the opportunity to identify consistencies and dissimilarities between participants' responses, and consequently to gain answers to my research questions through the vivid descriptions by the participants of their perceptions (Maree, 2016).

1.10 ETHICAL CONSIDERATIONS

Creswell (2009) highlights the importance of following ethics by stating that ethical practices are more than just following a set of prescribed guidelines, but involve the researcher anticipating and addressing specifically those challenges that may arise during the research according to context-specific guidelines. The ethical guidelines, in

accordance with the ethics committee of the University of Pretoria, which I considered specifically in conducting my research study were the following:

- I obtained permission from the University of Pretoria to utilise the existing data that was generated from the broader school-based health promotion project.
- Informed consent was obtained from the participants before the commencement of the initial project.
- Participation was voluntary, and no coercion or deception was involved. For this study, respondents were in no way forced to participate, but rather were invited to participate, with a clear understanding that they are under no obligation to do so and that there are no negative consequences for them if they did not want to participate in the study.
- The importance and value of protecting a participant's identity remained of vital importance (Maree, 2016). Therefore, all written recoded data was dealt with confidentiality, and the identities of the participants and the names of the schools were not disclosed.
- The theories, methods and research design relevant to interpretations of the research findings were fully disclosed to maintain the integrity of the research (Creswell, 2009).
- The research design chosen posed a low risk to participants, thus no harm or mitigation came to the participants during the study.
- The findings and recommendations are reported in an orderly manner, with the limitations of the study clearly indicated.

1.11 QUALITY CRITERIA

To ensure the trustworthiness of the current study, I adhered to the quality criteria for qualitative research established by Lincoln and Guba (1985): credibility, transferability, dependability, confirmability and authenticity.

Being a critical factor in establishing trustworthiness, credibility refers to whether the research findings conveyed by the researcher are congruent with the participants' perceptions of the phenomenon under study. This implies that the participants' views, including their thoughts, feelings and actions, must be represented truthfully by the researcher so that they can be verified by the participants (Cameron, 2011; Mertens, 2018). In this study, I aimed to provide credible research by providing thick descriptions of the participants' perceptions of a school-based health promotion intervention and by

engaging in regular debriefing sessions with my supervisor to ensure the accuracy of my analysis and interpretation of the data. The analysis of existing datasets and data sources is indicative of triangulation and further enhances the credibility of the study (Mertens, 2018; Nieuwenhuis, 2016).

Transferability in qualitative research refers to how likely the findings of the study are to be applicable or generalisable to other settings based on the readers' judgement of the contextual similarities and differences which exist in terms of the research sites (Lodico, Spaulding, & Voegtle, 2006; Mertens, 2018). Although the aim of this qualitative research was not to generalise the findings, transferability of the research was ensured by providing clear, in-depth descriptions of the research process and, more specifically, of the participants' perceptions regarding the phenomenon under study so that it may usefully be applied to other, similar contexts and research studies. Additionally, I relied on reflection through regular debriefing sessions with my supervisor to obtain dependable findings (Nieuwenhuis, 2016).

Dependability is equivalent to reliability in a quantitative study (Nieuwenhuis, 2016). Dependability requires the researcher to provide a comprehensive account of the procedures and processes followed in collecting and analysing the existing data, so that the study demonstrates consistency and can be replicated by other researchers in the field (Cameron, 2011; Lodico et al., 2006). In the current study, I thus recorded the research process in detail. The analysis process was documented using coding, further enhancing the dependability of the research (Anney, 2014).

Confirmability indicates the extent to which the research findings reflect the voices of the participants and are not figments of the researcher's imagination or own preferences (Cameron, 2011; Mertens, 2018). To establish confirmability in the current study, I conducted an audit trail and reflected on my interpretations of the findings through debriefing sessions with my supervisor, in order to ensure that all the findings generated from the different data sources captured the true experiences and perceptions of the participants and had not been significantly influenced by my own preferences (Anney, 2014).

As the final criterion for trustworthiness, authenticity raises the integrity of the research study and involves a fair understanding and representation of the participants' individual views (Denzin & Lincoln, 2011; Mertens, 2018). Regular discussions with my supervisor in order to address any personal biases or assumptions and keeping an audit trail ensured the authenticity of the research.

1.12 OUTLINE OF CHAPTERS IN THE STUDY

The chapters in this dissertation have been structured as follows:

CHAPTER 1: INTRODUCTION TO THE STUDY

Chapter 1 serves as an introduction in which I provide a brief overview of the study in general. I start off with an introduction to, background of and rationale for the study, followed by the purpose of the study. I then state my research questions, declare my working assumptions and clarify the key concepts of the study to avoid any misinterpretation. Hereafter, the research process in terms of the theoretical framework, epistemological and methodological paradigms, research design and methodological strategies are introduced and briefly explained. I conclude the chapter with the ethical considerations and quality criteria to which I adhered.

CHAPTER 2: LITERATURE REVIEW AND THEORETICAL PERSPECTIVE

In this chapter I focus on the review of existing literature relating to school-based health promotion within South Africa and abroad. The literature review consists of six focus areas, which place the current study in the broader subject area. Each focus area is followed by sub-sections in which all the pertinent aspects are discussed regarding the current global and South African health status scenario, school-based health promotion, efforts to address health promotion challenges for Grade 1 to 3 learners, the roles of educators in health promotion and parental involvement in health promotion. Thereafter, I briefly explain Bronfenbrenner’s Bio-ecological systems theory and Vygotsky’s Socio-cultural theory of Human Development as theoretical framework utilised in this study.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

In Chapter 3 I provide a detailed account of the choices I made to carry out the research process. I explain and justify my epistemological and methodological preferences, my choice of research design, data generation and documentation strategies and participant selection, before discussing the data collection and documentation techniques and the data analysis and interpretation procedures I employed. I also indicate my role as researcher and conclude the chapter by discussing the trustworthiness criteria and ethical considerations I adhered to in my study.

CHAPTER 4: RESULTS AND FINDINGS OF THE STUDY

In this chapter I present the results I obtained from the data by following a primary inductive thematic analysis of existing datasets and data resources. I structure my

findings in terms of the themes and subthemes I identified. Thereafter, I relate the results to the existing literature in order to highlight similarities and inconsistencies that occur between the findings of the study and the existing body of knowledge.

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

In Chapter 5 I review the findings of the study I present in Chapter 4 to draw conclusions in terms of the research questions and purpose of the study. I then reflect on the challenges I experienced in conducting the study, as well as the strengths that potentially added value to the study. I conclude with possible recommendations for future research and practice.

1.13 CONCLUSION

In Chapter 1 I have contextualised my study and provided an informative composition of the components that form my study. I introduced my research with an overview of the phenomenon under investigation and the rationale for undertaking the study. I stated the purpose and focus of the study and presented my research questions accordingly. I indicated the working assumptions on the basis of which I approached the study, clarified the key concepts and introduced the paradigmatic and methodological perspectives I employed. I stipulated the research design, data collection procedures and data analysis strategies I utilised. I also briefly outlined the conceptual framework that directed the investigation and briefly referred to the quality criteria and ethical considerations I adhered to throughout the study.

In Chapter 2, I discuss the literature in the field of this study. I also present and explain the conceptual framework of the study in more detail.

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CHAPTER 2
LITERATURE REVIEW

2.1 INTRODUCTION

The purpose of Chapter 1 was to contextualise the current study by providing an overview of the study. I provided the background to the study, followed by the rationale for and purpose of the study. I then presented my research questions and clearly stated my working assumptions with which I approached the current study. Thereafter, I clarified key concepts and provided a broad overview of my paradigmatic and methodological choices following the research process. I concluded the chapter by stating the ethical considerations and quality criteria I considered in this study.

Chapter 2 provides an overview and review of the existing literature that relates to the current field of study. I focus my discussion on the current global and national health scenario by exploring four concurrent pandemics, namely: 1) non-communicable diseases; 2) malnutrition and food insecurity; 3) HIV and AIDS and 4) psycho-social challenges for health. Thereafter, I explore the impact these pandemics have on society. Next, I elaborate on the literature on school-based health promotion. I discuss the partnership between health and education, the role of health-promoting schools with regard to the implementation of the school-based health promotion curriculum, factors affecting implementation, and the outcomes of existing school-based health promotion programmes. Against this background, I describe global and national efforts to address health promotion challenges for Grade 1 to 3 learners. I furthermore present the age-level characteristics of Grade 1 to 3 learners by exploring the physical, cognitive, social and emotional stages of their development. In addition, I describe the related role of teachers in health promotion programmes to enable capacity and to address health challenges, as well as parental involvement in health promotion. I conclude the chapter with a discussion of the interrelationship between Bronfenbrenner's Bio-ecological systems theory and Vygotsky's socio-cultural theory of human development, which were utilised as the theoretical framework for the current study.

2.2 CURRENT GLOBAL AND SOUTH AFRICAN HEALTH SCENARIO

Previously, global health challenges were not as complex as they are today. While infectious illnesses such as HIV and AIDS, tuberculosis and other viral illness formerly received significant attention as the major causes of terminal ill health, the current

global health scenario regards infectious diseases as just one of the multiple complexities requiring urgent attention (De Cock, Simone, Davison, & Slutsker, 2013). As a result of global advancements that have led to globalisation, urbanisation, demographic changes and socioeconomic development, the rising global burden of non-communicable diseases (NCDs) and their associated risk factors, the abominable case of food insecurity, malnutrition, obesity and hunger, and the ongoing agenda of psycho-social and mental health challenges have escalated (Frenk & Moon, 2013). Although globalisation, urbanisation, demographic changes, and socioeconomic development continue to make a positive contribution to society, they have also been established as salient causative factors for illness and an increase in global mortality rates (De Cock et al., 2013).

In this section, I discuss the current global and South African health scenarios in terms of the four concurrent pandemics: non-communicable diseases (NCDs), food insecurity and malnutrition, HIV and AIDS, and psycho-social well-being. In the context of health promotion, considering the effects of each pandemic on a national and global level is imperative.

2.2.1 Non-communicable diseases (NCDs)

In this sub-section, I highlight national evidence on the way in which sub-Saharan Africa struggles with NCDs in relation to the international health status scenario of NCDs.

Over the past decade, global trends in lifestyle changes, demographics, globalisation and urbanisation (Venkat Narayan, Ali, & Koplan, 2010) have had an impact on the global health status. The growing burden of NCDs fits in the cluster of non-infectious diseases and is one of the leading causes of mortality and morbidity in many underdeveloped countries, such as in sub-Saharan Africa (Gupta & Guin, 2010). Examples of NCDs include cardiovascular disease, type 2 diabetes mellitus, chronic respiratory disease and cancer (Fernstrom, Reed, Rahavi, & Dooher, 2012, p. 301), with mental health recently being reported as a NCD by the World Health Organization (Shariful Islam et al., 2014).

In sub-Saharan Africa, and more specifically in South Africa, there has been an increase in obesity and several other risk factors for NCDs, such as an unhealthy diet, physical inactivity, diabetes, harmful use of alcohol, and a higher prevalence of hypertension, particularly among the urban poor. Eighty percent of the urban poor living in South Africa are unable to purchase healthy foods, which are 69% more

expensive than a non-nutritious meal. People moving from rural to urban areas experience changes in diet – from consuming traditional food to processed foods high in fat, salt and sugar, and may also display a decrease in physical activity, with sedentary lifestyles and changed cultural norms (Shariful Islam et al., 2014). Even though urban dwellers only accounted for about 36% of the total population in 2010, current estimates indicate that this percentage will increase by between 50% and 60% by 2030 and 2050 respectively (Mensah, 2016). Mayosi et al. (2009) proposes that obesity and stunting ironically coexist in childhood and adolescence, and both increase the risk of NCDs in adult life. Dukhi, Sartorius and Taylor (2016, p. 1) describe stunting as "chronic presentation of malnutrition, characterised by the failure of an individual to reach his or her full linear growth".

Since 2008, NCDs have accounted for about 60 to 63% of deaths worldwide, with more than 80% of these deaths occurring in low- and middle-income countries (Fernstrom et al., 2012; Venkat Narayan et al., 2010). By 2010, the health census indicated that NCD-related deaths had accelerated to an alarming 34.5 million, which amounts to approximately two-thirds of all deaths globally (Marrero & Adashi, 2015). Between nine and 14 million of these individual deaths occurred prematurely between 30 and 70 years of age, mostly in developing countries (Marrero & Adashi, 2015; Mensah, 2016). The most common modifiable risk factors for the burgeoning of the above-mentioned NCDs in the 21st century health arena include high levels of smoking, unhealthy or inefficient diet, physical inactivity, and the harmful use of alcohol (Fernstrom et al., 2012; Mensah, 2016). Additionally, the World Health Organization indicated other, related major risk factors, such as high blood pressure, high glucose levels, high cholesterol and obesity, which are largely associated with cardiovascular diseases, metabolic health causes, and cancer (Venkat Narayan et al., 2010).

In one study, Di Cesare et al. (2013) found that NCDs contributed to 85% of the total age-standardised death rates in Eastern and central Europe and central Asia, while only 8% of the total age-standardised differences were attributed to sub-Saharan Africa; between low and middle, and high-income countries. This indicates a 50% contribution to the NCD mortality gap between these regions, excluding Asia, sub-Saharan Africa and Latin America. From these statistics, it can be argued that developed countries have a higher mortality rate resulting from NCDs than most developing countries. However, estimates show that, if all adults in each region had the same mortality resulting from cardiovascular disease, cancers, chronic respiratory diseases and diabetes as did those in high-income countries, the global mortality rate would be reduced by 27% for men and 29% for women, thus exceeding the global

NCD goal of a 25% reduction in NCD-related mortality worldwide (Di Cesare et al., 2013, p. 586; Gupta & Guin, 2010). These statistics can be used as an indicator of the incidence of NCDs, which in turn supports the need for health promotion in communities.

In sub-Saharan Africa, not only are non-communicable diseases inextricably linked to the ubiquitous forces of globalisation and urbanisation, but they are also associated with poverty and socio-economic inequality (Shariful Islam et al., 2014; Venkat Narayan et al., 2010). Over the past decade and a half, the change in the political landscape has seen an increase in NCDs, driven by an upsurge in significant risk factors in both urban and rural areas. While some sub-Saharan and central European countries has been recognised for having the highest burden of NCDs, World Health Organization estimates indicate that the burden of NCDs in South Africa exceeds the rate in developed countries (Mayosi et al., 2009) . Although NCDs are not currently the leading cause of death in sub-Saharan Africa, social determinants of health such as demographic changes with reference to population growth and ageing, as well as lifestyle changes (Mensah, 2016) such as poor living conditions and social exclusion, increase exposure to the determinants of NCD and an increase in NCD rates (Mayosi et al., 2009).

2.2.2 Food insecurity and malnutrition

In this sub-section, I define nutrition as an essential human need. I highlight the global causes of the nutrition transition, and then provide evidence of the national experiences of food insecurity and malnutrition challenges.

The South African Constitution and Bill of Rights (1996, p. 11) state that, while every individual has the right to access sufficient food and clean water, every child has the right to “basic nutrition”. Nutrition can be understood as a means of obtaining or consuming the food necessary to ensure optimal health and growth (Oxford Dictionary, 2013), and is an essential human need. The physiological or basic needs of every individual being are shelter, food, water and care. These needs, according to Maslow’s theory of the hierarchy of needs, are most powerful in attaining better psychological health, allowing the individual to progress to a level of self-fulfilment (Lester, 2013). The key element is the nutritional value of food, which has an impact on an individual’s health and well-being throughout the lifespan in innumerable ways (Hammond & Dubé, 2012). Currently, many countries around the globe are experiencing a nutrition transition (Dukhi et al., 2016). The nutrition transition, according to Dukhi et al. (2016) and Kimani-Murage et al. (2010) can be referred to as a change in nutritional food

composition, from traditional staple diets that are high in fibre and low in fat, to more westernised diets high in energy and low in fibre. Growing urbanisation, globalisation, economic transition, changing demographics and technological innovations are manifest drivers of this nutrition transition (Dukhi et al., 2016; Hammond & Dubé, 2012; Kimani-Murage et al., 2010), particularly in low- and middle-income countries.

According to Vorster (2010, p. 2), South Africa is a middle-income country, with a diverse, multi-cultural and multi-ethnic population, undergoing a complete lifestyle transition, from changing dietary patterns, physical inactivity and frequent alcohol consumption to socioeconomic, social and educational changes. Despite the NCD and HIV and AIDS epidemic persisting in South Africa, malnutrition also contributes to the public health crisis as a major consequences of food insecurity and thereby hunger (Dukhi et al., 2016; Hammond & Dubé, 2012). Food insecurity, although a multidimensional concept (Altman, Hart & Jacobs, 2009), can be simply understood as a shortage of adequate food supply (Hendriks, 2015), due to the inaccessibly or unaffordability of wholesome food, to sustain a healthy life. Food insecurity affects the physical, social and economic domains of human well-being (Walsh & Van Rooyen, 2015)

Altman et al. (2009) state that household food insecurity is of great concern in South Africa, occurring as a result of widespread chronic poverty, inflation, income inequality and unemployment. Walsh and Van Rooyen (2015) reiterate that household food insecurity continues to be a major problem in both the rural and urban developing world, with 26% of households experiencing food deprivation, and at least 28% that are at risk of food insecurity. Learners living in households experiencing food insecurity thus become victims of hunger and are malnourished. Formerly, poverty and hunger were widely associated with rural dwellers in South Africa. However, changing dynamics resulting in urbanisation has marked a shift from poverty in rural areas to urban settings as well. Although the extent, degree and exact causes of the prevalence of food insecurity have not been fully established (Walsh & Van Rooyen, 2015), the issue of hunger remains perplexing.

Malnutrition is defined as a nutritional deficiency that impairs the physical functioning of the body to a point where an individual can no longer maintain adequate performance processes pertaining to growth and development, biological functions such as pregnancy and lactation, physical exertion, and resistance to and recovery from disease (Engelbert Bain et al., 2013). The nutritional status of an individual is determined by the nutritional value of the food consumed, thus a person experiencing a lack of macro- or micronutrients in a diet (Hoddinott, Rosegrant & Torero, 2012) is

generally referred to as being malnourished. Malnutrition encompasses both undernutrition and overnutrition (Faber & Wenhold, 2007), thus the phenomena surrounding the issue of hunger and malnutrition can be viewed as being two sides to the same coin. Nutrient deficiencies may not necessarily be the result of undernutrition but may also be a consequence of overnutrition.

Currently, there are an estimated 815 million people in developing countries who are malnourished, with almost 15 000 children under the age of five dying each day from preventable nutritional deficiencies (Food and Agriculture Organization of the United Nations, 2017; World Health Organization, 2017). The most common form of micronutrition deficiency (undernutrition) due to a severe or chronic lack of adequate nutrition is stunting (Altman et al., 2009; Walsh & Van Rooyen, 2015). The Oxford Committee for Famine Relief ([OXFAM], 2014) indicates that, of the two billion learners suffering from a micronutrient deficiency, 26.5% are stunted. Dukhi et al. (2016) identify stunting as a major public health challenge affecting and preventing learners, particularly in the under-five age group, from reaching their full developmental milestones. The consequences of childhood undernutrition, if left untreated, pose a critical risk factor for ill health and contribute substantially to the burden of infection and disease in adulthood. Implications include impaired cognitive development, poor scholastic achievement, increased vulnerability to infections of the immune system and metabolic irregularities, as well as higher risk of being overweight or obese in later life (Altman et al., 2009; Cloete, 2015; Kimani-Murage et al., 2010).

2.2.3 HIV and AIDS pandemic

In this sub-section, I begin with a brief introduction to HIV and AIDS as a pandemic. I then provide international statistics on the HIV pandemic in relation to national statistics of HIV as an epidemic requiring urgent attention.

Since the earliest identification of HIV and AIDS more than three decades ago, the pandemic continues to be the most devastating health challenge affecting nations globally (UNAIDS, 2011). The onset of Acquired Immune Deficiency Syndrome (AIDS) was recognised by American health specialists in 1981 as a new form of disease characterised by a series of unusual opportunistic lethal infections and malignancies that compromised the immune system of young homosexual males. The spread of the illness, commonly through sexual relations between infected homosexual and heterosexual partners, perinatal routes, i.e. from mother to child, and contact with infected blood through transfusions or sharing of needles, particularly through drug use, resulted in almost 60 million infections globally (De Cock, Jaffe & Curran, 2012;

Muthukrishna, Tshauka, Ebrahim, Mbatha & Ntoi, 2008; Sharp & Hahn, 2011). The primary causative agent, which progresses to a group of opportunistic infections targeting the immune system, had been identified as a retrovirus and is commonly referred to as the human immunodeficiency virus (HIV-1) (Sharp & Hahn, 2011), while AIDS is conceptualised as a term that applies only to an individual who has reached the most advanced stages of HIV-1 infection (World Health Organization, 2016).

With the outbreak of the disease, HIV-1 infections reached epidemic proportions, which heightened to a widespread global pandemic (Van Rooyen & Van den Berg, 2009). According to Jepkemboi and Aldridge (2014), the Joint United Nations Programme on HIV and AIDS (UNAIDS) estimated that 34.0 million people worldwide were living with HIV and AIDS, and 25 million had succumbed to HIV and AIDS-related causes by the end of 2011. A study by Naidoo and Rule (2016) indicates that, in the past five years, 2.9 million new infections occurred globally. Although the spread of HIV and AIDS has reached varying heights across regions globally (Loening-Voysey, 2002), it has been recorded that sub-Saharan Africa has the highest prevalence of HIV infections, amounting to 25.8 million (Naidoo & Rule, 2016), with an estimated 19.4 million deaths since 2012 (Heath, Donald, Theron & Lyon, 2014; Jepkemboi & Aldridge, 2014). Of the total number of HIV infections estimated in the sub-Saharan African region, South Africa has experienced the fastest growing epidemic (Keikelame, Murphy, Ringheim, & Woldehanna, 2010; Loening-Voysey, 2002). An alarming 5.51 million individuals (15 years and older) are HIV positive. This amounts to 16.8% of the total adult population of South Africa (Keikelame et al., 2010; Naidoo & Rule, 2016) and clearly implies that South African youth are more vulnerable to the HIV and AIDS pandemic than those of any other country.

However, despite the high incidence of HIV infections globally, UNAIDS (2011, p. 18) stated in its annual report that the number of people dying from AIDS-related causes worldwide declined from 2.2 million to a projected 1.8 million. The decrease in HIV and AIDS mortality is most likely owing to the introduction of antiretroviral therapy (UNAIDS, 2011, p. 2). Although the number of HIV infections dropped in 33 countries, with 22 of these countries being in sub-Saharan Africa (UNAIDS, 2011), the region that has been most affected by the pandemic, Van Rooyen and Van den Berg (2009, p. 81) proclaim that the HIV epidemic in South Africa has accelerated to the stage of "generalised infection", with no indication of a decline in the epidemic. Keikelame et al. (2010) maintain that the HIV epidemic in SA remains unabated. In 2012, Naidoo and Rule (2016) found that an estimated 29 000 new infections had occurred in learners aged two to 14 years, while the prevalence of HIV infection is eight times higher amongst

females between the ages 15 and 19 than in males. In order to reduce the total number of HIV infections in South Africa, Keikelame et al. (2010) emphasise that it is crucial to take steps towards combatting and eliminating the drivers of the pandemic.

2.2.4 Psycho-social wellbeing

In this sub-section, I discuss the general risk factors for psycho-social and mental health problems in early childhood, and the overall prevalence of these health problems globally. I then conclude with a brief discussion of the need for mental health services, particularly in resource-constrained communities.

In early childhood, emphasis is placed on the biological development of learners pertaining to healthy brain development and thereby cognitive and emotional development, for example the formation of emotional regulation, which later affects mental health outcomes (Kieling et al., 2011). However, while mental health is an integral part of optimal growth and development, it is not limited to intrinsic factors of development, such as being able to manage one's own thoughts, emotions, behaviours and interactions with others, but is also affected by social, cultural, economic, political and environmental factors, like national policies and social protection, living conditions and standards, working conditions, as well as community social networks (World Health Organization, 2013).

Adversity during early childhood is a strong predictor of depression. A representative study of young adults in Mexico City, by Kieling et al. (2011), revealed that 68% of adolescents reported having at least one form of chronic adversity since childhood. From various studies conducted with learners and adolescents, Dreckmeier-Meiring (2012, p. 306) postulated that the prevalence rate for depression in young learners appears to fit in the same category as for older learners and adolescents. They also found that gender differences play a role in the prevalence of depression. At least 10% of learners and adolescents display moderate to severe symptoms of depression, while about 15 to 30% show mild to moderate symptoms. In addition, studies have found that boys are more likely to experience a depressive disorder before reaching adolescence, whereas females are more likely than males to experience a depressive disorder in adolescence, with an increase in severity of symptoms in late adolescence (Dreckmeier-Meiring, 2012, pp. 307-308).

Although few studies on the risk factors for mental illness during childhood have been documented in the literature, evidence of perceived, bidirectional mental health risks specific to school-aged learners (five to 18 years old) in low-middle-income countries

(but varying between countries) include obesity, academic failure, bullying, familial challenges involving physical and sexual abuse, alcohol and drug use, chronic diseases such as HIV and AIDS, cancer, diabetes and heart disease (Kieling et al., 2011). In addition, Patel, Flisher, Hetrick, and McGorry (2007) point out that poverty, and social and economic disadvantage are strongly linked to mental ill health. Exposure to adversity in the immediate environment, like food insecurity and poor nutrition, domestic violence, inadequate education, and living in a vulnerable neighbourhood with a lack of social networks, also places learners at risk of depression and other psycho-social difficulties (Wallace, Holloway, Woods, Malloy, & Rose, 2011).

Psycho-social and mental difficulties persist into adulthood if left untreated, and significantly reduce the quality of life of the individual, thus early interventions to prevent progression and the onset of comorbid diseases is vital (DeSocio & Hootman, 2004; Patel et al., 2007). Currently, between 70% and 85% of individuals with a mental condition receive no treatment at all (DeSocio & Hootman, 2004; Kieling et al., 2011; World Health Organization, 2013). This implies the need for mental health services in resource-constrained communities, for which Kieling et al. (2011) suggest the integration of child mental health services in existing primary settings, more specifically identified as the school (DeSocio & Hootman, 2004). Furthermore, there is a great demand for resources and more trained professionals, such as teachers, psychologists, counsellors and social workers, in order to ensure psycho-social support and meet the mental health needs of learners (Mwoma & Pillay, 2015). The following section discusses the impact of health in a global society.

2.3 SCHOOL-BASED HEALTH PROMOTION

2.3.1 Introduction

Ensuring optimal health for learners, particularly for those from groups that were disadvantaged prior to 1994, has posed many challenges for South Africa (Department of Basic Education [DoBE], 2012). Despite efforts to promote health for all South African citizens through accessibility to free healthcare services (i.e. local clinics and state hospitals), many citizens still do not receive the benefits of these facilities. Some of the reasons for this, to a greater or lesser extent, are poor quality health care and restricted access to better healthcare services. This is particularly true for people living in rural areas. In accordance with the Bill of Rights, which places emphasis on upholding learners' rights, the South African Government pledged as signatory to the United Nations Convention on the Rights of the Child. In the light of this, the introduction of health promotion with the aim of developing numerous health-

intervention programmes at the school level is at the forefront in addressing the health needs of young South Africans and future generations (DoBE, 2012).

In this section, I discuss school-based health promotion with respect to the partnership between education and health, health-promoting schools, the role of the curriculum in school-based health promotion, factors influencing the implementation of school-based health promotion programmes, and the outcomes of school-based health promotion programmes.

2.3.2 The partnership between education and health

In this sub-section, I draw attention to salient aspects that potentially influence the partnership between education and health.

While Ross and Wu (1995) have found that there is an established, positive association between health and education, they are of the opinion that explanations for this association have not been clearly established. In a recent study, Van der Heide et al. (2013, p. 173) indicated that several studies on health inequalities have established a strong link between insufficient educational levels and poorer health outcomes, and have shown clear associations between education and health literacy, education and health, and health literacy and health. However, in a recent study, health literacy was identified as an explanatory measure denoting the relationship between health and education (Van Der Heide, et al., 2013).

According to Haycock (2010), adults who receive a good education are better able to sustain healthy living and are better equipped to promote a culture of health amongst their learners. Education brings about a number of opportunities, which would not otherwise be available to those less educated, including health insurance with high-paying jobs, and access to well-established healthcare facilities. According to Zimmerman, Woolf and Haley (2014), research has shown that the educational attainment of parents, particularly the mother in a household, is a key determinant of the health status of her children (Maphalala & Adams, 2016, p. 148; Vergnani, Filsher, Lazarus, Reddy & James, 1998). Haycock (2010) further states that well-educated parents of learners are then also more likely to make wiser food choices by purchasing more nutritious foods, enrol their children in or create opportunities for them to participate in sports, and ensure safe and nurturing facilities for child-care such as living in health-promoting environment with access to good schools and various facilities.

Amongst other things, Zimmerman et al. (2014) highlight education in particular as having an impact on a range of essential skills, such as cognitive skills, problem-solving skills, and learned effectiveness. These skills are conceptualised as human capital and may all bring about agreement between the relationship between health and education. In addition to this, particular characteristics or traits of a person contribute to success in later life, such as employment opportunities as mostly important for health. Scholastic progress in reading, mathematics and science, as well as health literacy, forms part of fundamental educational subjects that are believed to contribute to learners' future health outcomes. Understanding the importance of education brings to attention how critical it is to ensure that learners, particularly those enrolled in at-risk schools, receive a quality education for a sustainable future (Organization for Economic Cooperation and Development [OECD], 2012).

Van der Heide et al. (2013) mention that low health literacy serves as a barrier to accessing health care and treatment as a result of low-paying jobs that offer inadequate or no medical health scheme (i.e. medical aid), and these individuals may have a poor understanding of health information and medication for treatment (unable to read instructions, labels) or experience difficulty finding ways of prevention and treatment through reliable sources. Poor lifestyle choices in terms of diet and exercise, unemployment or lower paying jobs may create considerable stress, leading to ill health and impeding any motivation to learn. Having English as a second language subject at school may improve language proficiency. Educational interventions, in addition to health interventions, though mutable, can be particularly important in strengthening learners' skills, especially learners attending underprivileged schools who reside in precarious home and social environments that may hamper their leaning of such refined skills (World Health Organization, 2009). Although enduring, these skills are also mutable, and research indicates that educational interventions to strengthen these skills can be important, especially among learners in disadvantaged areas, who may find it more difficult to refine these skills at home and in their social environments. Educating for sustainable living holds lifelong health benefits for future generations as well (Haycock, 2010; Zimmerman et al., 2014).

Although the above literature may hold a number of points that are presumably controversial, it is widely accepted that education and health have a strong partnership and that learners who are raised in healthy environments achieve better at school, thus educational attainment is associated with improved health outcomes in later life (Langford et al., 2014). Health-promoting schools are a recent advancement in health education, initiated by the World Health Organization. In the Health Promoting Schools

Framework of the World Health Organization, health education is outlined as a key element for achieving health-promoting school status (Peu et al., 2015). Health-promoting schools will be discussed next.

2.3.3 Health-promoting schools

In this sub-section, I define health-promoting schools as a concept introduced primarily by the World Health Organization.

Considering that learners spend a substantial number of hours at school each day, and that there is an intrinsic link between health and formal education (Langford et al., 2014), school-based health promotion offers a means of combatting the debilitating effects of the four epidemics. Schools are regarded as centres for learning that have the greatest influence on improving the health and well-being of learners, thus Hill et al. (2015) are of the view that schools are in the best position to transfer knowledge to learners about several health (most commonly related to HIV and AIDS and NCDs) and lifestyle issues. Katz (2009) and Langford et al. (2017) support this notion, asserting that significant information regarding health, for example smoking, physical activity and food choices, can reach learners during the early and most informative years of a learner's schooling career. Early education shapes the beliefs, attitudes and behaviours ensuring long-term health consciousness for sustainable living. Additionally, schools are deemed to be the most reliable settings to promote health, as the environment offers a cost-effective infrastructure, conventional policies and curricula, and personnel and resources, which offer great potential to constructively encourage healthy lifestyles. By providing education in school, not only do learners engage in healthy practices, but the message is also disseminated to the families of learners and to the broader community, thereby improving the general health status (Vergnani et al., 1998).

As a means of addressing and promoting health on a wide scale, the World Health Organization introduced a new concept in Ottawa, Canada in 1986: the Health Promoting Schools Approach. The World Health Organization introduced this conceptual approach by describing health promotion as "a process about enabling people to increase control over, and to improve their health (Buijs, 2009). Similarly, Peu, Napoles, Wenhold, Mostert-Wentzel and Seane (2010) used an extended definition to define health promotion. In the first definition, health promotion is described as the science and art of helping individuals transform their lifestyles and move toward reaching optimum health status. The second definition extends the concept of health promotion, stating that it is also a set of controlled actions or efforts

that improve, support or promote the well-being of individuals, their families, communities or societies at large (Peu et al., 2010).

To reinforce the strong partnership between health and education, the World Health Organization institutionalised the health-promoting schools (HPS) approach (Barnekow et al., 2006). The purpose of the health-promoting school is to ensure a paradigm shift away from traditional teaching that involved imparting knowledge on health through a health education curriculum in an attempt to change behaviour, to a new paradigm that places emphasis on a holistic approach to well-being that includes all aspects of development (Buijs, 2009; Langford et al., 2017; Macnab, 2012; Maphalala & Adams, 2016). The holistic approach works through a whole-school approach and places great emphasis on developing educational outcomes that facilitate actions for health by constructing health knowledge and skills in the cognitive, social and behavioural domains of learning (Buijs, 2009).

Quality education appears to be a valuable tool in promoting health education for sustainable living. Buijs (2009, p. 508) states that "strategic school-based programmes are more likely to produce better health and education outcomes than those which are mainly information-based and implemented only in the classroom". School-based health promotion programmes to promote physical and mental health are found to be among the most effective, more specifically when these programmes work on relevant changes in the psycho-social school climate, include the learners, teachers and parents, and focus on developing each individual's skills and resilience. They should also be implemented for longer periods of time, at least over one year (Barnekow et al., 2006; Buijs, 2009).

2.3.4 Role of the curriculum in school-based health promotion

In this sub-section, I briefly discuss the South African foundation phase curriculum (Appendix D) and thereby highlight the role of the curriculum in school-based health promotion.

Schools have long had an important role to play in health promotion. While knowledge of health and safety traditionally was imparted through the formal school curriculum in subjects such as literacy, numeracy and the sciences (Driscoll & Nagel, 2008; Langford et al., 2017; St Leger & Young, 2009), the current curriculum in early childhood education emphasises accommodating all learners and responding to their individual needs, as well as addressing societal concerns and lifestyle challenges affecting the learners' lives. Following this, many curriculum foci began integrating the traditional

developmental approaches with broader topics of health and safety, social justice and environmental awareness (Driscoll & Nagel, 2008).

In addition to the core subject curriculum, the Department of Basic Education implemented a Life Skills curriculum for grades R to 3. According to the Department of Basic Education (2011, p. 8), Life Skills is a subject that is "central to the holistic development of learners". The subject content encompasses the social, emotional, personal and intellectual, as well as the physical growth of learners, and reflects the ways in which each of these domains is integrated. The aim of this subject is to guide and prepare learners for life and its possibilities by equipping learners with meaningful knowledge, skills, values and attitudes to become successful and productive citizens in an ever-changing society (DoBE, 2011). Mwoma and Pillay (2015) reiterate that Life Skills in school is aimed at preparing young individuals to become productive and responsible citizens of a democratic society.

According to Darragh (2010), topics of health and physical fitness serve as a tool to support the holistic well-being of an individual and help prevent illness towards adulthood. The more knowledge learners gain about healthy lifestyles and the amount of time they spend doing non-sedentary behaviour at school, the more likely they are to adopt and sustain a healthy lifestyle (St Leger & Young, 2009). Although the current Life Skills curriculum shows evidence of supporting health promotion, it can be argued that there is still not enough time allocated to health topics and physical education (DoBE, 2011). Thus, this indicates that including extracurricular activities as an intervention may contribute to stronger health outcomes and lifestyles changes among learners and eliminate the factors that negatively influence the implementation of health promotion in schools (Naidoo, Coopoo, Lambert, & Draper, 2009).

2.3.5 Factors influencing the implementation of school-based health promotion programmes

In this sub-section, I examine factors influencing the implementation of school-based health promotion programmes in the light of the South African National Curriculum Statement.

In South Africa, the National Curriculum Statement (NCS) was said to be the result of the Government Department of Education's effort to transform the curriculum based on past government policies (DoBE, 2011). The curricular divisions of the past were initially overcome by implementing Outcomes-based Education (OBE) in 1997, and later the RNCS Grade R to 9 and the NCS Grade 10 to 12 in 2002 (DoBE, 2011). The

RNCS and the NCS curricula were integrated and reviewed as the NCS Grade R to 12 in 2012. This lack of curriculum pacing has brought about much confusion and frustration for policy makers, and more critically for teachers, regarding curriculum implementation and administration, as well as monitoring, class assessment and evaluation (DoBE, 2009).

According to Van Deventer (2009), the educational transformation to OBE and Curriculum 2005 introduced Life Orientation as a study area for all learners, and it is now more commonly referred to as Life Skills in grades R to 3. Constituents of this study area, such as Health Promotion, Social Development, Personal Development, Physical Development and Movement and Orientation to the World of Work, were identified as topics that promote the health and well-being of young learners. However, despite the many improvements made to the national school curriculum over the past 13 years, there are a number of contextual factors that hamper the successful implementation of health promotion in schools (Van Deventer, 2009).

The greatest shortfall in implementing health promotion in schools is that principals have a negative attitude towards the Life Skills subject and have disregard for its value in the curriculum (Christiaans, 2006). Second, the subject is often taught by teachers who are not specialists in the field or who have received no training to teach all the relevant Life Skills topics (Hoadley, 2009; Maharajh, Nkosi & Mkhize, 2016; Mahlo, 2017; Van Deventer, 2009). Third, the time allocated to the Life Skills curriculum, and more particularly to health promotion, is insufficient (Department of Basic Education, 2011; Hoadley, 2009). Fourth, teachers still grapple with administration and therefore have less time to focus on teaching and catering for the individual needs of learners, and resources are very limited, especially in no-fee paying schools (this includes a lack of human resources, i.e. teachers, a lack of cultural resources, e.g. time, language and other cultural embodiments, and a lack of material resources, e.g. textbooks) (Maharajh et al., 2016). Lastly, large classrooms with more than 40 learners per classroom make it difficult for teachers to contain and provide attention to individual learners, especially those affected by social difficulties, for instance home violence or abuse, who are unable to concentrate on class activities and the lesson being taught (Maharajh et al., 2016; Mahlo, 2017).

The World Health Organization (2005, p. 4) has furthermore identified that some of the factors with a negative effect on the successful implementation of health promotion programmes include a lack of national planning; political influence and capacity; limited availability of data regarding the target groups and impressions of interventions; the influence of socio-economic factors and special concerns about the age of the target

population; the overwhelming burden of disease on society, families and individuals; the use of interventions in a multifactorial setting; communication strategies through media and school to reach vulnerable and minority groups; and a lack of engagement and partnerships on all levels of society (from government to individual).

2.3.6 Outcomes of school-based health promotion programmes

In this sub-section, I explore evidence of outcomes of different school-based health promotion programmes implemented both internationally and nationally.

To prevent a further increase in mortality rates, particularly in low-middle-income countries, Abel and McQueen (2013, p. 10) advise that interventions designed at population level have greater potential to benefit disadvantaged communities and contribute considerably to a significant decrease in health inequalities. Population-level interventions are targeted at all age groups with the aim of preventing health challenges by addressing the underlying risk factors for disease, and are thus efficient and effective in their purpose (Abel & McQueen, 2013). Population-level interventions can be implemented using various approaches, like community mobilisation through household visits and the facilitation of community dialogue on health, health initiatives such as public health screenings and immunisation, as well as awareness campaigns, for example the national diabetes week or World AIDS Day (Department of Health, 2014). Although health promotion has been on the agenda for at least four decades, school-based health promotion has only recently received greater attention as a population-level intervention strategy using a more holistic approach (Kesharvarz Mohammadi, Nutbeam, Rowling & Khavarpour, 2010).

School-based health promotion programmes for learners of school age are usually delivered through the school system. Some of the most common interventions include deworming, school feeding and micronutrient supplementation, malaria control, HIV prevention and care, oral health care and prevention of non-communicable diseases (Bundy, 2011). These interventions are usually reinforced with a formal school health policy between both the health and education sectors. Together, the education and health sectors provide safe, simple and effective school-based interventions, which are likely to address some of the most common health and nutrition complications that affect school-age learners (Bundy, 2011, p. 4).

The basic daily interventional activities are carried out primarily by teachers and the supporting school staff, with minimal training and oversight from the health sector. For example, interventions such as providing information on deworming, tooth-brushing,

hand washing and sanitisation, physical activities and school feeding, and other health practices are easily conveyed to learners. While weekly interventions, including, for instance, iron and vitamin supplementation and water sanitisation, are carried out with the assistance of other staff members and assistants, other interventions are carried out annually by specialised healthcare personnel, for example health care assessments for vision and hearing and oral health, the dispensing of relevant aids, malaria treatment and deworming (Bundy, 2011, p. 5).

These types of interventions are implemented globally and nationally, to both primary and secondary school learners, and specific to regions and areas of a country (Bundy, 2011; World Health Organization, 2017). International school-based interventions that have received recognition for best practice regarding clinical and behavioural outcomes in school-based health promotion as applied to primary school learners to encourage and support healthy behaviours, include the Know Your Body Intervention Programme and the Pathways Intervention Programme. The Know Your Body Programme (KYBP) is an intervention plan aimed at the primary school level for learners in grades 1 to 6 (Steyn, Lambert, Parker, Mchiza & De Villiers, 2009). The objective of the programme is to equip learners with the necessary knowledge, skills, attitudes and values in order to empower them to practise positive health behaviours. The purpose is to instil within learners a belief system that they are to take ownership of their own health and are responsible for their own thoughts, emotions and actions (Resnicow et al., 2013). The KYBP is designed on the basis of Social Learning Theory and includes three critical components, namely a) a classroom curriculum on general health and healthy eating, b) a physical activity programme, and c) parental involvement (Steyn et al., 2009).

While the KYBP previously focused only on risk factor prevention, the revised programme is more comprehensive, making use of developmentally appropriate health instruction approaches and cognitive and behavioural skills-building techniques to address various health areas, some of which include exercise, nutrition, dental health, self-care, emotional health, first aid and injury prevention, as well as HIV and AIDS (Resnicow et al., 2013; Steyn et al., 2009). The six-yearlong intervention programme implemented in Greece was carried out by trained teachers in the Life Skills curriculum, as well as by qualified physical education teachers. The curriculum focused on health and nutrition during class time, and a maximum of 45-50 hours per year, which is about two 45-minute physical activity sessions per week (Steyn et al., 2009). Together, the three components, viz. nutrition and physical activity programme with parental involvement and qualified teachers, contributed to the success of the programme,

which resulted in significant improvements in nutritional health and dietary intake of energy and participation in physical activity (Resnicow et al., 2013; Steyn et al., 2009). The KYBP intervention highlights qualified teachers and parental involvement as two strong contributors of a successful intervention – two components that are often lacking in low-income communities (De Villiers et al., 2012).

Using different approaches to target specific behaviours and promote healthy eating to prevent risk factors associated with obesity and related diseases is the Fresh Kids Intervention Programme, which was implemented in schools in Melbourne, Australia, and the Alberta Project Promoting Active Living and Healthy Eating in Schools (APPLE) programme (Laurence, Peterken & Burns, 2007; Vander Ploeg, McGavock, Maximova & Veugelers, 2014). The Fresh Kids intervention programme utilised the Health Promoting School framework developed by the World Health Organization as the foundation for the design of this holistic, whole-school intervention programme. The main objective of this intervention is to evaluate the effectiveness of the HPS framework in increasing health-promoting practices, in this case fruit/vegetable and water consumption amongst primary school learners. The key intervention involved classroom fruit breaks to encourage learners to eat healthy snacks such as fruit and vegetables, which are brought from home. Additionally, learners are only allowed to drink water during class time as opposed to sweet, fizzy drinks. Fruit weeks also form part of the intervention, whereby learners learn about and get to taste new fruits to inspire healthy eating (Laurence et al., 2007).

These practices are formalised by the school management team and relevant staff by means of an established policy. The success of the intervention presented a significant increase – of 25 to 50% of learners bringing fresh fruit and vegetables for lunch, and similarly it was noted that between 15% and 60% of this proportion of learners brought filled water bottles to school (Laurence et al., 2007, p. 218). Other school-based health promotion interventions focusing on the prevention and treatment of various health concerns, including fitness and nutrition, deworming and other treatments for viral infection, as well as mental health treatments, are offered in schools across the globe (Bundy, 2011).

Interventions implemented internationally that have been recognised as best practice (such as the ones mentioned above) have been used to plan and develop national interventions. One such intervention is HealthKick (Draper et al., 2010; Steyn et al., 2009). HealthKick is a recent school-based nutrition and physical activity health promotion intervention, implemented in low-income primary schools, aimed at

preventing obesity and reducing the risk of non-communicable diseases by promoting healthy eating habits and physical activity (De Villiers et al., 2012; Draper et al., 2010).

The HealthKick intervention is developed within the context of the social ecological model and primarily aims to encourage healthy eating habits in learners, parents as well as teachers as a means to reduce the risk of chronic diseases, more specifically type 2 diabetes; increase regular involvement in health-enhancing physical activity in learners, parents as well as teachers; to prevent overweight and obesity, and to reduce the risk of chronic diseases; and to encourage and support the growth of a conducive environment within the school and community that enables the adoption of healthy lifestyles (Draper et al., 2010; Steyn et al., 2009). The intervention consists of an action plan, a toolkit and a teachers' manual. The first constituent (i.e. the action plan) was grounded in international intervention guideline perspectives, such as the Action Schools! BC Planning Guide for Schools and Teachers, and the Centres for Disease Control School Health Index (Hill et al., 2015). The action planning process was initially intended to cover at least six areas, namely life orientation (curriculum component), food and nutrition, physical activity, health promotion for school staff, school policy and environment, and family and community involvement (Draper et al., 2010).

The HealthKick toolkit contains a resource guide, a resource box and a physical activity resource bin. The resource guide is a printed handbook that contains information about current resources from government, non-governmental organisations and industries about nutrition, physical activity and diabetes, whereas the physical activity resource bin contains basic equipment such as skipping ropes, balls, bean bags, stopwatches and whistles for the learners. The resource box holds relevant information sources on nutrition, physical activity, chronic diseases and policies, and the school environment. These information sources include lesson plans and activities (Draper et al., 2010). The manual is a core component of the intervention, which comprises the curriculum component of the HealthKick intervention, and also includes information regarding the action planning process, the resource guide and numerous other resources, for instance the South African food-based dietary guidelines (Draper et al., 2010; Steyn et al., 2015). According to Hill et al. (2015), implementing an intervention such as HealthKick in resource-constrained communities is effective; however, time, financial resources and the lack of effective policies are major constraints that needs to be overcome if such interventions are to be successful and sustainable (Steyn et al., 2015).

Another intervention that has recently received attention is the production of food gardens at schools (Draper et al., 2010). Laurie, Faber and Maduna (2017, p. 80)

describe food gardens as "a vehicle for spreading knowledge of food production, creating a culture and love for food gardening and making the link with nutrition". The introduction of vegetable gardens as intervention at schools has created a great set for health promotion. School vegetable gardens hold many benefits and have resulted in changes in learners' skills and attitudes. By encouraging and increasing vegetable and fruit consumption, learners have sound knowledge about fruit and vegetables and how growing their own fresh produce contributes positively towards influencing dietary habits. Additionally, it has made noticeable changes in food behaviour; for instance, learners are more likely to choose healthy options such as a fruit to snack on instead of crisps and sweets, and learners also consume more water than fizzy drinks (Laurence et al., 2007). Furthermore, school vegetable gardens also have the potential to provide, to some extent, locally grown fruits, vegetables and legumes to be included in the school meal as part of a school feeding scheme (Laurie et al., 2017; Somerset & Markwell, 2009). Engaging in the practice of planting also increases participation in physical activity, as well as improves emotional and psychological well-being.

2.4 EFFORTS TO ADDRESS HEALTH-PROMOTION CHALLENGES FOR GRADE 1 TO 3 LEARNERS

2.4.1 Introduction

With the global burden of communicable and non-communicable diseases affecting millions of individuals, there is a call for addressing the associated primary disease-related risk factors, such as smoking, unhealthy diets, sedentary behaviour and the harmful use of alcohol and other substances (Abel & McQueen, 2013, p. 21). To address these health issues, health promotion programmes have received widespread attention (World Health Organization, 2017). Interventions to address health issues at both the population level and system level have been well documented and argued. However, assuring the health of all citizens of a country moves beyond focusing on the health status of a particular group of individuals, but rather requires an intersectoral approach (Frank & Jepson, 2013). The following sections provide an overview of global and national efforts to address health promotion among Grade 1 to 3 learners.

2.4.2 Overview of global efforts to support the health of Grade 1 to 3 learners

In this sub-section, I provide an overview of global efforts to support the health of Grade 1 to 3 learners. The discussion is focused on efforts that involve health promotion programmes implemented at a global level.

According to USAID (2009, p. 1), the success of health promotion programmes and, more specifically, school-based health promotion programmes in developing countries is the partnership between ministries of education, health and other stakeholders, such as private sector partners, non-governmental organisations (NGOs), and community-level stakeholders.

A number of authors (Brown & Summerbell, 2008; Byrne, Rietdijk & Pickett, 2016; Langford et al., 2017) agree that the school setting is most appropriate and effective for promoting the health and well-being of learners, and thereby of communities at large. The reason for this is two-fold. Firstly, health and education are very strongly linked and, secondly, learners spend much of their time at school and are thus in the best position to receive health benefits through education to produce long-term health outcomes (Langford et al., 2014). Hence, holistic approaches to address health promotion have received more attention globally as opposed to biomedical models, that focus solely on individual treatment and outcomes (Abel & McQueen, 2013; Institute of Medicine of the National Academies, 2003).

To bring health promotion to the forefront, the World Health Organization proposed an innovative, holistic approach to health promotion that takes into account the whole school environment and the social, political and environmental impacts of health on individuals (Langford et al., 2014). The Health Promoting Schools Framework (HPSF) was established to support the growth and development of health-promoting schools in various regions. Intended for use by all relevant stakeholders, such as government departments of health and education, schools (i.e. school staff, teachers, students and parents), local governments as well as nongovernmental organisations, the HPSF aims to offer guidance on the fundamental principles of health-promoting schools. The Health Promoting Schools Framework serves as a resource, outlining some basic tools that can help various stakeholders assess, review and prioritise practical actions that lead to effective strategies for intervention in establishing health-promoting schools to improve health outcomes (World Health Organization, 2009).

Like the World Health Organization (WHO), the World Food Programme (WFP), established under the United Nations (UN), proposed the Food for Education (FFE)

Programme in the year 2000 in an attempt to increase school enrolment rates by attracting learners to school on the basis of food provision, which in turn would also reduce short-term hunger to help learners concentrate and learn better, thus producing higher educational outcomes (Adelman, Gilligan, & Lehrer, 2008). By the year 2005, the World Food Programme reached at least 21.6 million learners in developing regions. The Food for Education programmes include in-school feeding schemes, as well as take-home rations for learners enrolled at the school, subject to the child's attendance. Providing learners with food rich in protein and key micronutrients improves their nutritional status and subsequently their cognitive abilities. The Food for Education programme was adopted by many developing countries with the aim of achieving these objectives and reducing morbidity rates amongst young learners (Adelman et al., 2008; Bundy, 2011).

The World Food Programme was also adopted by other countries as an independent initiative. The government of Brazil, for instance, launched a National School Feeding Scheme, which aided more that 36 million learners from birth to fourteen (Adelman et al., 2008). In 2003, Brazil projected a Zero Hunger Programme as part of the National System for Food and Nutrition Security. This programme outlined four concrete interventions: 1) providing low-income populations with access to food by means of income and cash transfers, 2) providing schools with wholesome meals for school-going learners, 3) increasing the minimum wages of workers and promoting employment, and 4) strengthening the supply of fresh produce from farms to increase the food supply. The success of these interventions relies largely on the commitment and partnerships between government and civil society (Bundy, 2011; Committee on World Food Security, 2012).

Similar to the Zero-hunger Programme, India adopted a three-pronged strategy for addressing national food security. The first initiative is aimed at providing destitute communities access to food by doing cash transfers. The second initiative is the reduction of food prices through the provision of food subsidies to industries (also known as the Food Subsidy Programme). The third initiative involves providing a fresh mid-day meal (the Mid-Day Meal Programme) to learners in grades 1 to 8 who attend a state-funded government school. This strategy has reached at least 130 million school learners throughout India (Bundy, 2011; Committee on World Food Security, 2012).

The World Health Organization's efforts to promote health globally have had a marked impact on health promotion in many countries around the globe. However, the most significant efforts towards health promotion prevalent in low-middle-income countries

are those adopted by Brazil and India. Other international comprehensive health promotion programmes include the Challenging the Frontiers of Poverty Reduction programme in Bangladesh, and the Vision 2020 Umurenge Programme in Rwanda (Committee on World Food Security, 2012)

2.4.3 Overview of national efforts to support the health of Grade 1 to 3 learners

In this sub-section, I provide an overview of national efforts to support the health of Grade 1 to 3 learners. The discussion is focused on efforts that involve health promotion programmes implemented at the national level.

Health promotion in South Africa has evolved in recent years. The transition from mere health education to a comprehensive programme that includes education, training, research, legislation, policy coordination and community development has allowed the nation to fight against a quadruple burden of disease and bring about healthier future generations (Department of Health, 2014, p. 7).

Before the development of these current initiatives, South Africa, like other low-middle-income countries, had long implemented the unconditional cash transfer[2] programme by providing social grant schemes. According to the Constitution and the Bill of Rights, all learners from impoverished homes are eligible for the social grant (to be applied by their caregivers). More than 11 million learners in South Africa receive the grant. It has been stated that, of the seven social grant schemes (viz. Grants in aid, Child Support Grant, Foster Care Grant, Care Dependency Grant, War Veterans Grant, Disability Grant, and Grants for Older Persons) (South African Social Secuirity Agency, 2016), the child support grant provided to learners from birth to the age of 18 has managed to halve the poverty gap and has been proven to have a positive impact on food security (Committee on World Food Security, 2012, p. 47). Providing social grants alone, however, is not sufficient to promote health and wellbeing in order to achieve long-term future health outcomes. Hence, many initiatives under the National Health Policy, together with local and international partnership, have come forward in establishing school-based health promotion programmes.

Some of the current national health promotion efforts to address the multiplicity of health issues and social barriers to learning include:

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[2] An unconditional cash transfer is a welfare programme that provides a social grant to the poor as a means of alleviating poverty and food security. The grant scheme is provided to individuals of low socioeconomic status without any conditions being placed on the person eligible for the grant.

- The Alcohol and Drug Use Prevention and Management Programme (DoBE, 2017)
- The Care and Support for Teaching and Learning (CSTL) Programme (DoBE, 2017)
- HIV and AIDS Life Skills Education Programme (DoBE, 2017)
- Integrated School Health Programme (ISHP) (DoBE, 2017)
- Peer Education Programme (DoBE, 2017)
- The National School Nutrition Programme (NSNP) (DoBE, 2017)

The CSTL programme is a Southern African Development Community (SADC) initiative that was adopted by government ministers of education in 2008. The aim of the initiative is to prioritise the educational rights of all learners by providing an inclusive school environment for learners, including those who are considered vulnerable. By creating an inclusive environment, this initiative seeks to prevent and mitigate all factors that impact negatively on vulnerable learners in schools, and to address barriers to learning and teaching. The DoBE (2017) points out nine priority areas when addressing barriers to learning, which include nutrition education, health promotion, psycho-social support, social welfare, and school support (i.e. curriculum materials, curricula and co-curricular support). These programmes influence and contribute towards empowering young individuals, their families, communities and society at large to take control of their own physical, psycho-social and mental well-being (Department of Health, 2014).

In addition, the National School Nutrition Programme (NSNP) was presented under the CSTL programme with the same goals, i.e. upholding learners' right to health and adequate nutrition, and addressing barriers to learning associated with poverty and hunger (Department of Basic Education, 2017; Rendall-Mkosi, Wenhold, & Sibanda, 2013). The objectives of the NSNP are to provide healthy meals to school learners daily in order to strengthen their cognitive abilities, promote a healthy lifestyle that will allow learners to make wiser nutritional choices by incorporating nutrition education in the curriculum, and supporting the development of food gardens in which learners are able obtain their own fresh fruit and vegetables to supplement nutritious meals (Department of Basic Education, 2017; Rendall-Mkosi et al., 2013). These objectives are in sync with the view of Omidire and Karp (2016, p. 176) regarding the goals of nutrition education. The CSTL programme and initiatives appear to be successful in the prevention of non-communicable diseases.

Apart from nutrition-based health promotion, the National Policy of HIV and AIDS gave way to the development of a school-based HIV and AIDS Programme (Chibango, 2013). The school HIV and AIDS policy supports the implementation of the programme through the Life Skills or Life Orientation curriculum for all learners from Grade 1 to Grade 12. Integrating HIV and AIDS education in the Life Skills/Life Orientation curriculum provides learners with valuable knowledge on HIV and AIDS and ways of preventing and mitigating those factors that contribute to the spread of infection. The programme also intends to provide support and care to learners who are infected or affected by HIV and AIDS and related illnesses (Department of Basic Education, 2017). Evidence of health promotion is reflected in the CAPS Life Skills curriculum for grades 1 to 3. Including health promotion topics in the early primary grades helps educate learners from a very young age about the dangers of unhealthy lifestyle practices and how to take basic health precautions against the spread of disease (Department of Basic Education, 2011).

Furthermore, to counteract health concerns such as worm infections, measles, tetanus and other existing viral and bacterial infections which a pose threat to many young learners particularly in low-middle-income countries (LMIC) (Bundy, 2011; USAID, 2009), deworming and immunisation programmes are implemented in schools in most countries around the globe, including South Africa. The ISHP programme initiated by the DoBE, together with the Department of Health, has placed emphasis on providing school health services in the form of health education (for example raising awareness of drugs and healthy living, as well as safety and protection), and providing onsite immunisation and deworming (DoBE, 2017). Health education components, for example teaching learners about micronutrients in nutrition education, is essential to the successful implementation of a variety of health promotion interventions (Omidire & Karp, 2016; USAID, 2009). Interventions under these programmes are relatively inexpensive to purchase and administer and do not require any down-time that could affect classroom instruction (Adelman et al., 2008).

Although efforts are being made to increase health promotion in South Africa, the DoBE still calls for improvement in the coordination of health promotion efforts across government departments that are implementing health promotion programmes. Intersectoral collaboration and partnerships between the Department of Education, the Department of Health and the Department of Sport and Recreation to promote physical activity, as well as the Departments of Housing and Social Development, need to be strengthened to implement health promotion through all existing department programmes (Department of Basic Education, 2012; Department of Health, 2014).

Partnerships between NGOs and the academic and health sectors, as well as civil society, at the national, provincial and district level can help standardise health promotion interventions across the nation, as there currently are no established health promotion units in some provinces (Department of Health , 2014). Thus, it can be deduced from the above insights that, while health promotion was emphasised historically through national policy (Department of Health, 2014), it seems that health promotion in South Africa still requires more attention with regard to the national implementation of wide-scale health promotion programmes.

2.5 ROLES OF TEACHERS IN HEALTH PROMOTION

In this section, I highlight the multiple roles that teachers should adopt in supporting health promotion, and the need for pre-service and in-service training to assist teachers in fulfilling these roles.

Teachers are considered as the primary source of knowledge on health and safety matters (Byrne et al., 2016). Studies have found that many teachers think of health promotion in terms of the general curriculum due to the low priority given to health promotion by schools, and are thus often only responsible for providing such education alongside other subject specialisations. Thus, teachers are often unaware of their role in health promotion and are unable to provide learners with sufficient knowledge on practising and sustaining a healthy lifestyle (Jourdan, Samdal, Diagne, & Carvalho, 2008). The implication is that not many teachers have received preservice training, and that not many still receive in-service training on health promotion, which indicates the necessity to support teachers regarding their basic knowledge of health promotion through providing training on health promotion so that they can address the collective health needs of all learners (Byrne et al., 2016; Migliorett, Velasco, Celata, & Vecchio, 2012; Peu et al., 2015).

Without exception, all competent teachers, including foundation phase teachers (i.e. teachers teaching Grade R to Grade 3), as per the Norms and Standards for Teachers (DoE, 2000) and retained by the Draft Policy on the Minimum Requirements for Teacher Education Qualifications selected from the Higher Education Qualifications Framework (Department of Higher Education and Training [DHET], 2010), are required to fulfil and represent seven interconnected roles in school. These roles involve the teacher as: being a facilitator of learning; a subject specialist in a particular learning area or phase of study; a specialist assessor in providing fair assessment; interpreters and developers of curriculum and learning programmes; leaders, administrators and managers of the classroom; scholar and lifelong learner; as well as a research

professional playing a community, citizenship and pastoral role (DoE, 2000; DHET, 2010; Landsberg & Matthews, 2016). These specialised roles assigned to teachers have become even more crucial with the increase in complex social and health problems that challenge the physical and social well-being of learners, thereby affecting learning outcomes (Peu et al., 2015; UNESCO, 2016). Policymakers and teachers are the driving force in providing quality education for a sustainable future, and therefore are encouraged to embrace health promotion in order to respond effectively to multiple health challenges to sustain teaching and learning (Inman, Van Bakergem, Larosa, & Garr, 2011; UNESCO, 2016).

Byrne et al. (2016) assert that teachers play a citizenship, community and pastoral role by contributing to the delivery of health promotion interventions through the school curriculum by giving instruction in personal, social, health and economic education and spiritual, moral, social, and cultural education. This role has long been emphasised by the Department of Higher Education (2010) in supporting learners with HIV and AIDS. However, Migliorett et al. (2012) and Peu et al. (2015) found that foundation phase teachers have limited training in health matters to carry out health promotion programmes. Byrne et al. (2016) lament that the general gap between theory and practice, and intrinsic factors such as teachers' personal attitudes and beliefs, further aggravate the situation between pre-service health training and the effective implementation of school-based health promotion (Byrne et al., 2018). Thus, in-service training may be a better option to yield more positive health teaching and learning outcomes (Migliorett et al., 2012; Peu et al., 2015).

Furthermore, according to Darlington, Violon and Jourdan (2018), the implementation of health promotion programmes can be challenging due to insufficient training of all relevant stakeholders. What is imperative for the success of any health intervention is the training of staff, specifically teachers. Darlington et al. (2018) highlight that the expected outcomes of the development of school-based health promotion in terms of teacher training should relate to teachers' perceptions of health promotion, their capacity to integrate health promotion in their practice, the development of personal skills and perceived self-efficacy, amongst others. With sufficient training in this regard, teachers are expected to meet the expected learning outcomes which is to achieve enhancement of well-being through promotion of the social, physical and emotional health of learners.

2.6 CAREGIVER INVOLVEMENT IN HEALTH PROMOTION

In this section, I briefly discuss caregiver involvement, with specific reference to parents, in terms of school-based health promotion programmes and the need for parent training for the success of school-based health promotion programmes.

Children's behaviour is often shaped by observation and copying of members of the household. Primary caregivers, such as parents, are the most influential in a child's life, thus the inclusion of caregivers is essential for school-based health promotion and the prevention of health problems (Ulfsdotter, Enebrink, & Lindberg, 2014; World Health Organization, 2018). The notion surrounding parental involvement in a school-based health promotion is based on the fact that parents know best what they want for their children, and thereby should play an active role in promoting a healthy lifestyle (Tekin, 2011). However, according to Clelland, Cushman and Hawkins (2013), collaboration with parents has been identified as a major challenge to school-based health promotion. The World Health Organization (2013) states that the cause of this challenge is not as a result of schools' lack of communication with parents, but rather it is parents' disinterest in being a part of their children's learning.

Clelland et al. (2013) found that the most commonly used strategy by schools to communicate with parents, irrespective of parental needs, social class and individual circumstances, is by means of a newsletter. These authors (Clelland et al., 2013) argue that this strategy, although widely used, is not effective, particularly for parents who have a low level of literacy or speak a different native language. Furthermore, parents from a low socio-economic background have been identified as having very poor involvement in schools – possibly for these reasons (Tekin, 2011). Clelland et al. (2013) posit that, without the necessary knowledge and motivation to support good health practice, parents may struggle to bring about a change. For instance, parents are often unaware of the relationship between good nutrition and physical fitness and their child's ability to learn to make better choices. The reason behind this trail of thought can be traced back to the home, where behaviour is modelled. Other factors contributing to poor involvement in health promotion include a lack of knowledge, skills and abilities to engage in consistent practices with the school, lack of time to prepare nutritious meals, insufficient funds to purchase wholesome food, misinformed opinions about healthy eating from the media, as well as poor personal eating habits and an inactive lifestyle (Clelland et al., 2013).

Shedding light on the need for health promotion training, the World Health Organization (2013) acknowledged that parents' motivation to support health promotion can be

strengthened by the school community through communication by the principal as well as through observation of the outcomes of a strong relationship between learners and teachers. Creating new health-promoting environments through the establishment of vegetable gardens and animal enclosures has the potential to increase collaboration amongst all vital role players. In addition, using learners as agents of change may encourage parental involvement in health promotion. Encouraging learners to communicate with parents by means of discussions and homework projects, in which teachers provide parents with written materials on health promotion, is also effective (Clelland et al., 2013). Furthermore, health promotion training programmes targeting both parents and teachers is accessible globally (Tekin, 2011; World Health Organization, 2013b).

2.7 THEORETICAL FRAMEWORK: BRONFENBRENNER'S BIO-ECOLOGICAL SYSTEMS THEORY AND VYGOTSKY'S SOCIO-CULTURAL THEORY OF HUMAN DEVELOPMENT

All children are exposed to a unique environment in which they grow and develop, hence the development of a child can be described as "the interaction between the child and the environment" (Visser & Moleko, 2012, p. 15). The environment influences the child and the child has a direct impact on the environment (Keenan & Evans, 2009; Visser & Moleko, 2012). This area of knowledge, referred to as the context in which a child grows and develops, determines his or her unique world, composed of family, caregivers, friends, neighbours, teachers and members of the broader community (Darragh, 2010). The interactions between the environment(s) and the impact thereof form a bidirectional relationship that can be analysed using Urie Bronfenbrenner's Bio-ecological systems theory of human development (Darragh, 2010; De Witt, 2016; Neaum, 2013).

According to Brown and Zhou (2014, p. 59) and Darragh (2010), the Bio-ecological systems theory can be used to understand and explore the complexities of human development, public health discourse, learning and education, as it combines both the proximal processes of human development and the three progressive constructs, namely the biopsychological characteristics of a developing person, the parameters of the ecological context, and the dimension of time in human development (Krebs, 2009, p. 115; Tudge, Mokrova, Hatfield, & Karnik, 2009). More specifically, the Bio-ecological framework can help outline, describe and illustrate the reciprocal influences that should be considered when addressing health concerns in school-based health promotion intervention programmes (Golden & Earp, 2012).

The components of process-person-context-time are referred to as the PPCT model, which is the essence of the Bio-ecological theory of human development (Tudge et al., 2009, p. 200). According to Nelson and Lund (2017) and Tudge et al. (2009), the first component, proximal processes, comprises progressive mechanisms that drive the Bio-ecological systems theory and are viewed as withstanding forms of interaction that take place within or between aspects of an environment. This could include contextual aspects, such as culture and socioeconomic status, or individual aspects such as gender, and an outcome of interest (Tudge et al., 2009, p. 199). In the context of school-based health promotion, these can be applied to interactions with parents, caregivers and siblings, interactions with teachers and peers, or interactions with neighbours and other community members.

Person characteristics are the second component. The interactions that take place within the different environments in which the child grows affect and are influenced by the child, thus permitting development. Bronfenbrenner acknowledges that the ability of the child to influence the environment stems from his/her personal characteristics, which contribute to his/her development. From an ecological perspective, the ability and capacity of the child to influence various interactions, and thereby the emergence and operations of the proximal processes that contribute to their own development, are directed by three categories of personal characteristics, namely demand, resource and force characteristics (Araújo & Davids, 2009; Tudge et al., 2009).

Demand characteristics, such as age, gender, skin colour and physical appearance, act as a direct stimulus to another person. These characteristics either invite or discourage responses from the social environment. In the context of health promotion, for example, the appearance of a child who is malnourished or overweight is noticed, and therefore the response to the child could be a form of bullying by others, but it may also influence the need for intervention (Nelson & Lund, 2017; Tudge et al., 2009).

Resource characteristics, on the other hand, are referred to as facilitators that influence the capacity of the individual to engage in proximal processes. These include the ability, knowledge, skills and experience of the individual. Resource characteristics are not immediately apparent, but can, to some extent, be induced by demand characteristics (Araújo & Davids, 2009; Tudge et al., 2009). According to Nelson and Lund (2017, p. 15), these could include emotional resources such as past experiences. as well as social and material resources like access to food, proper housing, nurturing and caring parents, and even educational opportunities. In this model as applied to school-based health promotion for foundation phase learners, invisible characteristics could include living in poverty with minimal or no access to basic resources and

facilities like food, water and health care. It may also include learners living with ill parents who are HIV positive or suffer from mental trauma.

Force characteristics, also known as dispositions, are individual characteristics that deal with differences in temperament, persistence and motivation (Nelson & Lund, 2017; Tudge et al., 2009). In this study, a child struggling with a communicable or non-communicable illness has fluctuating levels of motivation, which plays an essential role in effective change and choosing intervention or treatment options. For example, a child who is overweight or obese may have low self-efficacy due to bullying, thus the willingness and motivation of the child to take part in physical outdoor activities (as intervention) may vary. Other health complications comorbid with overweight, obesity or HIV may also have an impact on motivation, and may influence changes in other individual differences such as persistence and temperament (Nelson & Lund, 2017).

The third component, identified as the context, is the crux of Bio-ecological systems theory (illustrated in figure 2.1), as it informs the earliest inception of Bronfenbrenner's ecological systems theory (Ashiabi & O'Neal, 2015). The environment(s) in which the various interactions take place are divided into a series of interconnected systems. Each of the systems are influence and have an impact on the growing child's development. The reciprocal interactions between the biopsycho-social person and their ecological environment forms the interconnection between the systems (Nelson & Lund, 2017).

These systems comprise of the microsystem, mesosystem, exosystem, macrosystem and chronosystem. The microsystem is essentially the most important of the five systems, as it has the greatest influence on the developing child on a day-to-day basis. Within this system, the child has a direct interaction with his/her immediate surroundings, such as the home (family), school (teachers and peers) and neighbourhood (Araújo & Davids, 2009; Darragh, 2010; Keenan & Evans, 2009; Nelson & Lund, 2017).

The mesosystem represents the interrelationship between two or more microsystems or immediate settings in which the individual child actively participates (Araújo & Davids, 2009; Darragh, 2010; Watling Neal & Neal, 2013). In this study, the critical mesosystemic relationship is between the child's home environment and the school environment, for instance parental involvement in school-based health promotion can have a positive influence on learner's health through fostering healthy lifestyle habits and thereby improving the child's academic competence (Ashiabi & O'Neal, 2015).

The exosystem is the larger social setting with which the child does not have direct interaction (Ashiabi & O'Neal, 2015; Darragh, 2010). The exosystem includes social settings such as the workplace of the parents, community health care and recreation, as well as support networks (Ashiabi & O'Neal, 2015; Keenan & Evans, 2009). The interactions that take place within these settings have an indirect impact on the development of the child. Learners residing in resource-constrained communities may not have access to health services nearby, and the lack of service in turn has an impact on the child's development, as the child does not have quick and easy access to treatment in the case of illness or injury; furthermore, unemployment, particularly of the father, leads to numerous challenges, including poverty, which results in a lack of food in the household, domestic violence and abuse (De Witt, 2016).

The macrosystem forms the broader ideological and cultural context, including the role of ethnicity, religion, governmental structures and laws, and socio-economic factors, all of which affect the development of the child. In this study, these include school health and other higher government policies to address health promotion that are in place to support learners and families, mass media communications that promote products and services that affect health and well-being, as well as societal beliefs and cultural attitudes on parenting and lifestyle (Casper & Theilheimer, 2010; Darragh, 2010; Nelson & Lund, 2017).

The final component in the Bio-ecological systems theory is the dimension of time (Darragh, 2010). The divisions of time include micro-time, which relates to occurrences between activities and interactions, meso-time, relating to the extent to which interactions occur consistently over a period in the child's developing environment, and macro-,time which is more commonly referred to as the chronosystem, the final nested system (Tudge et al., 2009). This system or division of time refers to events that take place throughout the child's growth process and that influence change over time. Events such as stages of development (e.g. delayed development), historical events (e.g. apartheid laws), or other major life events during the course of the lifespan – such as a parent's death or divorce – all have an impact on development over time (Darragh, 2010; Keenan & Evans, 2009).

Bio-ecological systems theory (Bronfenbrenner, 1989) is applicable to this study, as it provides an understanding of how contextual and environmental factors play a role in public health problems and addressing these problems through health promotion. Health-promotion interventions could develop on several levels across the systems. Bio-ecological systems theory is relevant to understanding the nature of various circumstances that affect health within a social system, and the impact each

environment or system has on the individual developing a health consequence. In the case of this study, health promotion is intentionally influenced by the school environment. I believe that health promotion is critical to sustainable living, and that it is important to have a thorough knowledge of how the social dimensions affect the development of the individual child.

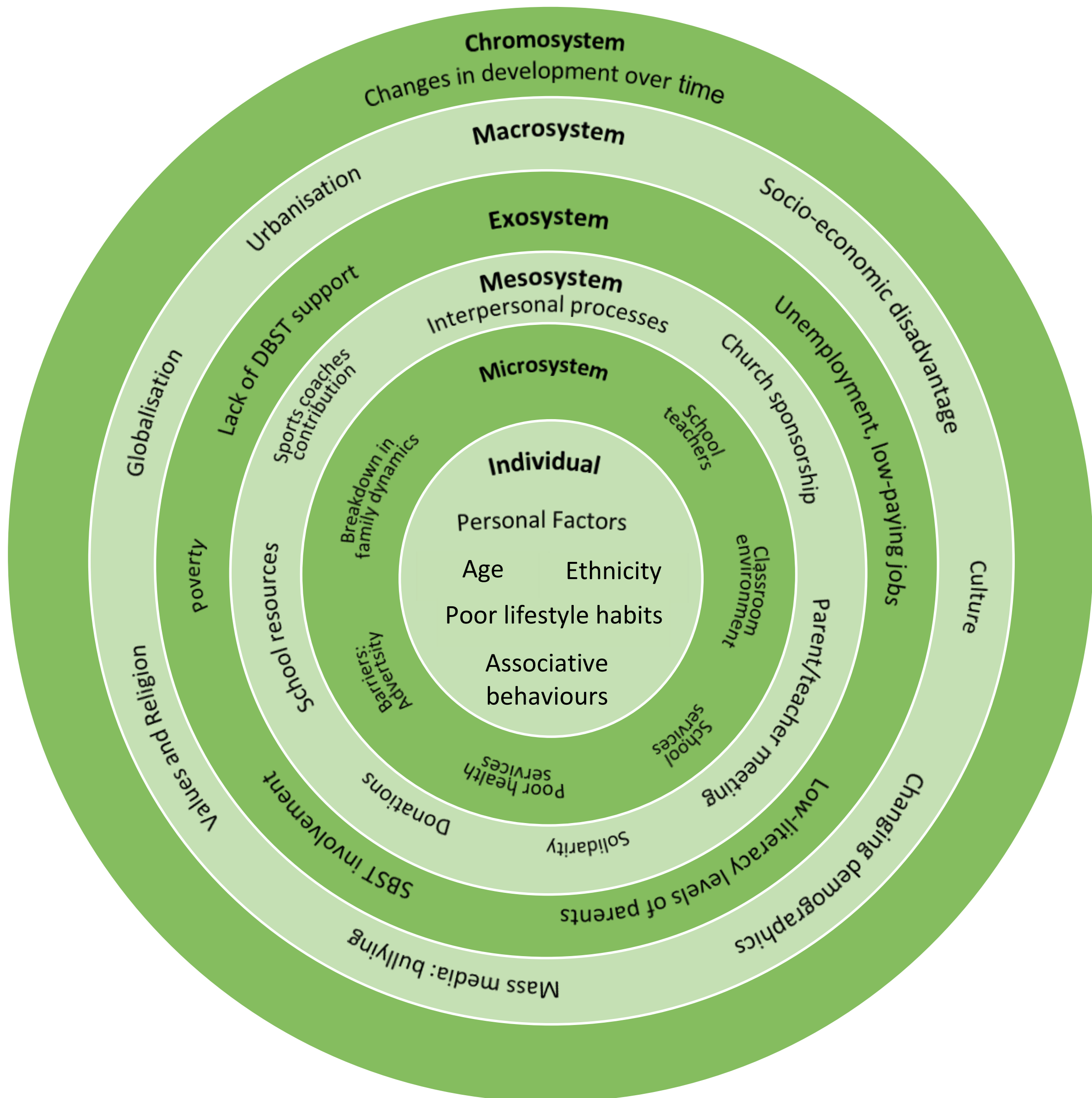

Figure 2.1: Bronfenbrenner's Bio-ecological Systems Theory (Rivara & Le Menestrel, 2016)

Vygotsky's socio-cultural theory stems from the belief that learners' cognitive development occurs through social interaction with experienced adults (i.e. parents, teachers or even older peers), who show and provide help and opportunities to engage in meaningful yet challenging series of activities. These activities, Vygotsky argues, help learners build on acquired skills and tools, both cultural (for example a museum

time period in early years and mobile devices in this era) and psychological (for example signs and symbols), to enhance their cognitive performance and make meaning of their individual experiences as per the child's culture (Keenan & Evans, 2009; McDevitt & Ormrod, 2013; Venter, Haasbroek, Nthangase, Snowman, & McCown, 2016). Adult guidance and supervision through social interaction and the use of language in promoting cognitive advancement is also critical to socio-cultural theory (Venter et al., 2016).

Vygotsky's theory is relevant to learning about healthy living in the school environment. Developing learners' understanding of basic health concepts, and working with learners through a series of tasks varying in level of difficulty to achieve health outcomes, can be achieved through what Vygotsky labels private speech – a process of internalisation which begins with social speech (conversations with others) and moves on to private speech or inner speech.[3] As the teacher engages in discussion about basic health matters and healthy practices, the child gradually internalises these concepts and can thus change his/her behaviour towards acting upon those internalised concepts in order to make wiser choices or solve problems (Venter et al., 2016). Vygotsky believes that every culture passes down different cognitive tools,[4] hence the importance of using culturally appropriate activities that are prominent in a child's community and family life, which will enable the child to acquire organisational and cognitive tools more easily and help him/her to develop higher-order cognitive competencies.

While Bronfenbrenner's Bio-ecological systems theory focuses on holistic development through interaction in a series of interrelated systems, Vygotsky's sociocultural theory emphasises the socio-cultural context in cognitive development as the basis of all human activity (Ashiabi & O'Neal, 2015). Bio-ecological systems theory and sociocultural theory both inform my study, since culture critically influences the development and well-being of a child. Although Bronfenbrenner's theory views culture as an external influence by implying its influence through social systems, Vygotsky's theory places culture at the centre of development. The concept of reciprocal interactions and proximal process established by Vgotsky in sociocultural theory has similarly been applied in bio-ecological systems theory, whereby the interaction/s between the learner and the social environment is influenced by culture, such that

[3] Dialogue which is understood by the thinker.
[4] A concept, symbol, strategy or other culturally constructed mechanism that helps individuals think more effectively (McDevitt & Ormrod, 2013).

exposure to familial cultural norms within the specific environment informs behaviour that develops and is enacted, and later internalised, by the individual.

Parents' and teachers involvement in the microsystems and mesosystem is significant for the physical health and well-being of children. In my study, health promotion is seen to be bound by family and culture and is reflected by the learner in the school setting. As culture informs our everyday activities and practices and influences development, every child comes into the classroom with a different concept of well-being and health practices. The classroom curriculum taught in class, and the teachers' personal views on health promotion, may differ from the knowledge that the child has adopted at home, hence the transfer of knowledge from what the child already knows and what he/she is being taught in the school environment through interaction with the teacher enable the child to build on his/her existing knowledge and internalise new behaviour and health practices, which in turn may produce healthier developmental outcomes. This study is not aimed at understanding the nature of health promotion in a school, but rather at gaining an understanding of how school-based health promotion interventions are viewed and conceptualised by teachers at a school that serves to support learners with health problems.

2.8 CONCLUSION

Many children in South Africa are exposed to unsafe and unhealthy home and school environments due to widespread poverty. These environments can negatively affect the holistic development of the child. Living in conditions of poverty exposes these children to a number of social ills and increases their vulnerability to disease, as they have restricted access to health resources and facilities (Phajane, 2016). Hence, to place my study in the context of existing research pertaining to the current study, I conducted a comprehensive literature review to gain insight into health promotion and to better understand those aspects that contribute to and influence global health among young children. In this chapter, I discussed the current and global health scenario, highlighting the prevalence of communicable and non-communicable health challenges. I focused on school-based health promotion and, in addition, explored current efforts to address health challenges for Grade 1 to 3 learners. Since my study focuses on health promotion in at-risk school communities, I further explored the role of teachers in health promotion and the need for parental involvement in health promotion. After a critical review of the existing literature, I concluded the chapter with a description of the conceptual framework that guided my study.

In the following chapter, I present a detailed discussion of the research process. I explain and justify my paradigmatic and methodological choices, including the research design, data collection and documentation strategies I employed in the current study. I furthermore present the quality criteria and ethical considerations on which I relied during this study.

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CHAPTER 3
RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

In Chapter 2, I explored the existing literature by embarking on a literature investigation relevant to the current and global health status scenario, school-based health promotion, efforts and strategies to address health promotion challenges for foundation phase learners, the roles educator's play in health promotion, as well as parental involvement in health promotion. These research areas allowed me to explore the possible influences of the perceptions of teachers regarding school-based health promotion interventions for Grade 1 to 3 learners. To contextualise my study, I further presented a description of the chosen theoretical framework, namely Bronfenbrenner's Bio-ecological systems theory and Vygotsky's socio-cultural theory of human development.

In Chapter 3, the aim is to discuss the research methodology and paradigmatic perspectives used to guide the study. In this chapter I provide an explanation of and justification for the research methodology as well as the research design that was applied to the current study, followed by a discussion of the sample selection, data collection strategies, and data analysis and interpretation procedures that were employed. I complete the chapter with a discussion of the ethical guidelines and quality criteria adhered to during the study.

3.2 PARADIGMATIC PERSPECTIVES

3.2.1 Introduction

A research paradigm can be defined as an "overarching philosophical stance" (Broom & Willis, 2007, p. 17), or a set of fundamental assumptions and beliefs about reality, as well as the ways in which the world is perceived (Nieuwenhuis, 2016; Wahyuni, 2012). The researcher's paradigmatic positioning generally serves as a guiding framework that directs the actions put forward (Broom & Willis, 2007; Creswell, 2009). The epistemological, ontological and methodological dimensions are of critical importance to a research paradigm, as they help the research define and make meaning of the nature of the enquiry (Wahyuni, 2012). In the current study, I employed a qualitative research approach anchored in an interpretivist paradigm.

3.2.2 Phenomenology as meta-theory

I relied on phenomenology as a meta-theoretical paradigm, as the current study followed a qualitative methodological approach with a specific view to doing a primary inductive thematic analysis of existing data (Cohen, Manion, & Morrison, 2018). Acknowledging that the ontology of this paradigm is based on the assumption of multiple social constructions of reality (Mertens, 2010), the data collected during the initial phases of the broader school-based health promotion project were described through the understanding of the multiple realities that were presented in the existing data sources. As the current study aimed to explore and describe teachers' perceptions of a school-based health promotion intervention, the use of existing datasets enabled me capture and make sense of the experiences that influence teachers' perceptions by drawing on common themes to generate insight into my findings (Ebersöhn, Eloff, & Ferreira, 2016; Flick, 2014b). I paid specific attention to the social context of the participants, as this comprises a significant component of gaining insight into any meaning that has been created (Flick, 2014b; Nieuwenhuis, 2016).

The underlying theory of phenomenology focuses on the lived experiences of participants and the meaning that is socially constructed through human interactions in their naturalist or social setting (Creswell, 2009; Nieuwenhuis, 2016), hence the notion of meaning-making can be understood through phenomenology, as it allows the researcher the opportunity to interpret and describe the reported experiences from the perspectives of the participants (Nieuwenhuis, 2016).

Having my study located within phenomenology enabled me to gain a rich, in-depth understanding of teachers' perceptions regarding the development of a school-based health promotion intervention (Creswell, 2014), and thereby also guided me to avoid any attachment of personal meaning to the experiences of teacher participants in the at-risk school settings (Creswell, 2009). According to Neuman (2000), self-awareness is imperative when applying a phenomenological lens. Hence, I remained mindful of my role in relation to the data and kept abreast of the inherent limitations of phenomenology.

While there are a number of advantages of phenomenology, there are also several challenges. Some of these challenges are that it might be time consuming to collect and analyse the data, the data produced is not generalisable, there is great possibility of research bias (Maxwell, 2013), and studies using phenomenology may be held in low regard by policymakers (Maxwell, 2013). In the current study, these limitations were overcome by employing only subsets of secondary data, and therefore data

gathering was not required. The aim of the study was not to generalise findings, but rather to inform development for social change. In addition, I also minimised the potential of any possible bias by keeping a reflective journal to capture the analysis process effectively (Appendix C), and engaged in extensive discussions with my supervisor to eliminate challenges relating to interpretation. Furthermore, rigorous quality control was implemented to enhance and ensure the credibility and reliability of the study (Nieuwenhuis, 2016).

3.2.3 Qualitative methodological approach

According to Lukenchuk (2011, p. 73), the concept of methodology "reflects an overarching process or plan for researching phenomenon". The purpose of the methodology is for the researcher to examine ways to carry out possible research plans and seek the pathways to follow in order to reach an understanding of the phenomenon under study (Lukenchuk, 2011). In qualitative research, emphasis is placed on the socially constructed nature of reality (Denzin & Lincoln, 2011). Thus, qualitative research approaches intend to understand the position of a particular social situation, event, group of individuals or specific interactions in the context in which they occur (Creswell, 2014). The phenomenon under study occurs in the natural setting (e.g. school setting) (Creswell, 2009; Symon & Cassell, 2012; Thanh & Thanh, 2015). Rather than aiming to predict, control or identify cause-effect relationships, qualitative research attempts to explore and reach a close understanding of the meaning that participants assign to a phenomenon (Creswell, 2014; Nieuwenhuis, 2016; Priya & Dalal, 2015).

Acknowledging that qualitative research is carried out when a social situation or event needs to be explored, interpreted and understood holistically, I chose to follow a qualitative research methodological approach, as I found it best suited to address the purpose and research questions of my study, which was to explore, interpret and understand how teachers perceive health promotion and describe content to be included in the development of a school-based health promotion intervention for foundation phase learners (Nieuwenhuis, 2016; Thanh & Thanh, 2015). Since qualitative research focuses on obtaining a holistic account of the problem under study by gaining insight into the multiple perspectives of participants (Creswell, 2014), I attempted to draw upon the participants' unique experiences and perceptions, which are shaped by their subjective and socio-cultural realities. The emphasis was on how the teacher participants understood, perceived and constructed meaning in their thoughts regarding the development of a school-based health promotion intervention for foundation phase learners. Owing to the inductive style of inquiry in qualitative

research, I was able to focus on the individual, subjective expressions of the participants and the meaning that they ascribed to the situation, as well as the importance of portraying the complexity of the situation (Creswell, 2009, p. 4).

The use of qualitative research approaches holds various benefits. A qualitative research approach provides a holistic, detailed account of the participants' feelings, opinions, and experiences, and the meanings attributed to their behaviour from the participant's own point of view. In terms of the current study, the results of the qualitative research provided clear, in-depth descriptions of how the participants perceived a school-based health promotion intervention (Rahman, 2017). Additionally, following interpretive inquiry, qualitative data collection methods provide an understanding of each individual's personal experiences of the phenomenon within the natural setting, and determines how the participants interpret constructs (Silverman, 2010; Symon & Cassell, 2012). Furthermore, highlighting that qualitative research seeks to explore and describe complex phenomena through the use of 'what and how' questions, it allows the researcher to gain a better understanding of the phenomenon under investigation (Jansen, 2016). Qualitative research approaches are also flexible in nature and are therefore responsive to any changes that may occur during the study that might result in a shift in the focus of the study (Rahman, 2017).

While it offers a number of advantages, qualitative research also presents limitations. As qualitative research relies largely on textual and image data to draw conclusions, and due to small sample sizes that are usually conveniently selected, a major limitation is that the findings generated by the study may be difficult to quantify and therefore cannot easily be generalisable to other contexts (Nieuwenhuis, 2016; Rahman, 2017). Additionally, qualitative research may be viewed as having lower credibility, as the basis of the research is not formed by testing hypotheses or theories that yield objective results (Creswell, 2009; Rahman, 2017; Thanh & Thanh, 2015). Another limitation is that qualitative data collection and data analyses are found more time consuming and costly when compared to quantitative research (Rahman, 2017). Researcher bias is said to be an obvious limitation, because the researcher's personal biases may influence the results generated from the data (Creswell, 2009).

3.3 RESEARCH METHODOLOGY AND STRATEGIES

3.3.1 Introduction

The process of a qualitative research study relies on a progression of decisions that are taken regarding the research design and the research methodology, including

sampling strategies, data collection and analysis procedures, ethical strategies and the quality criteria of the study (Creswell, 2014). Table 3.1 provides an outline of my methodological decisions, and the various aspects are subsequently discussed in detail.

Table 3.1: Methodological Decisions

METHODOLOGICAL DECISIONS	
Research design	▪ Qualitative descriptive case study – convenient selection of case study dataset
Existing datasets	▪ Visual data: PRA-based posters and field notes
Selection criteria	▪ Purposive sampling of visual data from PRA-based workshops (n = 17 female teachers), posters and field notes that contained responses to school-based health promotion ▪ 2016 cohort: School A = 8; School B = 9
Data analysis and interpretation	▪ Primary inductive thematic analysis
Quality criteria	Trustworthiness: ▪ **Credibility** – credibility was promoted by following a rigorous process associated with the analysis of secondary data (Mertens, 2010; Nieuwenhuis, 2016) ▪ **Transferabilit**y – transferability involved having a clear and accurate understanding of whether aspects of the findings could be viewed as lessons learnt and applied in similar settings (Nieuwenhuis, 2016) ▪ **Dependability** – dependability was ensured by recording the research process in detail and documenting the analysis process using coding (Anney, 2014) ▪ **Confirmability** – confirmability was ensured by providing accurate descriptions of qualitative secondary data (Anney, 2014) ▪ **Authenticity** – authenticity was achieved by keeping an audit trail and remaining aware of contextual factors throughout the study (Denzin & Lincoln, 2011; Mertens, 2010)
Ethical considerations	▪ Permission to utilise data ▪ Informed consent ▪ Confidentiality and anonymity ▪ Analysis and reporting

3.3.2 Qualitative descriptive case study as research design

A research design can be described as the "plans and procedures for research that span the research decisions from broad assumptions to detailed methods of data collection" (Creswell, 2009, p. 3). The researcher's ontological and epistemological perspectives, research skills and research practices, as well as specific method of data collection, analysis and interpretation, informs the choice of research design (Creswell, 2009; Nieuwenhuis, 2016).

For the purpose of this study, I employed a case study research design. A case study is defined as a detailed, empirical strategy of inquiry that seeks to investigate a contemporary phenomenon within the actual social and cultural setting (Nieuwenhuis, 2016; Salkind, 2010). A case study is bound by time and activity in that a researcher aims to explore and collect detailed and in-depth information about a programme, event, process or individuals (i.e. a single unity or entity) using multiple data sources (Creswell, 2009, p. 13). Furthermore, according to Cohen, Manion, and Morrison (2007, p. 182), case studies “strive to portray ‘what it is like’ to be in a particular situation, the close-up reality an ‘thick description’ of participants’ lived experiences of, thoughts about and feelings for, a situation”.

Since my study aims to explore and describe the perceptions of teachers regarding a school-based health promotion intervention for foundation phase learners, a case study was deemed suitable as research design. I conveniently sampled the case of an existing dataset of 17 female teachers’ perspectives of a school-based health promotion intervention in two at-risk school communities. The sampling was convenient, as I included the existing qualitative data from a school-based health promotion project that was readily available and easily accessible for use in my study (Etikan, Musa & Alkassim, 2016; Onwuegbuzie & Collins, 2007). A limitation of convenience sampling is that it does not result in a representative sample, and thus the findings of my study cannot be generalised (Maree & Pietersen, 2016).

This study can be classified as a descriptive case study, as it focuses on “thick description” of the phenomenon under investigation in its context (Hamilton & Corbett-Whittier, 2013, p. 7). This specific descriptive case study explores and describes the various themes that emerged from the secondary data sources, including PRA-based posters and field notes, which reflected the teachers’ participation in a school-based health promotion intervention project in the school setting.

Specifically, this study can be defined as a single descriptive case study (Mills, Durepos, & Wiebe, 2010) in which the researcher describes the phenomenon within the real-life context or setting in which the phenomenon occurred (Nieuwenhuis, 2016, p. 82). Hamilton and Corbett-Whittier (2013) explain that a case study captures the complexity of the nature of the phenomenon in terms of relationships, attitudes and beliefs within a bounded unit, using multiple data sources to explore a single or multiple perspective. Within this study, the case focused on a single unit of analysis, namely school-based health promotion interventions in the foundation phase in two different school settings. Each setting was an at-risk school community, and eighteen foundation phase teachers were the participants. Rule and John (2011) postulate that,

due to the nature of the study, the phenomenon should be formulated as a case. Hence, in this study the case included the phenomenon of school-based health promotion interventions, which were bounded by the school as its specific research site.

According to Thomlison (2001), a phenomenon formulated as a descriptive case through qualitative inquiry provides an in-depth account of the phenomenon using interpretive methods, and the "identification of themes and patterns using words produce rich interpretations of the phenomenon" (p. 132). In addition, Mills et al. (2010) posit that a prior articulation of the phenomenon benefits the researcher in specifying the boundaries of the case, and adds significantly to the rigour of the case study. Therefore, a major strength of descriptive case lies in the rich descriptive data that it yields. Other strengths of employing a descriptive case study include the depth of the research carried out, which allowed me to explore school-based health promotion interventions for the Foundation Phase in depth (Rule & John, 2011). The versatility of the case study design provided the opportunity to collect and utilise multiple data sources, as well as to explore a single bounded entity in a holistic way (Salkind, 2010). Additionally, manageability in terms of examining multiple data sources enabled me to delineate a specific unit of study, viz. teachers' perceptions of a school-based health promotion intervention in the Foundation Phase, and enabled me to explore the phenomenon in depth to answer my research questions (Berg & Lune, 2012; Cohen et al., 2018).

A case study design was suitable for this study, since my aim was to better understand a particular phenomenon and the intrinsic aspects of the particular case itself (Berg & Lune, 2012, p. 335). The case study also permitted me to answer "how" and "what" questions with the purpose of providing multiple perspectives of the phenomenon being studied through the voices of the participants in an attempt to refine and clarify the nature of the research problem (Cohen et al., 2018; Thomlison, 2001, p. 133). Thomilson (2001, p. 131) states that a major purpose of descriptive case study is to acquire a broad understanding of the situation and events as they occur in order to provide a complete "picture" of the population or phenomenon under investigation. In this study, the case focused specifically on describing teachers' perceptions of school-based health promotion interventions (Cohen et al., 2018).

Despite the numerous benefits, employing a case study design also presents certain challenges. Due to the nature of large volumes of data to be collected, it is time consuming and the researcher can easily become overwhelmed with the data to be analysed (Potter, Von Hellens, & Nielsen, 2010). It may also result in failure to capture

the actual meanings or significance of the symbols used in the text being analysed (Babbie, 2005). The findings generated from a descriptive case study are only applicable to the specific case. Although ideas may be transferred to similar cases, this is not the intention of a descriptive study, and therefore the results of this study cannot be generalised to the broader population (Berg & Lune, 2012). Flyvbjerg (2006) states that another limitation to using a case study design is the likelihood of researcher bias, which could result in failure to capture the actual meanings or significance of the symbols used in the text being analysed, due to the researcher drawing on patters in the data that confirm her own opinions.

The aforementioned limitations were dealt with in the current study by verifying the authenticity of the data sources with my supervisor, as I had obtained sufficient background information on the school-based health promotion study and was aware of the original intentions of the project at all times. Regular discussions with my supervisor regarding the analysis of the data allowed me to begin the process of familiarising myself with the data and making deductions early in the process. I furthermore remained aware of my own possible preconceptions, interests, biases, preferences and background regarding the data through the regular discussions with my supervisor and keeping a reflective journal (Cohen et al., 2018)

3.3.3 Data generation of the existing dataset

Willig (2013, p. 90) explains that, in qualitative data collection, the method chosen by the researcher needs to be "participant-led, or follow a bottom up approach" in the sense that it should allow for the participants' own voices to be heard through the meaning generated. These methods are essentially open-ended and flexible so as to enable the emergence of new, and unanticipated, categories of meaning and experience (Willig, 2013). During the broader school-based health promotion intervention project, PRA- based posters and field notes were obtained from the teachers' voluntary participation in the primary study. Convenience sampling was used to select the teacher participants for involvement in the school-based health promotion intervention project, while purposive sampling was used to select the datasets.

An advantage of utilising the existing datasets was that it provided an opportunity for additional research questions to emerge for this study. Another advantage was having access to a sufficient amount of data (Castle, 2003; Vartanian, 2011). Working with secondary data furthermore allowed for detailed, context-specific answers to the research questions posed in the study (Castle, 2003).

However, a primary limitation of using existing data that presented as a disadvantage was that I was not part of the primary research project and not personally involved in the data collection process, therefore it is possible that important details relating to the data collection could have been being lost by having the data used for a secondary purpose (Trzesniewski, Donnelan, & Lucas, 2011). I also had to remain cognisant of the unfamiliarity of the data, as I was not personally involved in the data collection, hence a potential challenge that had to be overcome was that I had to spend a considerable amount of time familiarising myself with the relevant datasets (Trzesniewski et al., 2011). Despite the above-mentioned challenges, utilising existing datasets presented as an overall advantage, as it placed me in a position to be very objective in analysing the data for the purpose of my study.

Table 3.2: Description of Participants

Site	Date of data generation	Gender of participants	Home language	Group 1	Group 2	Group 3	Total participants
School A[5]	2016	F	Afrikaans/ English	3	3	2	8
School B[6]	2016	F	Afrikaans	4	5	0	9
Total participants including both sites							**17**

3.3.4 Purposive sampling of data sources for analysis

I purposively sampled sources from the dataset (PRA-based workshop activities) for analysis. The dataset comprises group-based perspectives of two cohorts of female teachers generated in 2016. Each teacher group was guided by a member of the broader health promotion project research team who facilitated the PRA-based group activities. The dataset selected for this study includes the following data sources: PRA-based group poster activities (Appendix A) and fieldnotes on the observed activities of two cohorts of teachers (Appendix B).

A sampling strategy refers to any procedure for selecting units of observation (e.g. people or objects) from a population of interest (Babbie, 2005), and also involves the process of selecting data sources for a particular study (Onwuegbuzie & Collins, 2007).

[5] School A had three groups of participants. Participants 1 to 3 formed group 1, participants 4 to 6 formed group 2 and participants 7 and 8 formed group 3.
[6] School B had two groups of participants. Participants 1 to 4 formed group 1 and participants 5 to 9 formed group 2.

For the purpose of this study, sampling involved the selection of related documents in the qualitative secondary data of the school-based health promotion project (Gravetter & Forzano, 2009). The intention of the sampling process in the current study was to find relevant qualitative data that effectively captured and described the teacher participants' perceptions of school-based health promotion (Starks & Trinidad, 2007). Therefore, the qualitative inductive thematic analysis included information from samples that had been extracted from the existing school-based health promotion project data and accurately represented the perceptions of the participants.

According to Creswell (2009, p. 178), "the idea of qualitative research is to select participants, sites, documents and materials that will best help the researcher understand the problem and the research question". Hence, in this study, I made use of two non-probability sampling strategies – convenience sampling and purposive sampling (Cohen et al., 2018). Purposive sampling was applied, with a specific focus on where the data sources were readily available, indicating that the combined sampling strategy was highly suitable (Etikan, et al. 2016). Sampling for the purpose of this study included the meticulous selection of relevant data from the qualitative secondary data (Gravetter & Forzano, 2009).

Purposive sampling is limited by its reliance on a non-random selection of participants (Etikan et al., 2016). Including a non-random sample prohibits the research from generalising to the larger population (Etikan et al., 2016). However, this limitation was counteracted by sampling from two cohorts. In addition, the study did not intend to generalise to the larger population, therefore the shortcomings associated with purposive sampling did not hinder the study.

3.3.4.1 Existing PRA data: PRA-based posters

The PRA-based workshops in 2016 comprised one activity in which participants had to complete two posters in their respective groups.

On the first poster (refer to Appendix A), participants shared their responses on their current health practices based on the following questions:

- What is currently done in your class/school/community to promote Grade 1 to 3 learners' knowledge/information in terms of: healthy eating habits, emotional well-being and motivation to achieve, and physical wellness?
- What is currently done in your class/school/community to promote Grade 1 to 3 learners' skills/habits in terms of: healthy eating habits, emotional well-being and motivation to achieve, and physical wellness?

On the second poster (refer to Appendix A), the participants shared their responses on an after-school programme based on the following questions:

- What can be included in an after-school programme for Grade 1 to 3 learners to further promote knowledge and information in terms of: healthy eating habits, emotional well-being and motivation to achieve, and physical wellness?
- What can be included in an after-school programme for Grade 1 to 3 learners to further promote skills/habits in terms of: healthy eating habits, emotional well-being and motivation to achieve, and physical wellness?

Participatory action and reflection (PRA) research encourages and promotes the active engagement of participants in activities such as mapping, modelling, diagramming and ranking that do not depend on their levels of literacy, but rather on the representations of their ideas by means of symbols, drawings and concrete objects. PRA-based activities are conducted in small groups, in which the participants map their ideas based on the phenomenon under study, following prompts that can take the form of either questions, drawings or pictures. These PRA activities are typically supported with textual data. In this study, the PRA-facilitated poster mapping activities were supported by photographs and field notes (Ebersöhn et al., 2016; Ghaye et al., 2008).

PRA holds several advantages in research. A major advantage of PRA is that the activities do not require participants to possess high levels of literacy, while still allowing participants to benefit from an unremitting cycle of development and change on site. PRA also holds high construct validity, as participants are less likely to refuse participation in activities and are able to take ownership of the findings. It also allows the researcher to capture rich contextual data, involving the participants' own perspectives and points of view based on their unique experiences. Furthermore, PRA activities make use of limited and inexpensive resources, while still allowing the researcher to obtain extensive information (Ebersöhn et al., 2016, p. 147).

While there are a number of advantages to using PRA as data collection method, there are also certain limitations. One critical challenge includes the difficulty of earning the trust of the participants. This challenge was overcome by the primary research team, who spent additional time on introductory activities, as well as communicating with the participants in accordance with their desired level of communicational literacy. Valuing promises and delivering on initial agreements also helped nurture their relationships of trust. Another potential challenge may have included ignoring certain members within

a selected group of participants unintentionally, by implication or bias (Ebersöhn et al., 2016).

3.3.4.2 Existing observation data: Fieldnotes and photographs

Field notes as a supportive data collection method can be viewed as a descriptive account of the events, dialogues and reactions as they are experienced by the participants (Emerson, Fretz, & Shaw, 2007). Field notes are produced incrementally on a daily basis, and this allows the researcher to identify specific emerging themes. Field notes provided a written account, thus allowing the researcher to interpret and make meaning of the participants' personal encounters and perceptions. On the other hand, field notes are highly selective and may result in the researcher ignoring or leaving out aspects that do not appear to be significant (Emerson et al., 2007, p. 353).

Photographs as an additional data collection method present multiple ways of knowing – through perception, signs and symbols. The use of photographs allows the researcher to reach multiple perspectives and interpretations of the participants' lived experiences and "power-imbued contexts" (Winton, 2016, p. 432). The analysis of photographs enables the researcher to contemplate and reflect deeply on the participants' responses regarding the development of a school-based health promotion intervention. In line with the research aims, photographs as a participatory reflection and action research tool can be used as a catalyst to engage the participants and policymakers in group dialogue for social change (Ebersöhn et al., 2016; Winton, 2016). To ensure confidentiality, the risk of exposure can be controlled by excluding the participants' faces from the photographs or blurring the faces of the participants, and by not presenting the photographs in public, unless consent is given by the participants themselves (Leavy, 2014).

3.4 DATA ANALYSIS AND INTERPRETATION

3.4.1 Introduction

Data analysis can be viewed as a process that involves the interpretation of textual and image data in an attempt to infer statements about the implicit and explicit dimensions and structures of meaning-making of the data and to establish what is represented in it (Flick, 2014, p. 5).

In this regard, Creswell (2009, p. 183) points out that qualitative data analysis is a meticulous process that requires the "preparing of data for analysis, conducting

different analyses; moving deeper and deeper into understanding the data, representing the data, and making interpretation the larger meaning of the data".

In this research study, the aim of qualitative data analysis was to draw on the data collected in terms of words, phrases, themes and patterns (Nieuwenhuis, 2016). One of the most common approaches to the analysis of written and visual data involves the identification of recurring themes or patterns (Byrne, 2014). Considering that multiple existing data sources will be used, including PRA-based posters, photographs and field notes, I chose to make use of thematic analysis with a qualitative descriptive case study design to identify, analyse and report on recurring themes or patterns that emerge from the data (Vaismoradi, Turunen, & Bondas, 2013).

Thematic analysis is an analytical method for "identifying and analysing patterns (themes) in qualitative data" (Clarke & Braun, 2013, p. 123). It is a method that allows the researcher to organise and describe datasets in rich detail (Braun & Clark, 2006). In addition, Pickering (2011) and Vaismoradi et al. (2013) explain that thematic analysis is an independent, qualitative descriptive method that shares the same aims as the content analysis methodology. In the current study, I followed thematic analysis as an approach with a qualitative descriptive case study as research design – an approach that can be undertaken with all forms of written and visual material. (Mouton, 2001; Willig, 2013).

According to Braun and Clarke (2006), thematic analysis also seeks to theorise the socio-cultural context and structural conditions that permit the development of individual accounts, and allows for the social and psychological interpretation of the data. In this study, my focus during the data analysis process was to gain insight into and form an understanding of the perceptions of teaches regarding a school-based health promotion intervention. Thus, the purpose was to identify and extract common recurring and significant themes emerging from the teachers' depictions, opinions and views of a health promotion intervention for children in grades 1 to 3 (Vaismoradi et al., 2013).

Willig (2013, p. 181) states that "a theme refers to a specific pattern of meaning found in the data". Braun and Clarke (2006, p. 82) advise that a theme captures significant aspects about the data in relation to the research question and represents these aspects as a level of patterned responses or meaning within the dataset. With this understanding, I was able to determine relationships, patterns and categories that emerged in each case and compare these themes across the cases. Willig (2013)

affirms that codes assigned to emerging patterns and responses in the data enable the researcher to answer the research question, thus I encoded accordingly.

In the current study, I applied the guidelines for primary inductive thematic analysis as proposed by Braun and Clarke (2006), as illustrated in Figure 3.1 below.

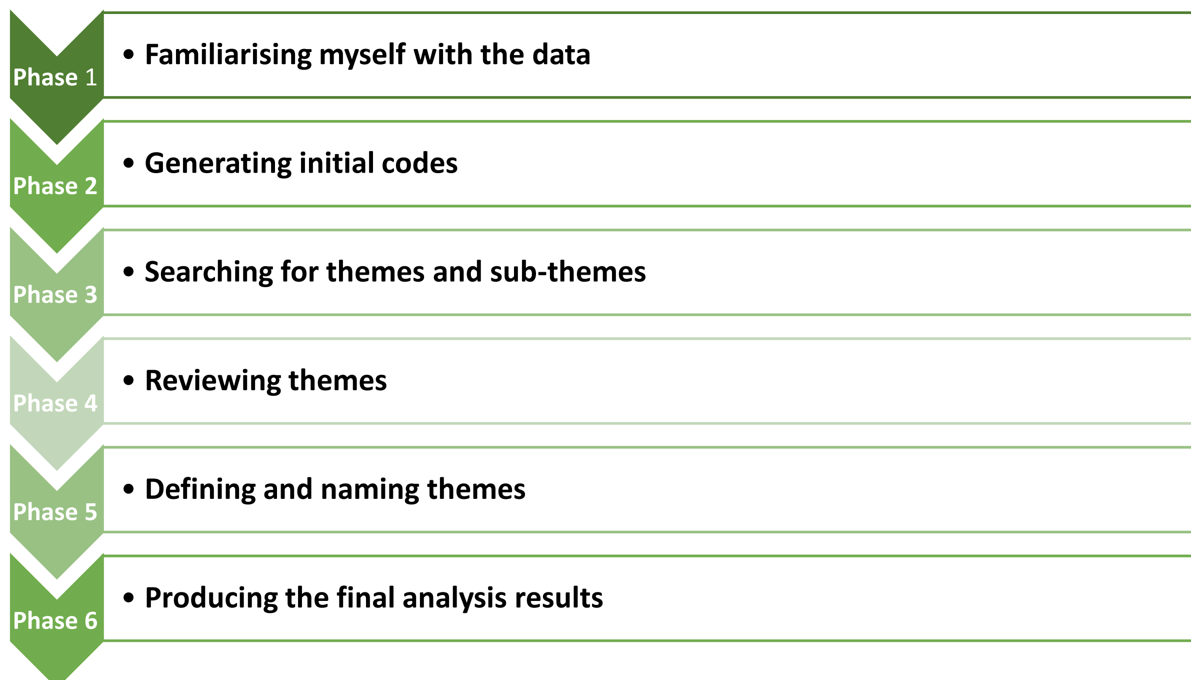

Figure 3.1: Process of primary inductive thematic data analysis

3.4.2 Phase 1: Familiarising myself with the data

After I had organised the different datasets (i.e. posters, photographs and field notes), I repeatedly examined, read and re-read the data in order to familiarise myself with and immerse myself in the data (Braun & Clarke, 2006; Willig, 2013). By immersing myself in the data, I was able to develop ideas about the nature of the data and identify meanings and patterns that emerged in relation to my research questions (Willig, 2013). I made margin notes with regard to my general thoughts and ideas to guide my initial sorting process (Braun & Clarke, 2006).

3.4.3 Phase 2: Generating initial codes (Refer to Appendix E for examples of this phase)

In this phase I commenced with the coding of the data by identifying interesting elements of the data in a systematic fashion across all datasets. As I analysed the data to generate meaningful codes, I continued making margin notes and highlighted similar patterns that emerged across the datasets. This process allowed me to easily collate the data within each specific code (Braun & Clarke, 2006; Maguire & Delahunt, 2017).

3.4.4 Phase 3: Searching for themes and sub-themes (Refer to Appendix F for an example of this phase)

Once the initial codes had been generated, I established the codes into possible categories, broader themes and sub-themes, gathering all collated data to fit a possible theme (Braun & Clarke, 2006; Maguire & Delahunt, 2017). I grouped the data by colour-coded group into identified, related categories and patterns.

3.4.5 Phase 4: Reviewing themes (Refer to Appendix G for an example of this phase)

I thereafter reviewed and modified the preliminary themes and sub-themes identified from the collated coded data until I was satisfied with the categorising of the themes in the context of each of the datasets (Braun & Clarke, 2006). I followed an inductive process, which involved going back and forth between categories, themes and sub-themes in order to identify any recurring patterns that were evident across all the datasets, so as to establish a comprehensive set of themes across all datasets (Creswell, 2009). I refined themes, as well as integrated new sub-themes to consolidate the emerging themes.

3.4.6 Phase 5: Defining and naming themes (Refer to Appendix H for examples of this phase)

An ongoing examination to 'define and refine' the specifics of each theme was done in order to generate a classification system in terms of what each theme and sub-theme entailed and what aspect of the data it captured. I checked each theme in relation to the coded extracts and in relation to other themes to avoid overlap (Braun & Clarke, 2006; Maguire & Delahunt, 2017). Each theme was given a working title and then assigned a name for final analysis.

3.4.7 Phase 6: Producing the results of the final analysis

This phase involved the final analysis and write-up of the report. To do this, examples of vivid extracts were selected in consultation with my supervisor, and the final analysis of the selected extracts allowed me to relate these back to the research questions and literature (Braun & Clarke, 2006). Finally, I developed inclusion and exclusion criteria that guided the composition of each theme.

As a student qualitative researcher, I found thematic analysis to be an accessible, flexible, user-friendly and unobtrusive method that allowed me to easily provide a rich, detailed account of the data (Braun & Clarke, 2006; Vaismoradi et al., 2013). By having

followed a primary inductive thematic analysis approach, I was able to generate my findings based on significant themes that had emerged from within the raw data without any objective restraints, thus permitting the generation of unanticipated insights (Braun & Clarke, 2006).

However, while thematic analysis is a flexible and useful method for summarising significant aspects of large bodies of data, the flexibility may also pose a limitation, since it permits a wide range of analytic options (Braun & Clarke, 2006; Javadi & Zarea, 2016). There is a possibility of too much overlap between themes, which may result in a mismatch with analytical claims. In order to counteract this limitation, I had to refer to my research questions and ensure that my analysis remained focused. I also consulted with my supervisor frequently to aid me in this process. Furthermore, the process of coding and analysing can be time consuming, hence specific additional time may need to be allocated to working through the process of analysis. A further limitation of thematic analysis is that the coding process is demanding and time consuming, considering that no standardised categories appeared at the outset of the process (Javadi & Zarea, 2016). To overcome this challenge, I had to allocate enough time within my research for the process (Babbie, 2005).

3.5 ROLE OF THE RESEARCHER

As a postgraduate student in the field of Learning Support, Guidance and Counselling in the Department of Educational Psychology, my selection to be part of the school-based health promotion intervention project presented me with the opportunity to play the role of researcher, as I could utilise the data for my Master's study. Since secondary analysis is viewed as an "independent procedure", I was able carry out this study by way of qualitative exploratory research as an individual researcher (De Vos, Strydom, Fouche, & Delport, 2011, p. 386). Although I was not involved in the initial project, my personal interest in conducting a study of teachers' perceptions of the development of a school-based health promotion intervention was within the scope of the school-based health promotion project.

I was interested in exploring teachers' perceptions regarding school-based health promotion interventions, since I had learned through my preliminary postgraduate research experience that limited research in general existed on school-based health promotion interventions for children, particularly in the early schooling years. More specifically, through my opening review of the phenomenon, I discovered that gaps existed in the literature that explores teachers' perceptions on the development of school-based health promotion interventions for resource-constrained communities. I

commenced this study from the perspective that substantial information on the phenomenon had been gathered through the process of data collection. The data collection activities were prepared, structured and conducted by the primary research team. Hence, I was responsible for conducting a secondary analysis of the existing datasets, which included PRA-based posters, photographs and field notes.

In conducting a secondary analysis of the existing data, I was able to view the data from a different perspective and generate new findings with a different research focus (De Vos et al., 2011; Flick, 2014b). Subsequently, a new set of research questions were answered, while still bearing in mind the goals of the initial study, to ensure that there was a match between the current research question and the existing data (Johnston, 2014). To avoid any bias and prejudice of the data, and to ensure that all significant information was recorded objectively, I had regular discussions with my supervisor. Through regular discussions, the validity and reliability of the data were also ensured (De Vos et al., 2011). In addition, the datasets were analysed in retrospect. This procedure (i.e. secondary data analysis) allowed me to move back and forth to gain a detailed account of the datasets and thus develop more generalisable arguments that could be used to achieve the broader project goal of social change (Flick, 2014b). Secondary analysis of the existing data also provided an opportunity to contribute to the literature base on school-based health promotion interventions, while remaining cognisant of the fact that there may be certain expectations of potential academic audiences. Furthermore, having had access to existing data contributed to building a greater capacity for empirical research (Johnston, 2014).

3.6 ETHICAL CONSIDERATIONS

3.6.1 Introduction

This research project is part of a larger project aimed at exploring teachers' perceptions on the development of a school-based health promotion intervention for Grade 1 to 3 learners in resource-constrained communities. In order to carry out this research study, ethical approval was obtained from the Faculty of Education Ethics Committee at the University of Pretoria. As ethical concerns arise at any stage of the research process and are not constricted to data collection and analysis (Cohen et al., 2007; Creswell, 2009), the ethical guidelines that I abided by in the current study included permission to utilise existing data, informed consent, and confidentiality and anonymity. Due to the nature of this study, I also included ethical analysis and reporting of the current study.

3.6.2 Permission to utilise existing data sources

Permission was granted by the Ethics Committee of the Faculty of Education at the University of Pretoria (University of Pretoria, 2018) to utilise the data generated by the University of Pretoria/Fordham University study. Therefore, I was able to use the data generated in the PRA-based workshops with teachers (visual data in the form of posters, field notes and a reflective journal) as the data sources for this study. When conducting research in the form of qualitative secondary analysis of existing data, the researcher is required to respect the rights and dignity of the participants who are portrayed in the existing, original data sources (Elias & Theron, 2012). In using multiple data sources, I ensured careful application of the relevant ethical considerations to each of the sources. I furthermore applied reasonable judgment and ensured that no potential bias caused any harm or resulted in any unjust practices (Elias & Theron, 2012). Throughout the research process, I continuously reflected on, reviewed and questioned the research-related decisions I made in order to promote ethical self-awareness.

3.6.3 Informed consent

Informed consent was obtained during the broader research project from the participants who were willing to participate voluntarily in the project by means of a consent form (Creswell, 2009; Willig, 2013). The participants were fully informed of the nature of the project and research procedures before they were requested to give consent to participate in the project (Flick, 2014a). Furthermore, the participants were provided the opportunity to seek clarification and to raise any issues or concerns they may have had pertaining to the project (Nieuwenhuis, 2016). Copies of the signed consent forms of the teachers participating in the study are in the possession of the Department of Educational Psychology and will be safely stored for a period of 15 years (University of Pretoria, 2018) (Appendix I).

3.6.4 Confidentiality and anonymity

The researchers who conducted the initial school-based health promotion intervention project facilitated participatory action and reflection (PRA)-based activities in the two at-risk school communities (Ebersöhn et al., 2016). The participants were informed of their rights during and after the study with regard to the potential risks in relation to confidentiality. Participants were requested to honour a code of confidentiality. In line with the ethics of research, the participants had the right to refrain from or withdraw from the research project at any point (Nieuwenhuis, 2016).

In order to utilise the data sources within the current study, I conformed with the ethical guidelines with respect to the preservation of confidentiality and anonymity (Menter, Elliot, Hulme, Lewin, & Lowden, 2011). To protect the identities of the participants, the names of the schools as well as of the participants were not revealed but were replaced with pseudonyms to ensure anonymity (Creswell, 2009). Confidentially was furthermore ensured by keeping information obtained from the participants private and stored in a secure location (Gravetter & Forzano, 2009). Only people who form part of the research project and had obtained ethical clearance from the Ethics Committee at of University of Pretoria have access to the data (Creswell, 2009).

3.6.5 Analysis and reporting

Creswell (2009, p. 92) states that ethical issues in research also apply to the actual writing and dissemination of the final research report. As a researcher, I was obligated to analyse and report on the results of my study ethically by providing an accurate and truthful account of the research process, findings and limitations (Babbie, 2005). In addition, I used language and words that were not biased against the participants because of gender, sexual orientation, racial/ethnic group, disability or age (Creswell, 2009, p. 92). Furthermore, I did not suppress, falsify, misrepresent or invent findings to meet my own or an audience's needs (Creswell, 2009, p. 92; Mouton, 2001). The details of the theories, methods and research design that are relevant to the interpretation of the research findings were fully disclosed during the broader project in order to maintain the objectivity and integrity of the research (Mouton, 2001).

3.7 QUALITY CRITERIA

3.7.1 Introduction

The aim of this study, in concordance with the nature of the interpretivist approach, was not to discover an 'ultimate truth', but rather to gain insight into the experiences and perceptions of teachers participating in the study by reporting information in the form of rich, comprehensive descriptions. Considering the interpretivist nature of the study and the use of a qualitative research approach as methodological paradigm, the criteria for judging the trustworthiness of the study were credibility, transferability, dependability, confirmability and authenticity (Lincoln & Guba, 1985). Different strategies were thus included to enhance the current study's trustworthiness.

3.7.2 Credibility

Zhang and Wildemuth (2005, p. 6) state that credibility within qualitative research refers to "the adequate representation of the constructions of the social world under study". In essence, credibility seeks to establish whether the research findings are congruent with the perceived social reality, in order to determine if there is correspondence between the researcher's viewpoints and the social constructs that have been put forward by the research (Mertens, 2010). Bengtsson (2016) explains that credibility can more simply be referred to as the process in the study whereby the researcher is able to ascertain the ways in which the data collection and data analysis procedures were carried out with precision in order to avoid any loss of significant data during the research process. To improve the credibility of research, Zhang and Wildemuth (2005), as well as Nieuwenhuis (2016), suggest multiple methods that can be used, e.g. prolonged engagement in the field, persistent observation, triangulation, peer debriefing sessions between the researcher and supervisor/s, personal reflective notes and member checking with participants.

To ensure the credibility of the current study, I engaged in regular debriefing sessions with my supervisor in order to monitor the data analysis and interpretation process (Nieuwenhuis, 2016; Willig, 2013). The credibility of my study was further enhanced by providing in-depth descriptions of the participants' experiences and perceptions of the phenomenon under study from the generated data sources, such as visual data from the PRA-based posters, photographs and field notes (Morrow, 2005). In addition, I interpreted the data contained in the generated data sources in a way that does not deviate from the original meaning expressed by the participants (Anney, 2014). I extracted detailed descriptions from the data sources, thereby relying on the participants' exact responses (Thomas & Magilvy, 2011).

According to Creswell (2013), triangulation can enhance the credibility of a study. I utilised triangulation by including field notes and a reflective journal from the broader project, in addition to the visual data sources. I furthermore established a trail of evidence through continuous reflection on the data analysis and interpretation process (Creswell, 2013). I continuously reflected on the data and aimed to learn from my experience to be able to develop my self-awareness as a researcher (Ellingson, 2009).

3.7.3 Transferability

According to Zhang and Wildemuth (2005, p. 6), transferability refers to the extent to which the findings of the study can be applied to other settings or groups in another

context. Bengtsson (2016) says that, depending on how representative the sample size is, the generalisability of the results may be affected. To ensure transferability of the study, I provided in-depth descriptions of the research design, culture and context, and the selection and characteristics of the participants involved in the study (Elo et al., 2014; Nieuwenhuis, 2016), as well as rich descriptions of the perceptions of the teachers who participated in the broader school-based health promotion project. Thus, it can be deduced that the data generated from the study yielded rich, descriptive findings (Nieuwenhuis, 2016).

Although the purpose of an interpretivist, qualitative study is not to generalise findings, it is my responsibility as a researcher to provide the contextual features of the study that will enable the reader to make an informed judgement concerning transferability (Mertens, 2010; Willig, 2013; Zhang & Wildemuth, 2005). In this regard, I also documented a full account of the research process, including the analysis and interpretation processes, so that others will be able to investigate the choices I made, how the analysis was performed and how I arrived at specific interpretations (Nieuwenhuis, 2016; Willig, 2013). However, as this study was conducted within a specific community, involving only selected participants who do not necessarily represent the whole community, the findings cannot apply to the broader community.

3.7.4 Dependability

While credibility and transferability are equated with internal validity, the term dependability in qualitative research can be used in preference to reliability (Nieuwenhuis, 2016). According to Bengtsson (2016), dependability refers to stability in research, such that the choice of research design and its implementation, as well as the data gathering techniques and reflective appraisal of the project, may be subject to change as the study is conducted (Nieuwenhuis, 2016). Nieuwenhuis (2016, p. 124) further states that, in qualitative research, a change in research design, data sources and data gathering techniques is often expected and acceptable in order to strengthen the study. Moreover, dependability considers whether the findings of a study would be similar if the study were to be replicated (Babbie & Mouton, 2001) and, in this regard, according to Mertens (2010), the same findings cannot be guaranteed in other contexts or with different participants, since change is acceptable and expected within qualitative research. Dependability, however, does not only include the repeatability of results, but also that the findings are representative of what the researcher claims them to be. In order to meet this criterion of dependability, I include extensive documentation of data, methods and decisions in this dissertation.

To establish the dependability of my research, I provide adequate documentation of my data, observations, as well as the methods and findings in order for other researchers to decide whether the study can be repeated in another context with participants of a similar nature (Nieuwenhuis, 2016). I aimed to report and record the research process in detail, therefore I provided a record of the analysis and kept track of the codes generated from the data. Keeping track of the codes enhances the dependability of the research through using a transparent coding process. It also allows for inter-coder verification in order to track changes in the process of recoding and relabelling. In this way, coding consistency is ensured (Anney, 2014; Zhang & Wildermuth, 2005).

In addition, I consulted with my supervisor throughout the analysis process in order to avoid misinterpretation and to obtain suggestions for further analysis. Keeping a record of the analysis and obtaining suggestions for further analysis enables other researchers in the field, with the same research aim, to investigate and verify the results of this study (Cohen et al., 2007).

3.7.5 Confirmability

Confirmability denotes the degree of neutrality and the extent to which the findings of the research are a clear representation of the voices of the participants and are free of any researcher bias (Nieuwenhuis, 2016, p. 125). Although the risk of researcher bias may be unavoidable, it is important to acknowledge its incidence and guard against it. Since the present study utilised data collected in the form of PRA-based posters, photographs and field notes, there was no direct interaction with the participants, thus the lack of direct involvement with the participants in this instance may have limited the risk of researcher bias to some extent (Nieuwenhuis, 2016). I furthermore established confirmability through an audit trail (Anney, 2014) and, through personal reflection and debriefing with my supervisor, I was able to ensure that my conclusions were fully supported by the data (Zhang & Wildemuth, 2005).

According to Creswell (2013), confirmable findings are findings that are based on the data and can thus be related back to the data source, rather than to the researcher. In my aim to enhance confirmability, I related my analysis an interpretation of the data to existing literature, thereby enriching the findings (Lincoln & Guba, 1985).

3.7.6 Authenticity

Authenticity refers to the extent to which all perspectives, values and beliefs from the participants' viewpoints have been fairly reflected by the researcher (Mertens, 2010;

Morrow, 2005). I aimed to achieve authenticity of my research by carefully noting and interpreting the participants' responses. I also reflected on the way in which my own personal views and biases may have affected the interpretation of the participants' responses. However, in this regard, I scheduled regular discussions with my supervisor in order to address any personal biases or assumptions, thereby ensuring authenticity.

3.8 CONCLUSION

In this chapter, I presented a detailed overview of the research process that was followed. In view of the paradigmatic perspectives, I discussed my choice for employing a qualitative research approach, which allowed me to analyse and interpret data from within an interpretivist paradigm. I explained the use of a qualitative descriptive case study as research design, as this supported the aim of the current study and enabled me to gain a deeper understanding of the perceptions of the participants regarding the phenomenon. In addition, I discussed the data collection methods and my selection of secondary data. I then described the manner in which I carried out my data analysis and interpretation. Furthermore, I reflected on my role as researcher and concluded with an explanation of the aspects of trustworthiness relating to quality criteria, as well as the ethical responsibilities complied with in this study.

In Chapter 4, I present and discuss the integrated results and findings of the current study in terms of the themes, sub-themes and categories that emerged through a process of primary inductive thematic analysis. I support my discussions by relying on examples from the PRA-based posters, field notes and photographs.

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CHAPTER 4
RESULTS OF THE STUDY

4.1 INTRODUCTION

In Chapter 3, I discussed the research methodology and paradigmatic perspectives I used to guide the study. I presented my choice of research design, including the advantages and limitations and how the limitations were addressed. I described the sampling and analysis process in detail against the specific quality criteria and ethical standards I adhered to during the study. My role as a researcher was also highlighted.

In Chapter 4, I present and report on the research results of the study in terms of the themes and sub-themes identified following the primary inductive thematic analysis process. I provide a description of each theme as well as of the subthemes. I also provide the inclusion and exclusion criteria for each main theme. The results are substantiated by including participants' direct quotations from the data sources (extracts from transcriptions of observational data captured as visual data, such as field notes and photographs). I conclude the chapter with a literature control by integrating the results of the current study against the background of the existing literature.

4.2 RESULTS OF DATA ANALYSIS

Following the primary inductive thematic analysis, three themes became evident regarding teacher perspectives on the need for a school-based health promotion intervention in challenged school settings. The first theme relates to teachers' perspectives on the context that requires health promotion in schools. The second theme describes the content that teachers view as relevant for a school-based health promotion intervention. The third theme highlights training needs that teachers identified as necessary to implement a school-based health promotion intervention. Within each theme, subthemes with categories (theme 1) were identified and are depicted in Figure 4.1. Figure 4.1 below thus provides a visual overview of the themes, subthemes and categories that emerged.

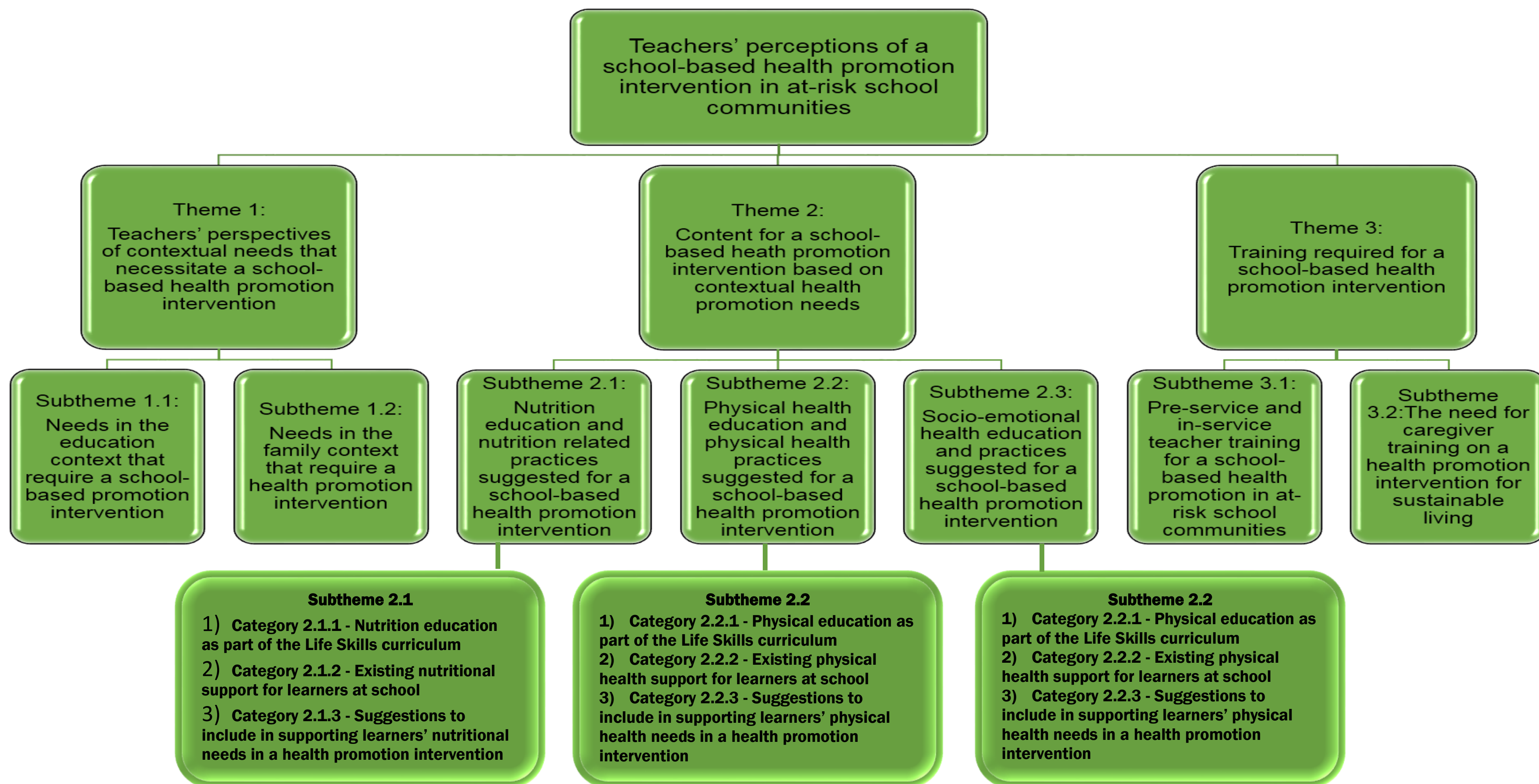


Figure 4.1: Overview of themes of this study

4.3 THEME 1: TEACHERS' PERSPECTIVES ON CONTEXTUAL NEEDS THAT NECESSITATE A SCHOOL-BASED HEALTH-PROMOTION INTERVENTION

4.3.1 Introduction

Theme 1 includes the following subthemes: teachers' views on needs in the education context that require a school-based promotion intervention, as well as needs in the family context that require a health promotion intervention. Table 4.1 indicates the inclusion and exclusion criteria used during the inductive thematic analysis regarding the teachers' perspectives on the context in which the school-based health promotion is needed.

Table 4.1: Subthemes of Theme 1, Indicating Inclusion and Exclusion Criteria

THEME 1 Teachers' perspectives on contextual needs that necessitate a school-based health promotion intervention		
SUBTHEME	**INCLUSION CRITERIA[7]**	**EXCLUSION CRITERIA[8]**
1.1 Needs in the education context that require a health promotion intervention	The education context, including: ▪ Barriers in the school context that present a need for a school-based health promotion intervention, such as lack of departmental support ▪ Opportunities and resources that contribute to a school-based health promotion intervention	▪ Any data that indicates barriers to interventions other than education context needs ▪ Contributions not reflecting education context opportunities or resources for a school-based health promotion intervention
1.2 Needs in the family context that require a health promotion intervention	The family context, including: ▪ Barriers in the family context that present a need for a school-based health promotion intervention, such as socio-economic conditions and family dynamics ▪ Opportunities and resources for a school-based health promotion intervention, such as caregiver contributions	▪ Data referring to socio-economic conditions outside the family context ▪ Data referring to opportunities and resources for a school-based health promotion, from role players other than caregivers

[7] Instances of the following are included in this category.
[8] Instances of the following are excluded in this category.

4.3.2 Subtheme 1.1: Needs in the education context that require a school-based health promotion intervention

This subtheme explains that teachers experience limited support for health promotion and consequently need such support within the education system.

The school community plays a key role in fostering the overall health of all learners (Gray, Young, & Barnekow, 2006). Depending on school functionality, positive health outcomes may be achieved, or negative health outcomes may result. School-based interventions are regarded as effective for preventing health challenges when working within a sphere of stakeholder participation that includes parents and the wider community (Paulus, Ohmann, & Popow, 2016).

Support from all major role players in the school context is critical for health promotion. However, a lack of support from the Department of Education was identified as a major barrier that could hinder the successful development and implementation of a school-based health promotion intervention. Data for this subtheme is based on the researcher fieldnotes and reflective notes.

Participants from school A highlighted: *"We don't receive any support from the DoE in terms of feeding hungry learners. Although they attempted several times to set up meeting/communicate with them…"* (Researcher fieldnotes, School A, PRA session, 2016, Teachers 1-3, Group 1, lines 10-12). This comment was supported by responses made at School B, where a participant reiterated: *"we are not supported by the department in terms of a feeding scheme, because we are a quintile 5 school"* (Researcher fieldnotes, School B, PRA session, 2016, Teacher 2, Group 1, lines 65-66).

A quintile 5 school is a school that is able to charge fees to learners without any restriction by the department on the amount charged (Dass & Rinquest, 2016). Hence, participants from School B indicated in this regard: *"Our school fees are furthermore every expensive"* (Researcher fieldnotes, School B, PRA session, 2016, Teacher 3, Group, line 69). A participant from school B further elaborated: *"Less than 60% of parents pay school fees…"* (Researcher fieldnotes, School B, PRA session, 2016, Teacher 2, Group 1, line 138). In addition, the participant mentioned*: "we cannot rely on the DBST…They don't support us… As teachers we do everything…"* (Researcher fieldnotes, School B, PRA session, 2016, Teacher 2, Group 1, lines 65-66). On the other hand, participants from school A mentioned that other barriers to the successful implementation of health promotion programmes include a "…*lack of resources and*

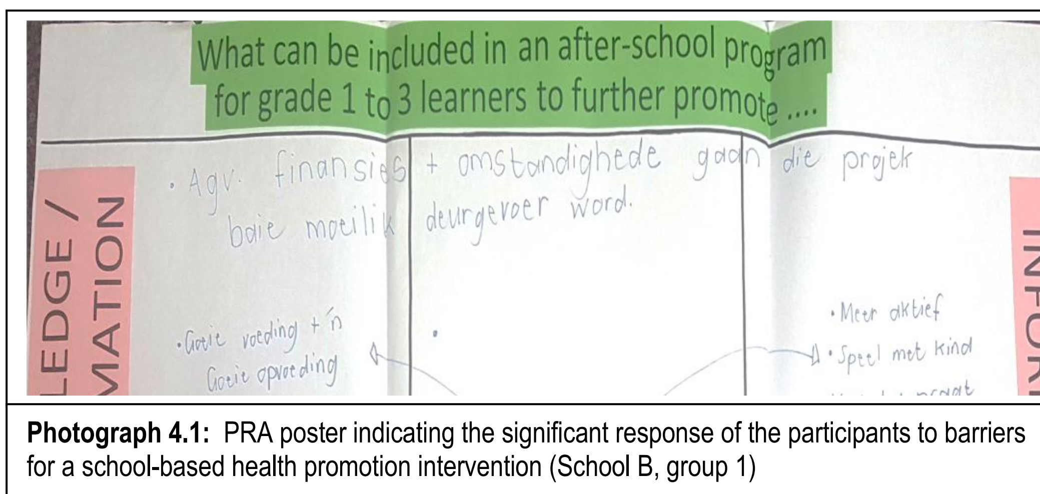
large classrooms play a role in the unsuccessful implementation of these programmes." (Researcher fieldnotes, School A, PRA session, 2016, Teachers 4-6, Group 2, lines 103-105).

4.3.3 Subtheme 1.2: Needs in the family context that require a health promotion intervention

This subtheme describes teacher perspectives on the at-risk family-level context in which the learners live. Family dynamics affect health in both negative and positive ways. While having a supportive family can increase overall health, a family characterised by stress and conflict can experience negatives consequences on the health of their young members (George, 2010). Poverty affects health in various ways. The major causes of poor health are rooted in political, social and economic injustices (Swinnerton, 2006). Many young learners in the urban primary school come from abject poverty, and this influences their health and well-being negatively. Unemployment, food insecurity, malnutrition, substance abuse and poor sanitation were mentioned as particular barriers to the development and implementation of a school-based health promotion intervention. The participants also indicated non-communicable illnesses, sexual abuse and domestic violence to be major stressors affecting learners' health and well-being. Data for this subtheme is based on researcher fieldnotes, reflective notes and PRA poster activities.

Participants highlighted that*: "…poverty will always be a huge barrier and challenge for any health promotion intervention"* (Researcher fieldnotes, School B, PRA session, 2016, Teachers 1-4, Group 1, lines 192-193). Expanding on this, the participants mentioned the various challenges that manifest in the learners' homes. One participant from School B specifically mentioned: *"…mostly the White kids are the poorest of the poor… Because their parents are the ones drinking and smoking… They are mostly extremely poor"* (Researcher fieldnotes, School B, PRA session, 2016, Teacher 3, Group 1, lines 40-42), while another participant stated: *"I agree, more than 80% of our Black learners are from middle-class families with enough income to support their kids sufficiently"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 1, group 1, lines 43-44). Participants from School B also raised concerns that *"[a] lot of the poor learners experience hunger and I think food insecurity – they don't have enough food to eat because of poverty. I think healthy food might be a luxury"* (Researcher fieldnotes, School B, PRA session, 2016, Teacher 4, Group 1 lines 256-258). They further explained: *"due to the extreme levels of poverty that many of our learners do experience on a daily basis – they will take anything from anyone…"* (Researcher fieldnotes, School B, PRA session, 2016, Teacher 9, Group 2, lines 83-84). One

participant elaborated, saying: *"I can give you an example… sometimes five learners will share a small yoghurt and the same lollipops"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 3, Group 1, lines 86-87). Participants from school A similarly indicated *"…their concern about malnutrition and how household food security affects learners"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 1-3, group 1, lines 22-23). In addition, participants from School A stated: *"the school consists of Black learners only who travel very far to attend the school. Some of them need to get up at 4:00 am to start travelling, to be on time. Transport is a huge problem for those kids attending this school"* (Researcher fieldnotes, School A, PRA session, 2016, lines 4-6). They also mentioned that, *"because of the distance some of these learners travel, they also fall asleep before second break"* (Researcher fieldnotes, School A, PRA session, 2016, lines 13-14).



Photograph 4.1: PRA poster indicating the significant response of the participants to barriers for a school-based health promotion intervention (School B, group 1)

At the other end of the spectrum of malnutrition, participants from school B also referred to *"the challenge of malnutrition, especially obesity is a reality"* (Researcher fieldnotes, School B, PRA session, 2016, teachers 1-4, Group 1, lines 196-197). In this regard, participants communicated that *"the parents in our community follow unhealthy diets, they are not active at all, they abuse alcohol and struggle with illnesses such as diabetes and hypertension"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 7, Group 2, lines 253-255). To this end, participants from School B reported: *"parents abuse drugs and alcohol… They are not emotionally involved in their children's lives or their development…"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 1, Group 1, lines 129-130). Another participant added in this regard: *"children are not supported by their parents"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 2, group 1, line 131).

Amongst other barriers to the development and implementation of a school-based health promotion intervention, participants from School B expressed their concerns about abuse: *"most learners think that you can fix everything with their fists… Household violence occurs on a daily basis in this community…"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 5, Group 2, lines 88-89). Participants from School B also pointed out that: *"a lot of the learners in our school are sexually active…and are being sexually abused…"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 8, group 2, lines 117-118). The participants specified: *"in some cases, parents do get more violent if you phone them or ask them to come to school to discuss the matter and then they abuse those children even more"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 8, group 2, lines 91-93).

Poor hygiene was also emphasised by the participants as a basis of concern. Participants from School B stated that: *"our learners don't know anything about personal hygiene at all… for example, parents don't bath so their children also don't bath…"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 4, group 1, lines 110-111) and *"a lot of the White kids wear the same filthy clothes for a whole week"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 4, group 1, lines 48-49). The issue of poor hygiene was also supported by other participants, who said: *"most children don't wear clean clothes, wash their hands or comb their hair"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 1, group 1, lines 113-114), and *"a lot of the poor learners also struggle with head lice"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 9, group 2, line 53). Participants from school B elucidated: *"All the bad lifestyle choices the parents make, together with their unemployment or very low-paying jobs, create considerable stress and influences learner's motivation to learn, as well as their emotional health"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 6, group 2, lines 262-264).

4.4 THEME 2: CONTENT FOR A SCHOOL-BASED HEALTH-PROMOTION INTERVENTION BASED ON CONTEXTUAL HEALTH-PROMOTION NEEDS

4.4.1 Introduction

Theme 2 includes the following subthemes: Nutrition education and nutrition-related practices suggested for a school-based health promotion intervention, Physical health education and physical health practices suggested for a school-based health promotion intervention, and Socio-emotional health education and practices suggested for a school-based health promotion intervention. The NCS CAPS Life Skills curriculum

encompasses health promotion with the aim of creating a healthy school environment, which promotes the general health and well-being of all learners and addresses key health and social barriers to learning, in order for effective teaching and learning to take place (Department of Basic Education, 2017). The subthemes are described in table 4.2.

Table 4.2: Subthemes of Theme 2 Indicating Inclusion and Exclusion Criteria

THEME 2 Content for a school-based health promotion intervention based on contextual health promotion needs		
SUBTHEME	**INCLUSION CRITERIA**	**EXCLUSION CRITERIA**
2.1 Nutrition education and nutrition-related practices suggested for a school-based health promotion intervention	Nutrition education, including: ▪ Nutritional needs of learners as per the Life Skills curriculum ▪ Existing nutritional support for learners ▪ Suggestions to include in a health promotion intervention to support nutrition needs of learners	▪ Data relating to the physical and socio-emotional health needs of learners ▪ Existing support in terms of physical health and socio-emotional health not relating to nutrition ▪ Suggestions to include in a health promotion intervention not referring to nutritional support for learners
2.2 Physical health education and physical health practices suggested for a school-based health promotion intervention	Physical health, including: ▪ Physical health needs of learners ▪ Existing support relating to physical health, such as perceptual skills, sports and gaming activities, and hygiene for learners as per the Life Skills curriculum ▪ Suggestions to include in a health promotion intervention to support physical health needs of learners	▪ Data relating to the nutritional and socio-emotional health needs of learners ▪ Existing support in terms of nutrition and socio-emotional health not relating to physical health ▪ Suggestions to include in a health promotion intervention not referring to physical health of learners
2.3 Socio-emotional health education and suggested practices for a school-based health promotion intervention	Socio-emotional health, including: ▪ Socio-emotional health needs of learners ▪ Existing support relating to socio-emotional health as per the Life Skills curriculum ▪ Suggestions to include in a health promotion intervention to support socio-emotional health needs of learners	▪ Data relating to the nutritional and physical health needs of learners ▪ Existing support in terms of nutrition and physical health not relating to socio-emotional health ▪ Suggestions to include in a health promotion intervention not referring to socio-emotional health of learners

4.4.2 Subtheme 2.1: Nutrition education and nutrition-related practices suggested for a school-based health promotion intervention

4.4.2.1 Introduction

Childhood nutrition refers to the dietary needs of children between the ages of two and 11. Following a healthy diet from a young age benefits children in reaching optimal development to grow and learn. Good nutrition also minimises the risk of obesity and other nutrition-related illnesses (Williams & Greene, 2018). During the PRA-based workshops, the participants discussed and shared their understanding of health promotion by communicating through posters and ad hoc discussions what they currently were doing in terms of nutrition education through the Life Skills curriculum to support health promotion, and what their suggestions were to further support a school-based promotion intervention.

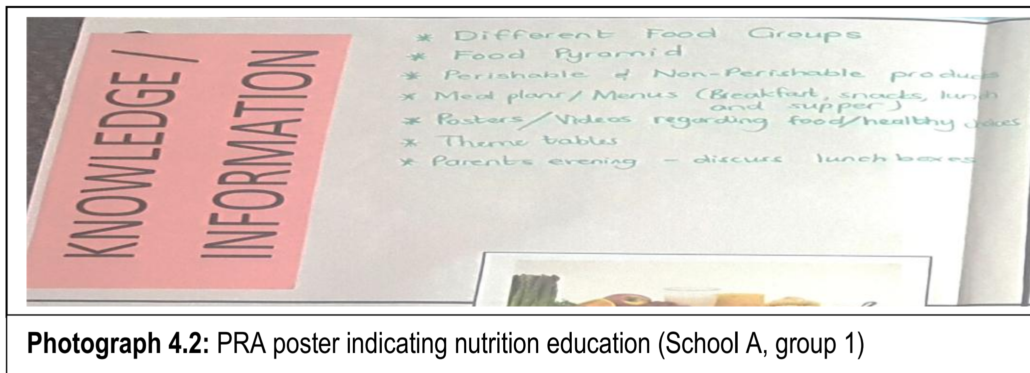
The subtheme 'nutrition education and nutrition-related practices suggested for a school-based health promotion intervention' includes the following categories: nutrition education as part of the Life Skills curriculum**,** existing nutritional support for learners at school, and suggestions to include in supporting learners' nutritional needs for a school-based health promotion intervention. In the current study, data for this subtheme is based on the researcher fieldnotes, reflective notes and participants' PRA poster activities from the aforementioned PRA workshops.

4.4.2.2 Category 2.2.1 - Nutrition education as part of the Life Skills curriculum

In category 2.1.1 of Subtheme 2.1, the results of the data analysis revealed that the participants specifically acknowledged consulting Life Skills to teach nutrition education.

Participants from both schools confirmed that knowledge and skills to promote the health of young learners is imparted through the Life Skills curriculum. However, participants from School A put much more emphasis on nutrition education than participants from School B. Participants from School A introduced their understanding of health promotion by stating that: *"health promotion forms part of the Life Skills curriculum, where they focus on the food groups and discussions about well-balanced lunch boxes"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 4-6, group 2, lines 79-80). They emphasised that they were already doing a lot to support health promotion in terms of nutrition, by indicating: *"As part of the Grade 1 to 3 curriculum they focus on different food groups and the food pyramid to teach learners about types of healthy food"* (Researcher fieldnotes, School A, PRA session, 2016,

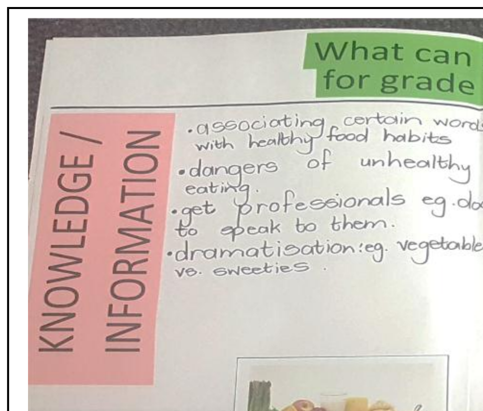
teachers 1-3, group 1, lines 47-49). Participants from School B similarly indicated: *“they work according to the curriculum to support learners’ health (nutrition). They teach them about healthy types of food by using the food pyramid and the food groups. They also try and do this in a creative manner by means of art activities, where learners make their own plates of food through drawing and painting, as well as menus and posters”* (Researcher fieldnotes, School B, PRA session, 2016, teachers 5-9, group 2, lines 176-178).



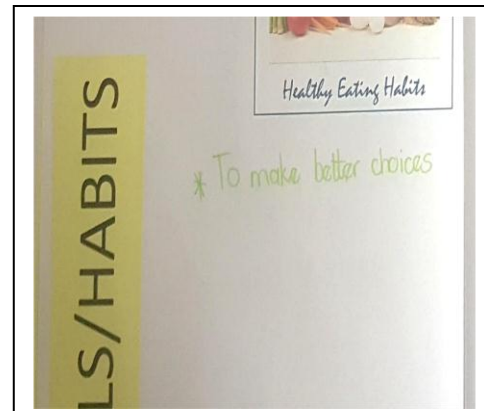
Photograph 4.2: PRA poster indicating nutrition education (School A, group 1)

Participants from School A elaborated on nutrition education by providing practical examples of the content of activities, stating that: *“they focus on meal plans and ‘menus’ for breakfast, snacks, lunch and supper to support learners to be able to have the necessary knowledge regarding healthy eating habits”* (Researcher fieldnotes, School A, PRA session, 2016, teachers 1-3, group 1, lines 49-52). The participants added: *“they do incorporate other learning material, such as posters and videos regarding food and/or healthy food choices to make it more interesting for learners”* (Researcher fieldnotes, School A, PRA session, 2016, teachers 1-3, group 1, lines 53-54). According to the participants from School A, theme tables are also very useful for teaching Grade 1 to 3 learners about healthy eating. In this regard, participants from School A highlighted: *“the value of theme tables, where they display examples of healthy food types on the table for learners to see, feel, smell and taste. Learners usually enjoy this a lot!”* (Researcher fieldnotes, School A, PRA session, 2016, teachers 1-3, group 1, lines 55-57). These participants elaborated: *“‘theme tables’ with healthy food types might develop learners’ knowledge and skills and gave the making of a fruit salad as an example”* (Researcher fieldnotes, School A, PRA session, 2016, teachers 7-8, group 3, lines 115-117).Participants from School A furthermore mentioned: *“focusing on a healthy lifestyle and choices in Life Skills, as well as in language by means of visual material such as posters, and classroom-based discussions to highlight their constant focus on healthy eating habits in class”* (Researcher fieldnotes, School A, PRA session, 2016, teacher 7-8, group 3, lines 109-

112). In this regard, other participants from School A emphasised: *“that learners must learn the correct terminology – they must associate certain words with healthy food habits. They (learners) must also be aware of and learn about the dangers of unhealthy eating and unhealthy food types and choice“* (Researcher fieldnotes, School A, PRA session, 2016, teachers 4-6, group 2, lines 140-142). Participants from School A accentuated that the outcome of nutrition education is that *“learners must be able to make healthier and better food choices”* (Researcher fieldnotes, School A, PRA session, 2016, teachers 4-6, group 2, lines 170-172).



Photograph 4.3: RA-poster indicating an example of nutrition activities as part of curriculum content (School A, group 2)



Photograph 4.4: PRA poster indicating an example of nutrition activities as part of curriculum content (School A, group 2)

Photograph 4.5: PRA poster indicating an example of nutrition activities as part of curriculum content (School A, group 3)

4.4.2.3 Category 2.1.2 - Existing nutritional support for learners at school

This category of Subtheme 2.1 specifies the types of existing nutritional support the participants could provide.

Participants in both schools agreed that they tried their best to support learners in terms of nutrition. Participants from School A and School B highlighted that the basic forms of support that they offer learners involve a feeding scheme, getting sponsors and

donations from the broader community, and motivating learners to make healthier food choices.

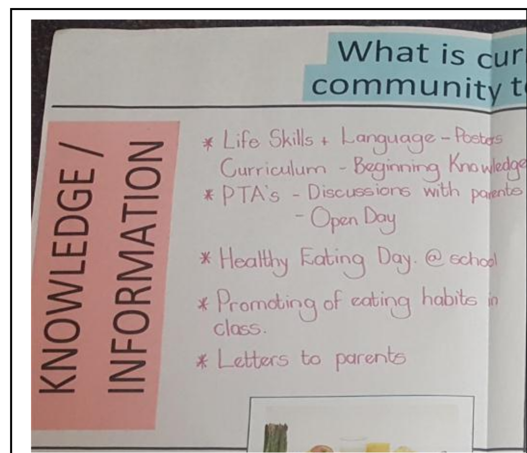
Participants from School A confirmed that they were able to provide learners with at least one meal a day as part of the feeding scheme: *"this school is only able to provide one meal a day (Monday-Thursday) to 45 learners. On Fridays they get hotdogs"* (Researcher fieldnotes, School A, PRA session, 2016, lines 8-9), whereas participants in School B stated that, in their school, *"unfortunately only the poorest of the poor do get food here at school… Although most of our learners actually do need it…"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 6, lines 37-38). To this end, as far as affordability is concerned, the participants from School A referred to donations, stating that: *"they also rely on donation (food) for kids such as soya, frozen veggies and fruit"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 4-6, group 1, line 7). For participants in School B, sponsorship from faith-based institutions and even the soccer coach was an important contributing factor. These participants indicated: *"churches do sponsor food for the poor kids, also we do have a volunteer youth worker at school who arranges food parcels for children and their families"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 3, group 1, lines 50-51). In addition, participants also mentioned that *"solidarity has been a consistent sponsor the past few years for all the Grade R learners… Every single Grade R learner gets three meals at school every day… Before school, during the first and second break they get something to eat"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 7, group 2, lines 56-58). Participants from School B also related that, for those learners who take part in sport, *"the soccer coach provides the players with food…"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 3, group 1, lines 134-135).

The participants drew attention to supporting learners when it comes to buying food from the tuckshop. Participants from School B said in this regard that they *"felt strongly about the tuckshop/kiosk – there must be rules, because they are only selling very unhealthy food"* (Researcher fieldnotes, School B, PRA session, 2016, teachers 5-9, group 2, lines 240-241). The participants emphasised: *"We need to do something about the kiosk (snoepie), they must also start selling healthier food"* (Researcher fieldnotes, School B, PRA session, 2016, teachers 5-9, group 2, lines 240-241). This comment was supported by responses from School A, where participants mentioned: *"we attempt to motivate learners to promote healthy food choices when they are buying food from the tuckshop"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 1-3, group 1, lines 59-60). Participants added that they *"motivate learners to*

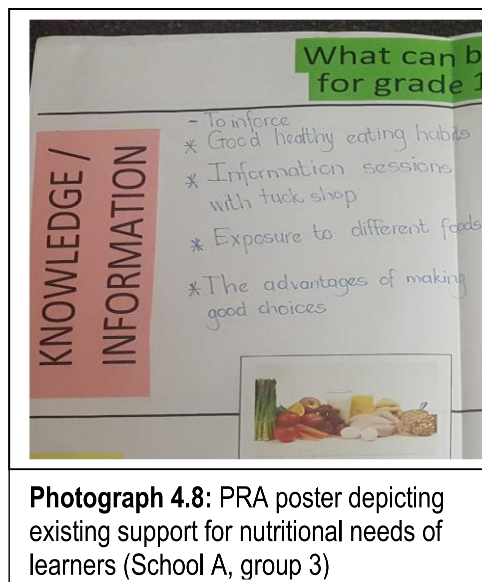
buy food rather than sweets at the tuckshop" (Researcher fieldnotes, School A, PRA session, 2016, teachers 4-6, group 2, lines 83-84), and also *"focus on healthy eating habits in class, with a 'Healthy Eating Day' at school"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 7-8, group 3, lines 111-112).

Participants from School A furthermore mentioned that regular parent evenings are held to discuss healthy eating with parents, and that this also serves as support for the learners. However, not all parents take an interest in attending these meetings. In this respect, participants mentioned that, *"during parent evenings we also try to discuss lunch boxes, healthy eating, and wellness with parents, but parents also don't attend these evenings regularly"* (Researcher fieldnotes, School A, PRA session, 2016, lines 16-17). Participants added: *"learners and parents (during parent evenings or by means of informational letters) are informed about healthy food items and options for learners' lunchboxes"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 1-3, group 1, lines 57-58).

Photograph 4.5: PRA poster depicting existing support for nutritional needs of learners (School A, group 2)



Photograph 4.7: PRA poster depicting existing support for nutritional needs of learners (School A, group 3)



Photograph 4.8: PRA poster depicting existing support for nutritional needs of learners (School A, group 3)

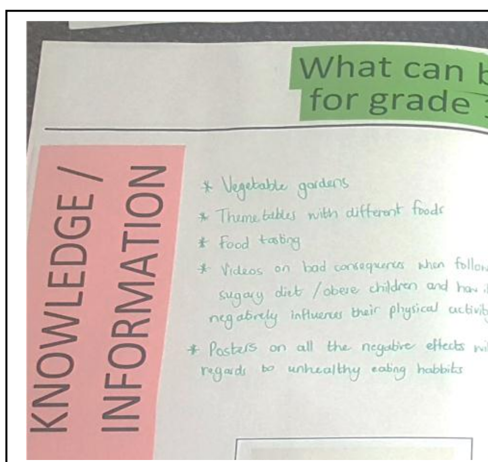
4.4.2.4 Category 2.1.3 - Suggestions to include in supporting learners' nutritional needs in a health promotion intervention

Category 2.1.3 of subtheme 2.2 spoke specifically to the participants thoughts regarding suggestions to include in supporting learners' nutritional needs in a health promotion intervention.

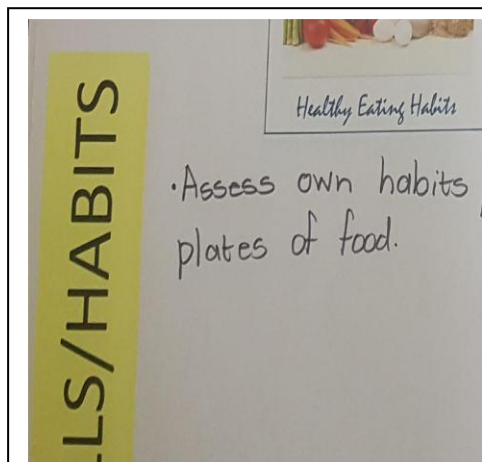
In terms of suggestions for a school-based health promotion intervention, participants from both schools provided specific examples of ideas they would want to include in further supporting learners' nutritional needs. According to participants from School A: *"learners must learn more skills and healthier eating. These skills and habits will assist them to assess their own food choices and plates of food when they are eating"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 4-6, group 2, lines 146-148). A response by a participant from School B supported this statement: *"I agree, they (parents and learners) need more knowledge and skills about healthy eating practices…"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 9, group 2, lines 30-31). Participants from both School A and School B indicated that practical skills, such as being able to grow one's own vegetables, would benefit learners as well as their parents greatly: Participants from School B said: *"…if parents know how to start their own vegetable garden - they will not only have fresh vegetables to eat but will also be able to be more self-sufficient"* (Researcher fieldnotes, School B, PRA session, 2016, teachers 1-4, group 1, lines 212-213), while participants from School A indicated that *"they think schools should teach learners to develop their own vegetable gardens at home with their parents and that schools should actually have examples (vegetable gardens) that learners can learn from, as well as parents. But due to several challenges, this is not happening"* (Researcher fieldnotes, School A,

PRA session, 2016, teachers 4-6, group 2, lines 105-108). Participants from School A, however, did not elaborate on the type of challenges faced in this regard. Participants from School B further recommended: *"learners might also benefit from a visit to a farm for example – this will give learners the opportunity to get in touch with healthy food"* (Researcher fieldnotes, School B, PRA session, 2016, teachers 5-9, group 2, lines 236-238).

The participants accentuated healthy eating habits and referred to exposure to different types of food as a means of supporting learners to make healthier food choices. Participants from School A indicated: *"learners must be aware of the advantages of making healthy food choices"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 7-8, group 3, lines 169-170), and emphasised that learners should gain skills to make healthier food choices: *"an important skill is that learners must be able to make healthier food choices"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 7-8, group 3, lines 170-172). Participants from School A suggested in this instance that *"the incorporation of drama might also work good – learners will enjoy this!"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 4-6, group 2, lines 144-145). Participants also mentioned that *"it will also be good if professionals could come and speak to learners and parents about a healthy lifestyle, food choices and health in general"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 4-6, group 2, lines 143-144). Participants from School B further made suggestions that would benefit learners as well as their parents and recommended: *"a restaurant day – where parents and/or learners will get the opportunity to eat a healthy plate of food and also learn how to prepare that healthy plate"* (Researcher fieldnotes, School B, PRA session, 2016, teachers 5-9, group 2, lines 238-239).



Photograph 4.9: PRA poster highlighting a vegetable garden as a suggestion to include in a health promotion intervention (School A, group 2)



Photograph 4.10: PRA poster indicating types of nutrition-education activities (School B, group 2)

4.4.3 Subtheme 2.2: Physical health education and physical health practices suggested for a school-based health promotion intervention

4.4.3.1 Introduction

Physical education in the education context provides learners with the opportunity to participate in regular and structured physical activity (Kolh & Cook, 2013). Moreover, teachers are viewed as key role players in helping young learners achieve their fitness goals (Fairclough & Stratton, 2005). Teachers are also in the best position to encourage and promote opportunities for physical activity within the school, along with extracurricular participation at home and in the community (Fairclough & Stratton, 2005).

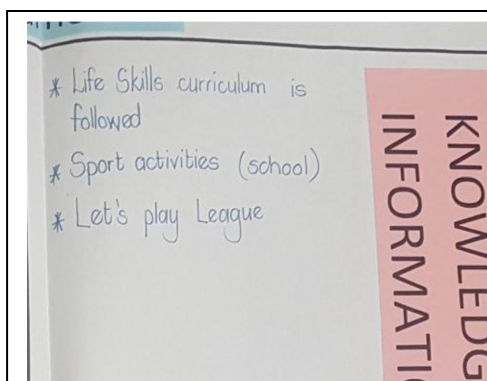
The subtheme ‘physical health education and physical health practices suggested for a school-based health promotion intervention’ includes the following categories: physical health education as part of the Life Skills curriculum, existing physical health support for learners at school, and suggestions to include in supporting learners’ physical health for a school-based health promotion intervention. In the current study, data for this subtheme is based on the researcher fieldnotes, reflective notes and participants’ PRA poster activities from the aforementioned PRA workshops.

4.4.3.2 Category 2.2.1 - Physical education as part of the Life Skills curriculum

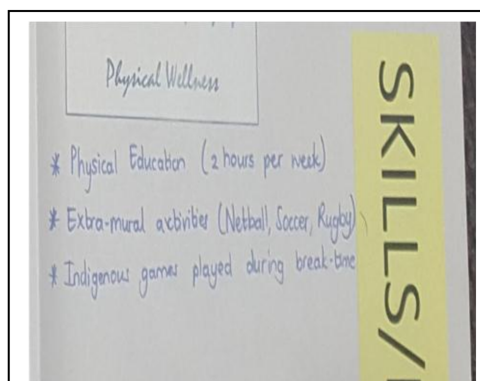
In category 2.2.2 of Subtheme 2.2, participants referred to the Life Skills curriculum as the basis for teaching health education.

Participants from both schools discussed the contribution of Life Skills as subject area to health promotion. However, participants from School A gave more elaborate explanations of their prescribed teaching on physical health education. Participants from School B indicated: *"we are currently relying on the curriculum to support their learners' physical wellness. They do as they are being prescribed by the curriculum"* (Researcher fieldnotes, School B, PRA session, 2016, teachers 1-4, group 1, lines 165-167). Participants from School A likewise affirmed: *"in terms of physical wellness, we also rely on the Life Skills curriculum and physical education/sport to enhance physical wellness"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 4-6, group 2, lines 93-94). Participants from School A in addition briefly mentioned that they have access to *"resources for using in class or in the field to better learners' physical wellness"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 4-6, group 2, lines 94-95), although they did not elaborate on this statement.

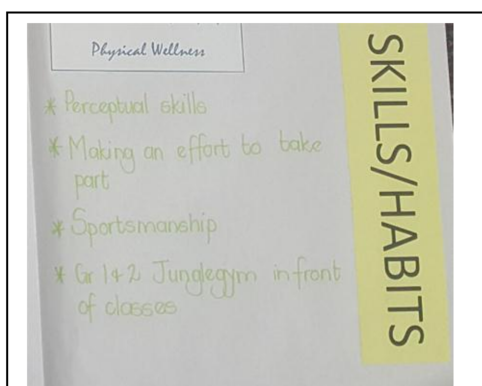
At School A, participants related the value of fitness and highlighted that the Life Skills curriculum focuses on *"physical education two hours per week in order to improve the learners' physical wellness"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 1-3, group 1, lines 67-69). The participants emphasised that the two hours per week of physical activity includes *"sporting activities"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 4-6, group 2, lines 129-130). According to the participants from School A, physical play and sports are important to encourage learners' participation and sportsmanship skills. Participants stated that *"they also want their learners to understand the value of participation and sportsmanship – important skills they feel learners will benefit from in future"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 4-6, group 2, lines 133-134). Participants from School A furthermore referred to *"the jungle-gym in front of the Grade 1 and 2 classes and how beneficial it is for learners who haven't had previous opportunities to explore something like that"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 4-6, group 2, lines 135-136). Participants from School A also highlighted that they focus on personal hygiene and care, such as *"self-discipline, learners' toilet routine"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 4-6, group 2, lines 89-90) and *"hand-washing"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 4-6, group 2, line 117).



Photograph 4.11: PRA poster indicating examples of physical health education activities as part of curriculum content (School A, group 2)



Photograph 4.12: PRA poster indicating the time allocated to physical health education in the Life Skills curriculum (School A, group 2)



Photograph 4.13: PRA poster indicating topics and activities emphasised in the Life Skills curriculum (School A, group 2)

4.4.3.3 Category 2.2.2 - Existing physical health support for learners at school

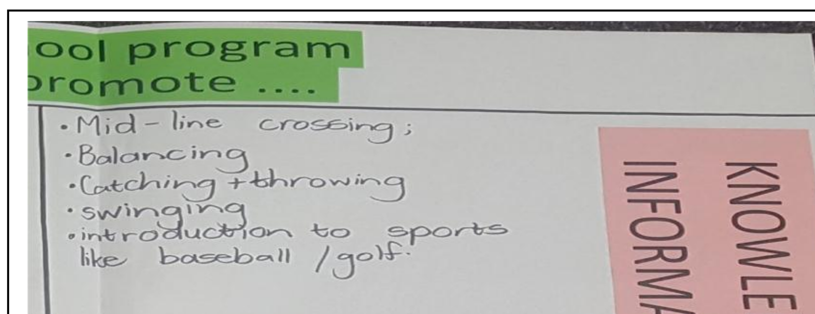
In this category, the participants specifically acknowledged the kind of support they provide in terms of physical health education.

In the light of the Life Skills curriculum, participants from both schools highlighted that the basic support that they provide to learners involved perceptual skills development, physical fitness such as sporting activities, and personal care and hygiene. Participants from School A mentioned that *"learners lack basic gross-motor skills and that is an important skill that will benefit them. It is a skill that must be developed and nurtured"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 1-3, group 1, lines 45-46). Examples of the types of perceptual skills that learners need support with were provided: *"learners must be supported in terms of their midline crossing, balance, catching and throwing of balls, swinging, etc. Currently learners, especially Grade 1, learners lack these very important skills"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 4-6, group 2, lines 159-162). Closely related to this, a

participant from School B indicated: *“we also try to provide learners with basic skills in terms of their physical well-being… We do practise practical activities to enhance their balance, we do rope jumping, spatial orientation, etc.”* (Researcher fieldnotes, School B, PRA session, 2016, teacher 1, group 1, lines 95-97). Another participant from School B added: *“we do have an occupational therapist who does group work and a play therapist that supports us with extreme cases… But they are working as volunteers only…”* (Researcher fieldnotes, School B, PRA session, 2016, teacher 4, group 1, lines 71-73).

Participants from both School A and School B emphasised the value of sport in promoting the physical health and wellness of learners. Participants from School A mentioned the importance *“to support learners with their physical well-being and fitness…together with sporting activities and ‘Let’s Play League’”* (Researcher fieldnotes, School A, PRA session, 2016, teachers 4-6, group 2, lines 129-131). In addition, participants explained that *“they also have discussions with learners on being active at home without any expensive equipment but also going to the gym with their parents”* (Researcher fieldnotes, School A, PRA session, 2016, teachers 1-3, group 1, lines 70-71). In this regard, however, a participant from School B indicated: *“although we know the value of sport… We don’t have sufficient equipment – most of it has been stolen…”* (Researcher fieldnotes, School B, PRA session, 2016, teacher 4, group 1, lines 132-133).

In terms of personal care and physical hygiene, participants related that there were many learners who did not maintain proper hygiene due to poor living conditions. According to a participant from School B: “*a lot of the poor learners also struggle with head lice… we do try and help these learners at school… try to get sponsors for shampoo and to cut their hair…”* (Researcher fieldnotes, School B, PRA session, 2016, teacher 9, group 2, lines 53-54). Participants from School A did not mention anything regarding support for learners struggling with physical hygiene.



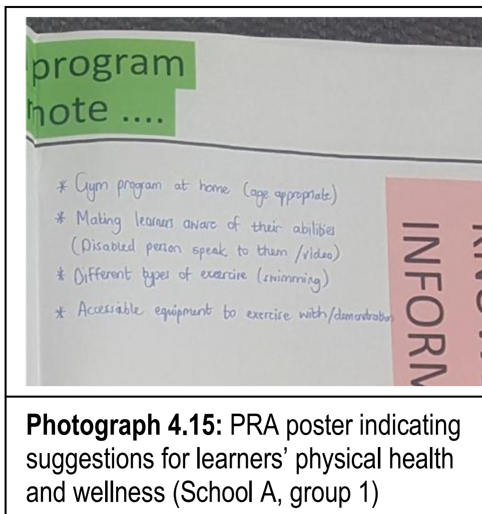
Photograph 4.14: PRA poster illustrating examples of perceptual skills participants focus on (School A, group 2)

4.4.3.4 Category 2.2.3 - Suggestions to include in supporting learners' physical health needs in a health promotion intervention

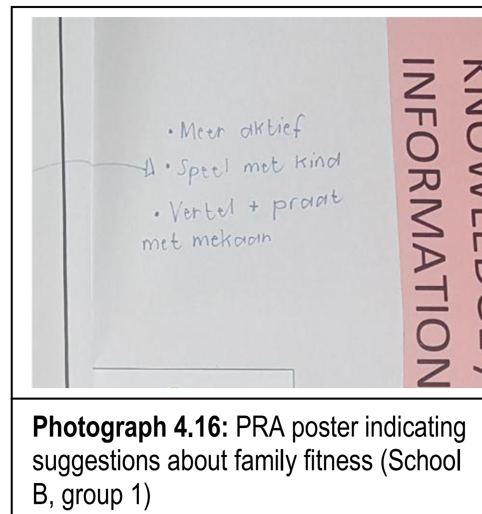
Category 2.2.3 of subtheme 2.2 speaks specifically to the participants' thoughts on suggestions to include in supporting learners' physical health needs in a health promotion intervention.

The participants confirmed that the health promotion intervention should include a reasonable amount of play time, as well as sporting activities for the learners. The participants added that parents or caregivers of learners play take a more active role in encouraging physical activity. Participants from School B suggested that *"families in this community must be more active, but as families, not as individuals"* (Researcher fieldnotes, School B, PRA session, 2016, teachers 1-4, group 1, lines 206-207). They said that children do not engage much in play, but lead more sedentary lifestyles: *"children don't play enough and are mostly busy with electronic devices, etc"* (Researcher fieldnotes, School B, PRA session, 2016, teachers 1-4, group 1, line 209), thus the participants also highlighted that *"parents need to spend more time with their learners by means of play"* (Researcher fieldnotes, School B, PRA session, 2016, teachers 1-4, group 1, line 208). Participants from School A similarly advised that *"learners must also exercise at home – they must have an age-appropriate gym programme at home they can follow – also they must have access to equipment or at least learn how to exercise without any equipment. These exercises must be fun and also include a wide variety of different kinds of exercises"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 1-3, group 1, lines 40-43).

Participants from School B furthermore added that *"sport teams can maybe also visit the learners and inform them about different kinds of sport"* (Researcher fieldnotes, School B, PRA session, 2016, teachers 5-9, group 2, lines 248-250). Some participants mentioned a *"traditional games day"* (Researcher fieldnotes, School B, PRA session, 2016, teachers 5-9, group 2, line 251), but did not elaborate on this. In terms of physical wellness and better personal hygiene, participants from School B briefly mentioned *"personal hygiene as an important focus point and something that must be included in the health promotion intervention"* (Researcher fieldnotes, School B, PRA session, 2016, teachers 5-9, group 2, lines 232-233).



Photograph 4.15: PRA poster indicating suggestions for learners' physical health and wellness (School A, group 1)



Photograph 4.16: PRA poster indicating suggestions about family fitness (School B, group 1)

4.4.4 Subtheme 2.3: Socio-emotional health education and suggested practices for a school-based health promotion intervention

4.4.4.1 Introduction

The key to the successful development of learners' socio-emotional well-being depends on the context in which they interact, the social opportunities with which they are provided, influence and education from caregivers and teachers, and the personal opportunities to express feelings and ways of dealing with emotional and social problems (Mihaela, 2015).

The subtheme 'socio-emotional health education and suggested practices for a school-based health promotion intervention' included the following categories: socio-emotional health education as part of the Life Skills curriculum**,** existing socio-emotional health support for learners at school, and suggestions to include in supporting learners' socio-emotional health for a school-based health promotion intervention. In the current study, data for this subtheme is based on the researcher fieldnotes, reflective notes and participants' PRA poster activities in the aforementioned PRA workshops.

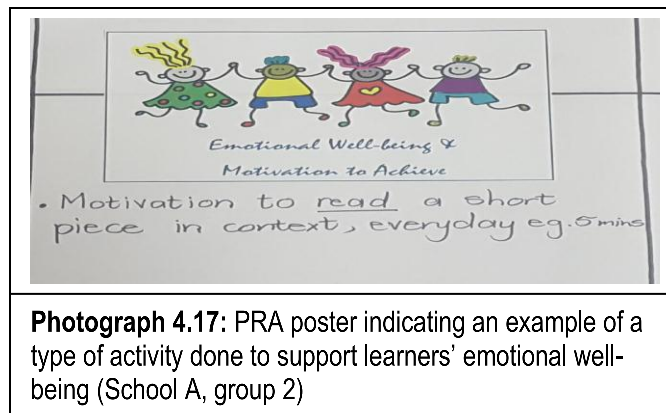
4.4.4.2 Category 2.3.1 - Socio-emotional health education as part of the Life Skills curriculum

In category 2.3.1 of Subtheme 2.3, the participants referred to the Life Skills curriculum as the basis for teaching topics concerning socio-emotional health.

The participants indicated that they relied on the Life Skills curriculum to promote learners' socio-emotional well-being. However, the socio-emotional learning

components in the Life Skills curriculum for foundation phase learners is of limited scope and very basic. Participants from School B commented in this regard: *"Teachers focus on basic Life Skills… But it is very basic and not nearly enough…"* (Researcher fieldnotes, School B, PRA session, 2016, teachers 3, group 1, line 81). Participants in both schools emphasised that learners' emotional well-being is critical and is thus a priority. Participants at School A mentioned: *"the emotional well-being of learners is an important focus point at school"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 4-6, group 2, lines 127-128), while participants at School B highlighted: *"emotional well-being is the foundation for healthy eating habits and physical fitness"* (Researcher fieldnotes, School B, PRA session, 2016, teachers 1-4, group 1, lines 194-195). A participant from School B stressed the fact that, *"If their (learners') emotional well-being is not the way it is supposed to be – positive/motivated, supporting, healthy relationships with others – nothing is going to work"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 8, group 2, lines 20-24).

Participants from School B expressed their concern about learners' emotional well-being, and furthermore emphasised that the scope of the curriculum only allowed for basic guidance for all learners as a class, therefore they were unable to cater for learners' individual emotional needs. Participants from School B stated: *"most of our learners don't know how to regulate their emotions… and as teachers we also don't have enough time to support learners on an individual level"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 2, group 1, lines 63-64). In this regard, participants elaborated: *"our guidance is very basic, for example – they don't know what to do if they are in a situation of family violence – what to do when dad hits mom…"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 6, group 2, lines 120-121). Participants from School A indicated how the curriculum enables them to address the socio-emotional well-being of learners by explaining that they *"motivate learners to share their stories and news on a daily basis and make use of worksheets that form part of the curriculum to develop and enhance [their] emotional well-being and motivation in general"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 1-3, group 1, lines 65-67). Participants from School A also referred to motivation in particular, and specified: *"in terms of motivation, it might help learners to read or hear a short piece to motivate them every day"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 4-6, group 2, lines 150-151).



Photograph 4.17: PRA poster indicating an example of a type of activity done to support learners' emotional well-being (School A, group 2)

4.4.4.3 Category 2.3.2 - Existing socio-emotional health support for learners at school

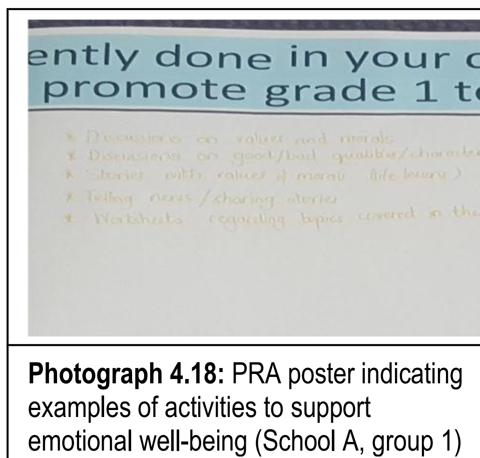
This category of Subtheme 2.3 refers explicitly to the kind of support participants are able to provide in terms of socio-emotional health.

The participants indicated that, in terms of socio-emotional well-being, they try their best to support learners by means of motivation (intrinsically and extrinsically), through faith-based programmes, and through the school-based support team, including specialist teachers, a counsellor and a social worker. Participants from School A acknowledged in respect of learners' socio-emotional well-being that they engage in *"classroom discussions with learners about acceptable morals and values, and utilise stories with life lessons on values and morals to motivate learners and support them with their morals and values"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 1-3, group 1, lines 61-63). Participants also added that they *"have regular discussions on good and bad qualities/characteristics"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 1-3, group 1, line 64) with learners. A response from a participant at School B similarly supported the above statements; this participant indicated that *"we do have a 'value' programme at our school – where we focus on important values… We try to teach these to learners in a practical manner"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 6, group 2, lines 78-79).

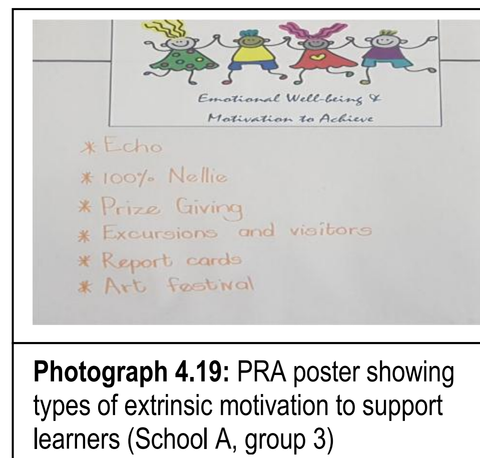
Again, in terms of intrinsic motivation, participants from School A referred to *"the schools' Christian foundation and the use of Bible stories to motivate learners and teach them positive values. ECHO* [a church group] *is very involved with learners and also a great source of motivation to learners"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 7-8, group 3, lines 122-124). Other participants from School A referred to the importance of *"the ECHO programme* [volunteers from the church] *to*

motivate learners and to support their emotional well-being" (Researcher fieldnotes, School A, PRA session, 2016, teachers 7-8, group 3, lines 122-124). The participants furthermore stated that they were *"in constant interaction with parents of learners who experience emotional challenges"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 7-8, group 3, lines 120-121). Participants from School A also encouraged extrinsic motivation as a means of acknowledging learners' efforts and increasing their self-esteem: *"through the arts festival, the yearly prize-giving ceremony, 100% Nellie campaign and even through report cards, the school and teachers aim to motivate and support learners in a positive manner"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 7-8, group 3, lines 124-127).

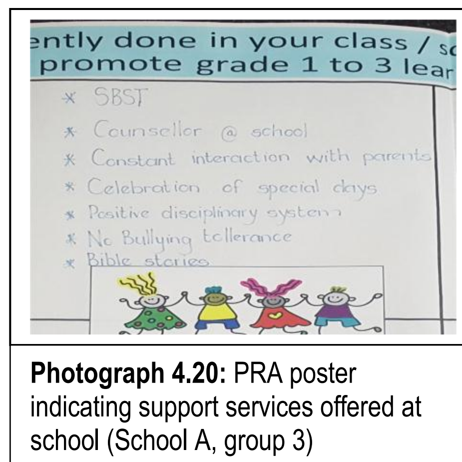
A school-based support team (SBST) is an important structure within the schooling system. The SBST in both schools took responsibility for learners by providing the necessary support in terms of their required emotional needs. Participants from School A confirmed the importance of *"the SBST as a current way of supporting learners' emotional well-being, together with the counsellor at school"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 7-8, group 3, lines 118-119). Participants from School B, however, mentioned *"the churches, and that they usually refer children with emotional challenges to the social worker. But she recently 'resigned', although she was just a volunteer"* (Researcher fieldnotes, School B, PRA session, 2016, teachers 1-4, group 1, lines 169-171).



Photograph 4.18: PRA poster indicating examples of activities to support emotional well-being (School A, group 1)



Photograph 4.19: PRA poster showing types of extrinsic motivation to support learners (School A, group 3)



Photograph 4.20: PRA poster indicating support services offered at school (School A, group 3)

4.4.4.4 Category 2.3.3 - Suggestions to include in supporting learners' socio-emotional health needs in a health promotion intervention

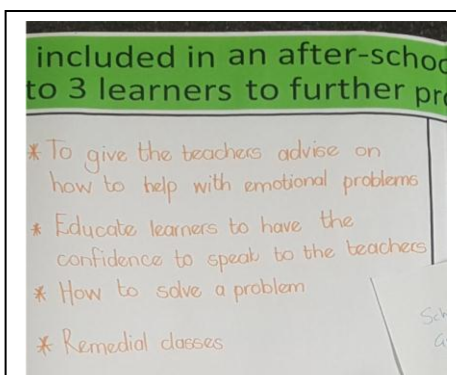
Category 2.3.3 of subtheme 2.3 speaks specifically to the participants' thoughts regarding suggestions to include in supporting learners' socio-emotional health needs in a health promotion intervention.

When prompted during the PRA workshops about suggestions to include in supporting learners' socio-emotional health needs, the participants identified positive achievement, motivational talks and problem-solving skills as crucial for any school-based health promotion intervention. Participants from School B emphasised that *"emotional well-being, school-based achievement and motivation are* [in their opinion] *crucial for any health promotion intervention – actually the most important aspect"* (Researcher fieldnotes, School B, PRA session, 2016, teachers 1-4, group 1, lines 189-191). Participants from School A shared their view that *"learners need to experience/view themselves as positive – thus suggesting activities that will help them to do this – whether it is by means of affirmation or seeing themselves in a more positive light"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 4-6, group 2, lines 155-158).

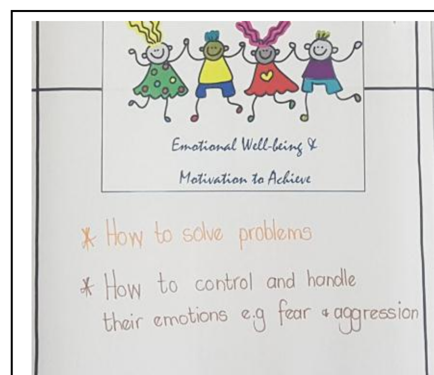
The value of role models was added by participants from both School A and School B. Participants from School A accentuated *"the value of positive role models"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 1-3, group 1, lines 38-39) and *"motivational speakers that can come to motivate learners – motivation must form part of any intervention"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 1-3, group 1, lines 32-33). While participants from School B also referred to the value of motivational speakers and public figures, they also suggested that learners be taken on outings for positive affirmation: *"our school needs more people from outside the*

school to come and motivate the learners, like sport stars or actors…Also we need more sponsors to take our learners on outings – just to get them out of their negative environment…" (Researcher fieldnotes, School B, PRA session, 2016, teacher 3, group 1, lines 143-145). Participants stressed "*how this will benefit learners – to be 'outside' their (poverty-stricken) environment, even just for a few hours to give these learners some hope again"* (Researcher fieldnotes, School B, PRA session, 2016, teachers 1-4, group 1, lines 229-231). One participant from School B furthermore suggested: *"even the police can be more involved… They can come and have talks at our school to also teach learners what to do in certain situations…"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 4, group 1, lines 147-148).

In terms of problem-solving skills, participants from School A emphasised, in relation to learners, *"problem-solving skills (practical steps/skills to apply when they are confronted with challenges). Also, learners must learn some skills on how to regulate their own emotions, especially emotions such as fear and aggression"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 7-8, group 3, lines 180-182). Participants from School A indicated: *"remedial classes will help to motivate learners who are struggling to achieve and that will enhance their emotional well-being"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 7-8, group 3, lines 178-180). Participants also drew attention to *"learners' lack of confidence and communication skills … to have confidence to speak to teachers and trust them"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 7-8, group 3, lines 175-176), and mentioned that *"learners must be taught about healthy relationships – for example how to communicate better, what we can do to support each other, etc"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 4-6, group 2, lines 158-159). Hence, they suggested that this must be included in such an intervention. Participants from School B also recommended support, as follows: *"emotional intelligence is important, and mental health and well-being"* (Researcher fieldnotes, School B, PRA session, 2016, teachers 1-4, group 1, lines 214-215).



Photograph 4.21: PRA poster indicating suggestions to include in support of learners' emotional well-being (School A, group 3)



Photograph 4.22: PRA poster indicating suggestions to include in support of learners' emotional well-being (School A, group 3)

4.5 THEME 3: TRAINING REQUIRED FOR A SCHOOL-BASED HEALTH-PROMOTION INTERVENTION

4.5.1 Introduction

The concept of health education is broadly understood as the transfer of health knowledge to help individuals change their attitudes and behaviour towards a healthier lifestyle as a means of empowering them to take care of their own health. In order to facilitate this change and implement a comprehensive school-based health promotion intervention successfully, staff and caregiver training is vital (Lee, Tsang, Lee, & To, 2003).

Theme 3 includes the following subthemes: pre-service and in-service teacher training for a school-based health promotion intervention in at-risk school communities, and conventional training for caregivers in a health promotion intervention for sustainable living.

Table 4.3: Subthemes of theme 3, indicating inclusion and exclusion criteria

THEME 3 Training required for a school-based health promotion intervention		
SUBTHEME	**INCLUSION CRITERIA**	**EXCLUSION CRITERIA**
3.1 Pre-service and in-service teacher training for a school-based health promotion intervention in at-risk school communities	▪ Teacher training relating to pre-service and in-service training to support health promotion in terms of learners' and their caregivers' nutritional needs, physical health needs and socio-emotional health needs as part of curricular and extra-curricular activities	▪ Data referring to pre-service and in-service training for teachers not relating to support for a school-based health promotion intervention

3.2 The need for caregiver training in a health promotion intervention for sustainable living	▪ Caregiver training to support health promotion in terms of their own as well as learners' nutritional needs, physical health needs and socio-emotional health needs	▪ Data referring to caregiver training not relating to support for a school-based health promotion intervention

4.5.2 Subtheme 3.1: Pre-service and in-service teacher training for a school-based health promotion intervention in at-risk school communities

Schools are regarded as the most suitable context for providing health education and health promotion for learners (Jourdan, Samdal, Diagne, & Carvalho, 2008). Teachers are key role players in this context and therefore require pre-service and in-service health promotion training in order to effectively fulfil their role in a health promotion intervention and have a more positive approach to health education (Jourdan et al., 2008). Data for this subtheme is based on researcher fieldnotes and reflective notes.

According to participants from School A, *"learners spend a lot of time at school each day and that must be regarded as an important link between health and education – schools can influence the health and well-being of learners from a position to transfer the necessary knowledge and skills to learners"* (Researcher fieldnotes, School A, PRA session, 2016, teacher 4-6, group 2, lines 96-99). The participants further acknowledged that education is the key to social change, and mentioned: *"through education, we can impact on the health-related knowledge and skills of learners and their parents. This will enable them to make better choices, not only in terms of food, but also in terms of their fitness and emotional well-being"* (Researcher fieldnotes, School A, PRA session, 2016, teacher 2, group 1, lines 72-75). Participants elaborated that *"health-related literacy skills are essential to combat poor lifestyle choices, and through these health promotion interventions we can strengthen these skills"* (Researcher fieldnotes, School A, PRA session, 2016, teacher 2, group 1, lines 75-77).

On the three key areas in health promotion, namely nutrition, physical health and socio-emotional health, participants from both schools confirmed that they required training, specifically in relation to promoting learners' socio-emotional well-being. In terms of socio-emotional well-being and motivation, participants from School B seemed negative and indicated that they were *"desperate for additional support in terms of learners' emotional well-being"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 1-4, group 1, lines 171-172). Many participants mentioned that they *"are not trained (pre-service and in-service training) to handle these learners who experience*

emotional challenges" (Researcher fieldnotes, School B, PRA session, 2016, teacher 1-4, group 1, lines 161-162). Responses by participants from School A were aligned with the responses of participants from School B, as they also indicated *"they need skills on how to support learners with emotional challenges, because [we] don't know how to support them*" (Researcher fieldnotes, School A, PRA session, 2016, teachers 7-8, group 3, lines 173-174). Other participants from School B furthermore indicated that, *"with their workload and the curriculum there isn't enough time and capacity to support learners additionally than what [we are] already doing"* (Researcher fieldnotes, School B, PRA session, 2016, teachers 1-4, group 1, lines 163-164), and therefore they felt *"unable to provide some of the learners with support who experience severe emotional challenges"* (Researcher fieldnotes, School B, PRA session, 2016, teachers 1-4, group 1, lines 159-160).

4.5.3 Subtheme 3.2: The need for caregiver training in a health promotion intervention for sustainable living

Collaboration between primary caregivers and the school community to promote learners' nutrition, physical health and socio-emotional health has become very significant in the light of the continuing increase in childhood obesity and other non-communicable illnesses (Blom-Hoffman, Wilcox, Dunn, Leff, & Power, 2008). The primary caregivers play the most significant role in a learner's life, and therefore also require training to promote learners' health in terms of nutrition, physical fitness and socio-emotional well-being. Data for this subtheme is based on researcher fieldnotes and reflective notes.

While participants from School A emphasised *"the importance of including learners, their parents and teachers in the health promotion intervention"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 4-6, group 2, line 100), they also mentioned: *"ultimately schools are responsible for preparing healthy, productive and responsible learners in collaboration with parents and school communities"* (Researcher fieldnotes, School A, PRA session, 2016, teachers 4-6, group 2, lines 101-102). Reponses by participants from School B support these statements: *"any health promotion intervention should focus more on parents – learn (sic) them skills about healthy eating habits, physical fitness, how to motivate their children and also how to support/develop their children's emotional well-being"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 2, group 1, lines 5-7). When prompted about the caregiver's role in health promotion, one participant from School B mentioned: *"I think any health promotion programme should start with parents or at least include them in any possible*

way" (Researcher fieldnotes, School B, PRA session, 2016, teacher 4, group 1, lines 11-12).

Furthermore, this participant briefly mentioned that caregivers specifically require training, since good health begins at home. Should teachers alone provide knowledge to learners, learners might not fully benefit if their caregivers do not possess and cannot implement the necessary knowledge and skills: *"we can teach learners as much as we want, but the parents…they are the main issue"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 4, group 1, lines 11-12). Supporting this statement, other participants from School B added: *"children can tell their parents about healthy eating and emotional well-being etc, but parents won't listen to their children, they won't take their children seriously"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 3, group 1, lines 15-16) and, *"in some cultures small children won't even attempt to tell/advise their parents on healthy eating, and exercise…"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 1, group 1, lines 16-17).

Referring to nutrition, a participant from School B highlighted that *"parents' knowledge regarding support toward their own children is almost non-existing…"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 4, group 1, lines 98-99). Elaborating by means of an example, a participant from School B explained: *"parents allow their children to buy Monster cold drink and then they are for example Grade 1 learners…"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 9 group 2, lines 105-106). In addition, the same participant responded to the need for caregiver training by stating: *"I agree, they (parents and learners) need more knowledge and skills about healthy eating practices"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 9, group 2, lines 30-31). Participants furthermore responded affirmatively, stating, *"yes, parents need to learn specific skills to be able to support learners better"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 5, group 2, lines 9-10).

Participants from School B reflected on their role in collaboration with parents and communicated: *"it is also our job to educate the parents and to teach them basic skills…"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 4, group 1, lines 127-128) and, *"as teachers we also need to teach the parents…"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 6, group 2, line 100). Participants made specific reference to the usage of the correct terminology in learning about nutrition, as well as the application of practical skills: *"parents and learners must learn the correct terminology and develop the correct understanding of aspects such as nutrients, the role of vitamins, what are examples of cheaper, healthy foods – this must form part of any intervention"* (Researcher fieldnotes, School B, PRA session, 2016,

teachers 1-4, group 1, lines 200-203). In addition, the participants elaborated that *"parents and learners need knowledge and skills – they must learn about the different focus areas and also do it in a practical manner"* (Researcher fieldnotes, School B, PRA session, 2016, teachers 1-4, group 1, lines 203-205). Furthermore, participants from School B emphasised in terms of nutritional training that *"parents need to learn how to prepare food in a healthy (way). They also need training on types of healthy food and reasons why people need to eat healthy food"* (Researcher fieldnotes, School B, PRA session, 2016, teachers 5-9, group 2, lines 222-224). A participant from School B also shed light on training for parents who cook as volunteers, stating: *"parents who cook and prepare food need some kind of training in terms of healthy food preparation methods…"* (Researcher fieldnotes, School B, PRA session, 2016, teacher 1, group 1, lines 141-142). Unlike participants from School B, who extensively discussed the need for parent training, participants from School A did not emphasise the need for parent training for a health promotion intervention.

4.6 CONCLUSION

In this chapter, I presented the results of the study in terms of the three themes and related subthemes, and categories that emerged through primary inductive thematic analysis. The results that derived from the data analysis were discussed comprehensively, and included descriptions of the themes and subthemes. Further descriptions reflected in the inclusion and exclusion criteria effectively describe the relevance of the data that was included. Visual evidence of the raw data (PRA posters) was also included to support the rich descriptions of the themes and subthemes that were discussed.

In Chapter 5, I compare the findings of the study against existing literature to identify possible causal relationships and differences that occur. I also address the research questions formulated in Chapter 1.

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CHAPTER 5
FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

In Chapter 4, I discussed the themes and subthemes that emerged following the primary inductive thematic analysis.

In this chapter, I provide an overview of Chapters 1 to 4 of this study in accordance with the content of these chapters. The research findings are discussed in detail. This is done by linking the findings of this study to existing literature by highlighting similarities and contradictions in terms of: teachers' perspectives on contextual needs that necessitate a school-based health promotion intervention (Theme 1), content for a school-based health promotion intervention based on contextual health promotion needs (Theme 2), and training required for a school-based health promotion intervention (Theme 3). The literature I present in this section is thus intended to provide answers to the primary and secondary research questions that were outlined in Chapter 1 (section 1.5) of this research report. I conclude the chapter with the study's identifiable limitations, along with recommendations for future research, practice and training.

5.2 SUMMARY OF THE PREVIOUS CHAPTERS

Chapter 1 presented an overview of the study. The opening sections included an introduction to the study, relevant background information, and the rationale for the study, which is entitled "Teachers' perceptions of a health promotion intervention in at-risk school communities". This chapter also highlighted the purpose of the study. The research questions that guided the study were introduced, followed by the working assumptions and a clarification of key concepts. Furthermore, the applicable paradigmatic lenses and methodological strategies relating to the study were described and discussed. The chapter briefly described the quality criteria and ethical consideration I complied with throughout the study. Chapter 1 concluded with a summative outline of the subsequent chapters of this dissertation.

The literature pertaining to school-based health promotion within South Africa and abroad was reviewed in **Chapter 2**. The current global and South African health scenario in terms of non-communicable diseases (NCDs), food insecurity and malnutrition, the HIV and AIDS pandemic and psycho-social well-being was discussed. I proceeded to describe school-based health promotion by providing an overview of

the partnership between education and health, health-promoting schools, the role of the curriculum in school-based health promotion, factors influencing the implementation of school-based health promotion programmes, and the outcomes of school-based health promotion programmes. The chapter moreover, contains a discussion on efforts to address health promotion challenges for Grade 1 to 3 learners, with specific reference to national and global efforts to support the health of Grade 1 to 3 learners. The chapter also focused on the role of teachers in health promotion and the involvement of parents in health promotion. The theoretical framework that guided this study was also introduced and discussed.

The applicable research methodology chosen for the current study was discussed in **Chapter 3**. This included a description of a qualitative descriptive case study as the selected research design, as well as the associated benefits and limitations thereof. The chapter contains a detailed description of the PRA datasets generated during the broader school-based health promotion project and the sampling procedures that were necessary for the secondary analysis of existing data. The description of the participants was outlined in table format. This included a summary of the two cohorts in a breakdown of: the site, number of participants, grouping, gender and language. The chapter also contains a comprehensive discussion on inductive thematic analysis. The role of the qualitative researcher is also described. The chapter concluded with a description of the ethical considerations and quality control mechanisms that were implemented and complied with throughout the study.

The results derived from the inductive thematic analysis in **Chapter 4** were reported as findings for this secondary study. The three themes and related subthemes were discussed in detail. The three themes were teachers' perspectives on contextual needs that necessitate a school-based health promotion intervention, content for a school-based health promotion intervention based on contextual needs, and training required for a school-based health promotion intervention. These three themes, as well as the corresponding subthemes, were supported with raw data in the form of visual data and extracts from the sampled data sources. The specific inclusion and exclusion criteria were also included in each case.

5.3 ANSWERING THE RESEARCH QUESTIONS

5.3.1 Introduction

In this section I share the findings of my study per research question based on a literature control. These findings answer the research questions posed in Chapter 1

(section 1.5) of this research report. The three secondary questions are addressed first, followed by the primary research question, which is answered separately.

5.3.2 Secondary research questions

5.3.2.1 Why do teachers think a school-based health promotion intervention is needed?

With regard to correlating Subtheme 1.1, I also found. like others (Maharajh, Nkosi, & Mkhize, 2016; Mahlo, 2017), that a lack of resources and large classrooms consisting of 40 learners or more make it problematic for teachers to provide attention to individual learners, especially those affected by social difficulties such as home violence or abuse and who are thereby unable to concentrate on class activities and the lesson being taught. A lack of resources in the school context and large classrooms create many challenges for teachers. This makes it particularly difficult for teachers to deliver lessons efficaciously to all learners, and therefore these challenges need to be addressed. The literature furthermore confirms what I found, namely that quintile 5 schools (fee-paying schools) have a lack of support from the Department-based Support Team (DBST) (Dass & Rinquest, 2016). However, different to others regarding basic education rights, I found fee-paying schools are not acknowledged by the DBST regarding the individual, contextual circumstances of the school, and thus a lack of resources applies to both no-fee-paying school as well as fee-paying schools. In contrast, Dass and Rinquest (2016) find that funding is provided to quintile 5 schools and that learners from a poor socio-economic background can apply for fee exemption.

Similar to international studies (Webb et al., 2018), I found that the challenge of malnutrition at both ends of the spectrum (overnutrition and undernutrition) is a result of a nutrition transition. Indicators of a nutrition transition that were identified globally (including urbanisation, globalisation, changing demographics, as well as poverty and socio-economic inequalities) resonated with what I found in relation to Subtheme 1.2 (Dukhi, Sartorius, & Taylor, 2016). Others (Dukhi et al., 2016; Hammond & Dube, 2012) also find that malnutrition is a major consequence of food insecurity and hunger.

Further, risk factors for non-communicable diseases (NCDs) identified in Theme 1 (obesity, unhealthy diets, sedentary lifestyles, smoking, alcohol consumption and a high prevalence of diabetes and hypertension in the urban poor) are consistent with the literature (Fernstrom, Reed, Rahavi, & Dooher, 2012; Mensah, 2016; Shariful Islam et. al, 2014). The literature on risk factors involving adversity in the home confirms the findings of this study. Cases of sexual abuse, drug addiction and bullying have also

been noted and were linked to psycho-social and mental health challenges (Kieling et al., 2011). Different to others (Dukhi et al., 2016; Fernstrom et al., 2012; Kieling et al., 2011) I found that poor hygiene was especially highlighted as a significant risk factor for illness.

The school context and the family context are critical to the success of a school-based health promotion intervention. However, inadequacies in either of these contexts could potentially hinder the development of effective school-based health promotion altogether (Clelland, Cushman, & Hawkins, 2013). Although there are various reasons why inadequacies occur in these contexts, some are particularly prominent.

It therefore appears that what teachers think is needed in a school-based health promotion intervention is similar to what is recognised as significant in other studies. In this regard, teachers think the following need to be included: nutritional support, physical health support, socio-emotional support, as well as adequate resources to ensure support measures are carried out successfully. In addition, different to what has been indicated elsewhere as being significant for a school-based health promotion intervention, the teachers believed that hygiene and communication skills need to be included.

5.3.2.2 What do teachers think need to be included in a school-based health promotion intervention?

With regard to Category 2.1.3 of Subtheme 2.1, findings that are similar to those of this study and reflect the teachers' suggestions on what needs to be included in a school-based health promotion intervention can be identified in the literature. Laurie, Faber and Maduna (2017) established that the production of vegetable gardens as part of an intervention is most valuable for health promotion, as this type of activity has the potential to benefit learners and their families in terms of knowledge, attitudes and practical skills to improve nutrition. Consistent with these aforementioned findings, the results of this particular study indicate that learners as well as their parents require knowledge and skills on healthy eating practices, thus the inclusion of the production of vegetable gardens in a school-based intervention will help inform parents as well. The study also noted the mutual acknowledgment of benefiting parents' knowledge and skills in health promotion.

In agreement with the findings in existing literature (Category 2.2.3 in Subtheme 2.2), this study found that parental involvement through exercise and play can improve learners' physical health (Resnicow et al., 2013; Steyn, Lambert, Parker, Mchiza & De

Villiers, 2009). The findings of this study also correlate with those of others (De Villiers et al., 2012, World Health Organization, 2009) in that involvement by both parents and teachers contributes strongly to an intervention for improving nutrition and physical activity. Further, the literature concurs with the current study, which notes that adversity is a strong predictor of socio-emotional health challenges and depression (Kieling et al., 2011). Similar to others (Department of Basic Education, 2011; O'Connell, Boat, & Warner, 2009), this study indicates that problem-solving strategies, emotion regulation and self-control strategies should be included in a school-based health promotion intervention, to support learners facing socio-emotional challenges.

Different to others (Draper et al., 2010; Kohl & Cook, 2013; O'Connell et al., 2009; Steyn et al., 2009), the findings of this study reflect on the value of role models, sports teams and traditional games in a health promotion intervention to increase learners' physical well-being. Similarly, the findings of this study also consider motivational speakers, public figures and field trips as ways to improve learners' socio-emotional well-being.

This study adds to the existing literature with regard to strategies for intervention to support learners' nutritional, physical and socio-emotional health and well-being in at-risk schools (O'Connell et al., 2009). This study contributes to knowledge in respect of multiple strategies that can be implemented in a school-based health promotion intervention. Such strategies include the incorporation of drama, public figures, constructive field trips like visits to fresh-produce farms and healthy restaurants, as well as organised after-school activities focusing specifically on socio-emotional well-being.

As a result of these findings, all the recommended intervention strategies can form part of a school-based health promotion intervention following the promotion of health and well-being in at-risk school communities. Health-promotion interventions particularly accentuate the role of various role players, including individual learners, teachers, caregivers and community organisations, as action-orientated agents in facilitating health promotion. A significant advantage of delivering a school-based health promotion intervention is the possibility of constructive, informed changes related to health promotion behaviour and beliefs.

5.3.2.3 Who do teachers think will be role players in the implementation of a school-based health promotion intervention?

The literature confirms that teachers play a key role in health promotion, and that efforts to promote health are more successful when parents are involved (Draper et al., 2010; Peu et al., 2015; Ulfsdotter, Enebrink, & Lindberg, 2014; World Health Organization, 2017). In terms of teacher training in health promotion (Subtheme 3.1), studies indicate that teachers are not always fully qualified to provide holistic support to learners in terms of health promotion and thus require pre-service and in-service training (Byrne et al., 2016; Migliorett, Velasco, Celata, & Vecchio, 2012; Peu et al., 2015). This study is consistent with the literature on the need for teacher training, particularly with regard to supporting learners who experience socio-emotional health challenges.

With regard to correlating Subtheme 3.2, the study is furthermore consistent with the literature in terms of caregiver involvement (parents) in health promotion interventions (Tekin, 2011; Ulfsdotter et al., 2014; World Health Organization, 2018). Although school-based health promotion interventions necessitate parents' involvement, parents are not always involved. Like others (Clelland et al., 2013; De Villiers et al., 2010; World Health Organization, 2013), this study that found many parents' involvement at the school is poor due to low education levels, language barriers, poor socio-economic circumstances or simply lack of interest in school communication. Teachers believe that parents need to be educated on health promotion and that they are also responsible for educating parents in this regard. The literature indicates that various training programmes are in place for both parents and teachers in supporting health promotion (O'Connell et al., 2009).

To encourage parents' involvement in school-based health promotion, international studies (Clelland et al., 2013; Ulfsdotter et al., 2014) describe learners as agents of change who have the potential to encourage parents to play an active role in health promotion. Dissimilar to these findings, the current study indicated that the learners alone cannot simply persuade parents to be involved in health promotion. In the South African context, culture was noted as a significant factor that discourages this practice, as children are not regarded to be in a position to advise their parents. This study contributes to current literature on training unemployed parents to be food handlers/chefs in a school-feeding scheme. This form of training then not only benefits the school, but also the parents, children and the community (Asiago & Akello, 2014).

The outcomes of Subtheme 3.1 and 3.2 are indicative of teachers' understanding of the various role players in health promotion. The identified needs for training

foreground the possible positive impact of a school-based health promotion intervention. To this end, teacher and parent training in at-risk school communities can be supported through health promotion training programmes offered by government-funded organisations (Department of Basic Education, 2017).

5.3.2.4 Which health promotion needs do teachers think are extracurricular and which form part of the curriculum?

Like Driscoll and Nagel (2010), this study finds that health education now forms part of the formal Life Skills curriculum. The shift from traditional health education as a separate subject towards Life Skills as a core subject, focusing on the holistic development of learners by including content on the social, emotional, personal, intellectual and physical growth of learners and the ways in which these are integrated, was confirmed when comparing official curriculum documents and other studies (Department of Basic Education, 2011; Mwoma & Pillay, 2015; Van Deventer, 2009). The health promotion needs identified in this study fall within three significant learning areas, namely nutrition education, physical health education and socio-emotional health education (Theme 2 in Chapter 4).

With regard to correlating Subtheme 2.1 in Category 2.1.1, nutrition education as part of the Life Skills curriculum, which noted topics on nutrition, is evident in the NSC CAPS foundation phase Life Skills curriculum (Department of Basic Education, 2011). A study by Beni, Stears and James (2017) of teachers' interpretations of a Life Skills curriculum found that teachers are guided by the curriculum to teach relevant content areas and, due to the reappearance of these topics every year, teachers are able to establish which topics must be part of the curriculum. Similarly, the findings of this study confirm that teachers follow the Life Skills curriculum. Nutrition education, physical education and socio-emotional health education are identified as important topics in the curriculum for Grade 1 to 3. However, the curriculum is not supportive in terms of the time allocated to teaching each of these learning areas effectively to produce stronger health outcomes (Hoadley, 2009; Kohl & Cook, 2013; Naidoo, Coopoo, Lambert, & Draper, 2009). (Refer to Appendix D)

Themes reflected in the findings of categories 2.1.1, 2.2.1 and 2.3.1 are confirmed with evidence from the NCS CAPS foundation phase curriculum. In terms of nutrition education, the findings indicate that content topics such as eating healthy food, foods we eat, where do foods come from (food groups), and healthy food choices are included as part of the curriculum content. Similar trends are also identified in Category 2.2.1 of Subtheme 2.2 in terms of physical education, and the findings indicate that the

content covered in the curriculum include perceptual skills, sports and games, and basic hygiene relating to proper toilet use, washing hands regularly and keeping hair, teeth and nails clean (Department of Basic Education, 2011). Furthermore, the findings of this study correlate with others (Kieling et al., 2011) in that socio-emotional development is critical in early childhood and thus forms part of the personal and social-wellbeing content area of the Life Skills curriculum, which focuses on addressing the socio-emotional health challenges of learners (Department of Basic Education, 2011).

If extra-curricular activities are considered in the context of the school, the literature confirms that additional learning content through an extracurricular programme can potentially contribute to stronger health outcomes and lifestyle changes, as well as eliminate the negative factors that influence the implementation of a school-based health promotion intervention (Kohl & Cook, 2013; Naidoo et al., 2009). In line with the objectives of a health-promoting school, which places emphasis on developing educational outcomes through a holistic approach to well-being, my findings confirm that, with regard health promotion, health knowledge and skills must be delivered in the cognitive, social and behavioural domains (Buijs, 2009; Langford et al., 2017; Maphalala & Adams, 2016). The study is consistent with the literature in terms of perceptual skills development, which is implemented in physical educational as part of the Life Skills curriculum. Regarding Subtheme 2.2 in Category 2.2.2, perceptual skills are considered fundamental to holistic development, and more specifically the physical development of a child (Libertus & Hauf, 2017).

The study is consistent with knowledge on perceptual skills development in order to develop learners; physical abilities (Department of Basic Education, 2011). The different perceptual skills are confirmed in the literature to be inclusive of learners' physical abilities, some of which include gross motors skills, midline crossing, and co-coordination skills (Department of Basic Education, 2011; Libertus & Hauf, 2017). Due to insufficient time allocation, extracurricular physical activities are required to fully enhance learners' well-being. Like others (Frank & Jepson, 2013), this study finds that professionals from the health sector, such as counsellors, social workers and occupational therapists, should be part of the school community to support extracurricular programmes.

Dissimilarities between the literature on extracurricular nutritional support and the findings are present in Subtheme 2.1 of Category 2.1.1. Different to others (Department of Basic Education, 2017; Rendall-Mkosi, Wenhold & Sibanda, 2013), the findings of this study posit that private sponsorships and donations are requested in order to

arrange extracurricular support to produce food gardens and provide feeding schemes. Also, in contrast to the literature on government-funded support programmes such as CSTL (Bundy, 2011; Department of Basic Education, 2017; Rendall-Mkhosi et al., 2013), this study finds that private sponsorships and community donations as well as volunteers from faith-based institutions contribute significantly to extracurricular activities.

In consideration of these outcomes, the literature places more emphasis on curricular activities than extracurricular activities. The incorporation of nutrition education, physical education and socio-emotional health education in the Life Skills curriculum provides core components of learning and emphasises the basic learning needs of learners. Extracurricular activities, on the other hand, are decided on by the school and are usually not mandatory. Although extracurricular activities are not compulsory for all learners in the school, there are many benefits for learners. Extracurricular activities are expected to enrich learners' learning experiences, develop and enhance as well as provide additional knowledge and skills, help learners manage stress, and provide advantages to increase their overall health and well-being. Due to time constraints, however, the learners are not all allowed the benefits that extracurricular activities offer. Hence, teachers are better able to establish which health promotion needs should be prioritised through curricular activities and which can be emphasised through extracurricular activities.

5.3.2.5 Silences in the data

Surprisingly, the data was silent on the struggle of HIV and AIDS in the family context of at-risk communities, even though the data led me to expect this to be a prominent finding (Subtheme 1.1). The contribution of creative arts and performing arts to the holistic development of learners did not come to the fore in the findings of this study, despite emphasise on curriculum structures (Category 2.1 of Subtheme 2.1.1). In addition, silences occurred in the data regarding school health promotion policies. Similar to the literature (Bundy, 2011; World Health Organization, 2017), the data reflect health promotion activities in practice but do not refer to the policies in place for supporting existing health promotion practices at the schools.

5.4 PRIMARY RESEARCH QUESTION

How can the perspectives of primary school teachers on the health promotion needs of learners inform the development of a school-based health promotion intervention?

The aim of this study was to explore teachers' perceptions of a school-based health promotion intervention in at-risk school communities. Through my literature review, I was able to comprehend why a school-based health promotion intervention is significant for promoting the health and well-being of young learners. The development of a school-based health promotion intervention relates directly to needs in the educational context as well as in the family context. The conceptual framework, viz. Bronfenbrenner's Bio-ecological systems theory and Vygotsky's theory of socio-cultural development, was utilised to extend the view on the interrelationship of communities in the different systems. The conceptual framework aimed to include an understanding of learners in at-risk school communities according to the context and their unique experiences so as to emphasise the need for a health promotion intervention. This study works strongly towards informing a school-based health promotion intervention by extensively discussing all relevant aspects, including the identification of contextual needs, the role of the curriculum, existing support practices at school, suggestions of aspects to include in a health promotion intervention, as well as the need for teacher and parent health promotion training.

Secondary data sources were used, with a qualitative descriptive case study methodology, with data analysed using primary inductive thematic analysis. The results indicate many similarities between the findings and known knowledge in terms of health promotion and school-based health promotion interventions, from the international as well as South African perspective. Importantly, the study also makes a contribution to existing literature on intervention strategies to include in supporting learners' holistic health and well-being, particularly in the form of organised activities for socio-emotional development, drama, public figures and constructive field trips. This contribution specifically relates to the development of a school-based health promotion intervention in at-risk school communities that are categorised by adversity. Another potential contribution includes the training of unemployed caregivers (parents) to facilitate health promotion activities at school, particularly with respect to nutrition practices. This is relevant to the South African context, in which communities are characterised by poverty and unemployment.

The teacher participants perceived the community as one significantly affected by poverty and economic disadvantage in the different systems (mainly the exosystem and the macrosystem). These factors affect the microsystem, which determine the learners' living conditions, including food insecurity, malnutrition and exposure to adversity in the home, including substance abuse, sexual abuse, domestic violence and poor sanitation. As such, it can be concluded that poverty and socio-economic

disadvantage would have a detrimental effect on food consumption practices, physical fitness and socio-emotional needs of at-risk communities. Furthermore, the school context is also restricted by a lack of support from the department-based support team and a lack of resources. However, the school context is still able to offer learners additional support as part of school services, namely a school feeding scheme, onsite counsellor, occupational therapists, play therapist and a social worker. As indicated by Bronfenbrenner in Figure 5.1, factors impeding the exosystem and macro-system would then affect the other systems.

Teachers' perceptions of a school-based health promotion intervention are based on their knowledge and experience of curriculum structures. In addition, teachers' perspectives on what can be included in a school-based health promotion intervention potentially inform the development of an intervention suited to the at-risk school community context. Furthermore, teachers' identification of collaboration between each other as community members emphasises another aspect of Bronfenbrenner's Bio-ecological systems theory, i.e. the mesosystem, indicating that the interaction between the different systems and contexts is viewed as permeable in connection with individual needs and the possibility to facilitate change through the development of a school-based health promotion intervention.

Closely related to teachers' perceptions of a school-based health promotion intervention, it can be concluded that teachers were able to see how they themselves and the parents might benefit from additional training in health promotion. The study posits that teachers fulfil the realisation that changes within the microsystem of the school and the home would potentially result in positive change in other microsystems (such as families in the community), thus effecting change in the mesosystem. As such, even though the at-risk school community is negatively affected by factors in the macrosystem (poverty), positive change at the microlevel might affect positive change and support the health and well-being of learners, despite the numerous challenges faced.

Coinciding with Bronfenbrenner's Bio-ecological systems theory, Vygotsky's socio-cultural theory of human development similarly emphasises that change in one area of development, namely the cognitive domain, results in change in the other areas of development. This change, which teachers are capacitated to bring about in learning, is driven by the social context of the learner, the interaction and experiences between the learners and their teachers, the curriculum using language, and learning through a series of tasks through the zone of proximal development (ZPD), resulting in socio-cultural mediation. The primary setting in which formal learning takes place is the

school. The social interaction between learners and teachers forms the basis of learning and development, by which learners are able to build on new, meaningful knowledge imparted through these learning experiences. Aspects of language and culture are central to socio-cultural theory and are reflected in the type of activities teachers deliver, such as classroom discussions and problem-solving tasks. Language and the learners' cultural background critically shapes learning and thought, hence it is understood that the construction of knowledge of health promotion is a socio-culturally mediated process affected by the physical and psychological tools inherent in the learners' unique cultural and social context. As such, change is effected by teachers in the zone of proximal development, whereby learners learn about health promotion through a series of tasks under the guidance of the teacher (through curricular activities and extracurricular activities). As learners internalise knowledge of health promotion cognitively, they begin to engage in private speech, which is an indication of internalised learning, potentially resulting in change in health behaviour and practices.

Vygotsky's socio-cultural theory coincides with the Bio-ecological systems theory in terms of social interaction and the influence of culture. Based on the principles of Bronfenbrenner's Bio-ecological systems theory and Vygotsky's socio-cultural theory of human development, the need for and value of interventions, such as a school-based health promotion intervention, was emphasised. Health-promotion interventions intended to improve health outcomes through early learning raise awareness as well as support the families to which the learners belong. The focus on early learning, as in Vgotsky's sociocultural theory, targets the microsystem and is expected to have a ripple effect on the other systems. By following this conceptualised theory, and based on the teachers' perspectives of the health promotion needs of learners, the school-based health promotion intervention could ensure that positive change in the microsystem will positively influence the mesosystem, exosystem and macrosystem

5.5 ADAPTED CONCEPTUAL FRAMEWORK BASED ON BRONFENBRENNER'S BIO-ECOLOGICAL SYSTEMS THEORY AND VYGOTSKY'S SOCIO-CULTURAL THEORY OF HUMAN DEVELOPMENT FOR A SCHOOL-BASED HEALTH-PROMOTION INTERVENTION IN THE SOUTH AFRICAN CONTEXT

The following figure illustrates the adapted framework:

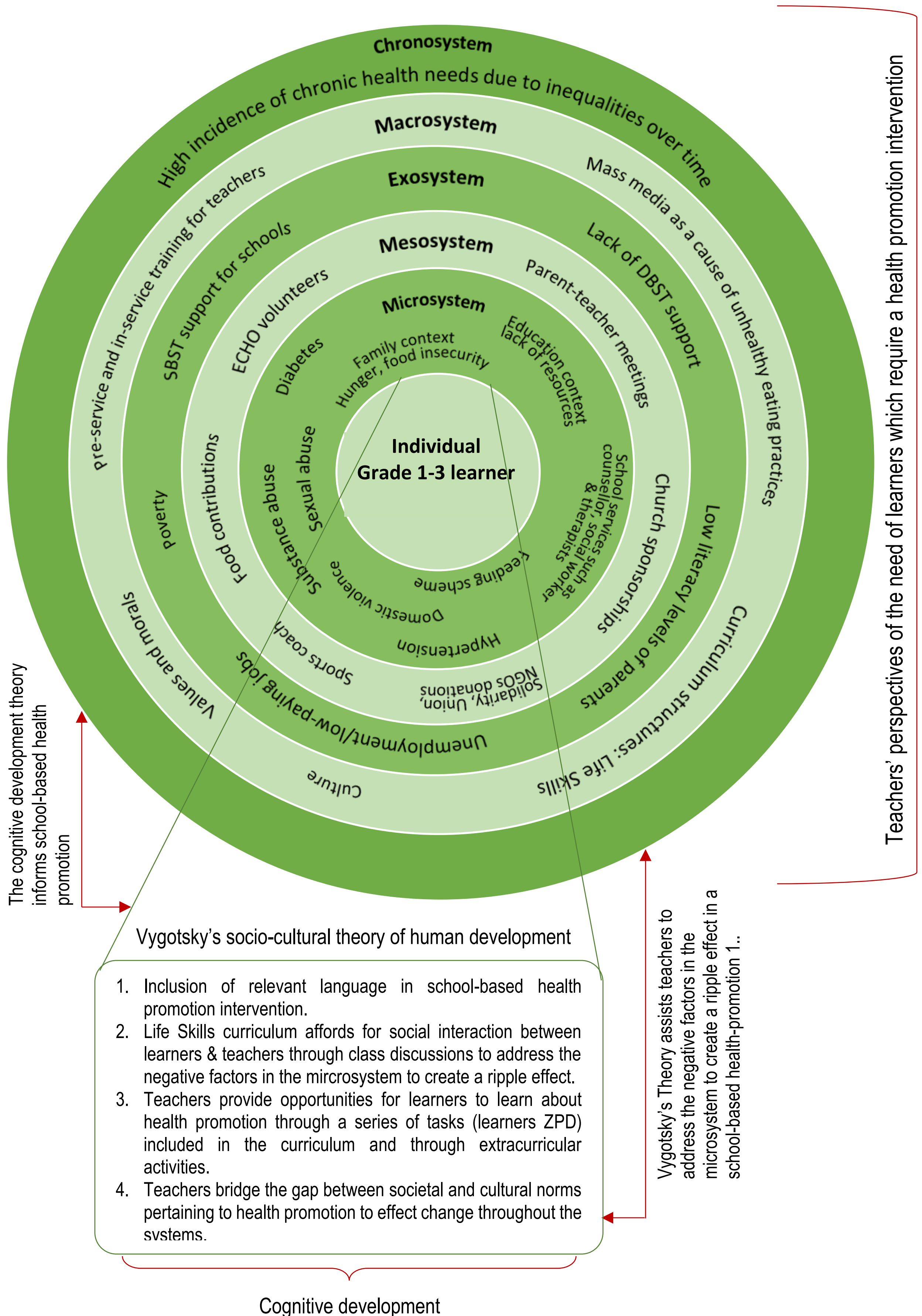

Figure 5.1: Adapted framework

5.6 LIMITATIONS OF THE STUDY

5.6.1 Limitations

The limitations that were identified relate back directly to the limitations of the selected research design, the methodology, and potential biases that could have emerged during the analysis of the existing qualitative data (Braun & Clarke, 2006). The specific limitations associated with the use of existing data include time constraints as a result of the extensive process of interpreting the data. Another possible limitation is the loss of important detail relating to the data collection process due to the data being analysed for a secondary purpose (Trzesniewski, Donnelan, & Lucas, 2011). A further limitation was my absence in the data collection process, as I was not part of the primary research project. The lack of generalisability when employing a qualitative methodology is also limiting (Berg & Lune, 2012). These limitations associated with descriptive case study as research design and primary inductive thematic analysis form part of the inherent characteristics of the methodology selected for the study (Nieuwenhuis, 2016). For the purpose of this study, it was of vital importance to acknowledge the contextual aspects that could have given rise to errors or misinterpretation of the data during the analysis process (Cohen, Manion, & Morrison, 2007).

A limitation relating to the findings of the current study is that the PRA-based activities were carried out in only two at-risk urban primary schools. The aspect of having worked with data generated from only two schools could influence the transferability of the findings to other settings. The PRA-based activities conducted with teachers in the two urban at-risk primary schools therefore represent an isolated group of individuals who hail from similar backgrounds, with Afrikaans as the predominant language. This might potentially affect the transferability of the findings, particularly when applied to different language and cultural backgrounds.

5.7 RECOMMENDATIONS

5.7.1 Recommendations for future research

- Owing to the PRA-based activities having been conducted in only two urban at-risk primary schools, it would be advisable for future research to carry out these activities at other urban at-risk primary schools, which would promote transferability to more urban at-risk schools in South Africa.

- Future researchers could choose to conduct PRA-based activities in provinces other than Gauteng, possibly with teachers who are known to have other home languages and originate from different cultural backgrounds, as this could also promote the transferability of the activities to different contexts.
- Further studies could be conducted to determine the efficacy and value of the specific PRA-based activities with Grade 1 to 3 teachers in urban at-risk primary schools.
- Future researchers could do an in-depth investigation of Grade 1 to 3 teachers' experiences when conducting PRA-based activities in urban at-risk settings as a measure for transferability to potential rural settings.

5.7.2 Recommendations for practice

- Grade 1 to 3 teachers could use the results of the current study to plan, adapt and design relevant activities for health promotion suited to the urban at-risk school context.
- The suggestions of teachers on how a school-based health promotion intervention could be included for use in an attempt to accommodate urban at-risk contexts has the potential to inform curricular structures in South African schools.
- The suggestions of the teachers on a health promotion intervention could also inform household health practices, which could in turn bring about health changes that are sustainable and cost-effective for urban at-risk contexts.
- The insights from the current study could also inform whole-school approaches to health promotion by incorporating health promotion intervention activities for learners in both primary and secondary school.
- Teachers could use the findings of the study further to develop and promote health by arranging information sessions and workshops for participating community members. Such sessions could involve the Department of Basic Education, the Department of Health as well as the Department of Agriculture, Forestry and Fisheries.

5.7.3 Recommendations for training and development

Teachers who work in urban at-risk school settings should ideally be equipped and trained regarding the following:

- Contextually relevant health promotion activities that are categorised by diversity, multilingualism and multiculturalism.
- Additional theory and practical training regarding the need for the development and adaptation of health promotion activities to provide for South African urban at-risk communities.
- Understanding flexibility, adaptation and collaboration with other role players in health promotion to ensure that intervention activities are contextually and culturally appropriate.
- Facilitating school-based health promotion interventions that are sustainable, cost-effective and accessible.
- Training in the organisation and administration of health promotion activities as part of a knowledge-sharing process that involves caregivers in health promotion interventions and facilitates change amongst families within wider communities.
- Designing mentorship programmes that allow professionals entering the field to develop awareness of how school-based health promotion interventions benefit holistic health and well-being. It may be particularly important in the current educational context for student teachers to be able to understand the contribution of health promotion to facilitating social change.

5.8 CONCLUSION

In this study, I explored and described teachers' perceptions of a school-based health promotion intervention in at-risk school communities in the Pretoria area in Gauteng, South Africa. As such, this study provided baseline data for the development of a school-based health promotion intervention focusing on the nutritional needs, physical health needs and socio-emotional needs of young learners by reflecting on teachers' voices on the at-risk community. The findings of the study highlight the need for teacher input and caregiver involvement in the successful development and implementation of a school-based health promotion intervention.

The findings of this study furthermore emphasis that economic challenges, such as poverty and adversity in the household, are determining factors in the poor lifestyle choices of the particular at-risk communities. Teachers' perceptions confirm that the current support for health practices is not sufficient in terms of nutrition, physical fitness and socio-emotional needs, often due to a lack of insufficient resources and limited financial means.

Based on the reality of the South African context, the focus is on informing at-risk communities about food consumption that is healthy and affordable, optimum physical activity and positive socio-emotional action.

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REFERENCE LIST

Abel, T., & McQueen, D. V. (2013). Current and Future Theoretical Foundations for NCDs and Health Promotion. In D. V. McQueen (Ed.), *Global Handbook on Noncommunicable Diseases and Health Promotion* (pp. 21-37). New York: Springer.

Adelman, S. W., Gilligan, D. O., & Lehrer, K. (2008). *How Effective are Food for Education Programs?.* Washington: International Food Policy Research Institute.

Akwara, P. A., Noubary, B., Lim Ah Ken, P., Johnson , K., Yates, R., Winfrey, W., . . . Luo, C. (2010). Who is the vulnerable child? Using survey data to identify children at risk in the era of HIV and AIDS. *AIDS Care*, 1066-1085.

Altman, M., Hart, T., & Jacobs, P. (2009). *Food Security in South Africa.* Human Sciences Research Counsil.

Anney, V. N. (2014). Ensuring the Quality of the Findings of Qualitative Research: Looking at Trustworthiness Criteria. *Journal of Emerging Trends in Educational Research and Policy Studies, 5*(2), 272-281.

Araújo, D., & Davids, K. (2009). Ecological approaches to cognition and action in sport and exercise: Ask not only what you do, but where you do it. *International Jpurnal of Sport Psychology, 40*(1), 5-38.

Ashiabi, G. S., & O'Neal, K. K. (2015). Child Social Development in Context: An Examination of Some Propositions in Bronfenbrenner's Bio-ecological Theory. *SAGE Open Journals*, 1-14.

Asiago, D., & Akello, C. A. (2014). The challenges facing head teacher's role in the implementation of the school feeding programme in public primary schools, in Nairobi, Kenya. *International Journal for Innovation Education and Research, 2*(6).

Atinmo, T., Mirmiran, P., Oyewole, O. E., Belahsen, R., & Serra-Majem, L. (2009). Breaking the poverty/malnutrition cycle in Africa and the Middle East. *Nutrition Reviews, 67*(1). doi:10.1111/j.1753-4887.2009.00158.x

Babbie, E. (2005). *The basics of social research* (3rd ed.). Belmont: Thomson/Wadsworth.

Babbie, E., & Mouton, J. (2001). *The practice of social research.* Cape Town: Oxford University Press.

Barnekow, V., Buijs, G., Clift, S., Jensen, B. B., Paulus, P., Rivett, D., & Young, I. (2006). *Health-promoting schools: a resource for developing indicators.* European Network of Health Promoting Schools.

Bartkus, K. R., Nemelka, B., Nemelka, M., & Gardner, P. D. (2012). Clarifying The Meaning Of Extracurricular Activity: A Literature Review Of Definitions. *American Journal Of Business Education, 5*(6), 693-704. doi:10.19030/ajbe.v5i6.7391

Bengtsson, M. (2016). How to plan and perform a qualitative study using content analysis. *NursingPlus Open*, 8-14.

Beni, S., Stears, M., & James, A. (2017). Foundation phase teachers' interpretation of the Life Skills programme with regard to the teaching of natural science. *South African Journal of Childhood Education, 7*(1), 1-14. doi: doi.org/10.4102/sajce.v7i1.440

Berg, B. L., & Lune, H. (2012). *Qualitative Reseach Methods for the Social Sciences.* Upper Saddle River: Pearson Education Inc.

Bertram, C., & Christiansen, I. (2014). *Understanding Research: an introduction to reading research.* Pretoria: Van Schaik Publishers.

Bhana, D. (2007). The price of innocence: teachers, gender, childhood sexuality, HIV and AIDS in early schooling. *International Journal of Inclusive Education*, 431-444.

Biggeri, M., & Mehrotra, S. (2011). Child Poverty as Capability Deprivation: How to Choose Domains of Child Well-being and Poverty. In M. Biggeri, J. Ballet, & F. Comim, *Children and the Capability Approach* (pp. 46-75). London: Palgrave Macmillan.

Blom-Hoffman, J., Wilcox, K. R., Dunn, L., Leff, S. S., & Power, T. J. (2008). Family Involvement in School-Based Health Promotion: Bringing Nutrition Information Home. *School Psychology Review, 37*(4), 567-577.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualiative Research in Psychology*, 77-101.

Bronfenbrenner, U. (1989). Ecological systems theory. In R. Vasta, *Six Theories of Child Development: Revised Formulations and Current Issues*, *6*, pp. 187-249. Greenwich: JAI Press.

Broom, A., & Willis, E. (2007). Competing paradigms and health research. In M. Saks & J. Allsop (Eds.), *Researching health: Qualitative, quantitative and mixed methods* (pp. 16-31). London: SAGE Publishers.

Brophy, S., Cooksey, R., Gravenor, M. B., Mistry, R., Thomas, N., Lyons, R. A., & Williams, R. (2009). Risk factors for childhood obesity at age 5: Analysis of the Millennium Cohort Study. *BioMedical Central, 9*.

Brown, D., & Zhou, M. (2014). *Educational Learning Theories.* Dalton.

Brown, T., & Summerbell, C. (2008). Systematic Review of School-based Interventions that Focus on Changing Dietary Intake and Physical Activity Levels to Prevent Childhood Obesity: An Update to the Obesity Guidance Produced by the National I nstitute for Health and Clinical Excellence. *Obesity Reviews*, 110-141.

Buijs, G. T. (2009). Better Schools through Health: networking for health-promoting schools in Europ. *European Journal of Education, 44*(4), 507-520.

Bundy, D. (2011). *Rethinking School Health: A Key Component of Education for All.* Washington D C: The World Bank.

Burchi, F., Fanzo, J., & Frison, E. (2011). The role of food and nutrition system approaches in tackling hidden hunger. *International Journal of Environmental Research and Public Health, 8*(2), 358-373. doi:10.3390/ijerph8020358.

Byrne, E. (2014). *Visual data in qualitative research: The contribution of photography to understanding the mental health hospital environment.* Bristol: University of the West of England.

Byrne, J., Pickett, K., Rietdijk, W., Shepherd, J., Grace, M., & Roderick, P. (2016). A Longitudinal Study to Explore the Impact of Preservice Teacher Health Training on Early Career Teachers' Roles as Health Promoters. *Pedagogy in Health Promotion: The Scholarship of Teaching and Learning, 2*(3), 170-183.

Byrne, J., Rietdijk, W., & Pickett, K. (2018). Teachers as health promoters: Factors that influence early career teachers to engage with health and wellbeing education. *Teaching and Teacher Education, 69*, 289-299.

Cameron, R. (2011). An Analysis of Quality Criteria for Qualitative Research. *25th ANZAM Conference* (pp. 2-16). Wellington: Central Queensland University.

Carl, A. E. (2002). *Teacher empowerment through curriculum development: Theory into practice* (2nd ed.). Cape Town: Juta.

Casper, V., & Theilheimer, R. (2010). *Early Childhood Education: learning together.* New York: McGraw Hill.

Castle, J. (2003). Maximising research opportunities: Secondary data analysis. *Journal of Neuroscience Nursing, 35*(5), 287-290.

Chambers, R. (2008). PRA, PLA and Pluralism: Practice and theory. In P. Reason, & H. Bradbury, *The Sage Handbook of Action Research* (2nd ed., pp. 297-318). London: SAGE.

Chibango, C. (2013). South Africa's HIV and AIDS Policy and Legislation: An Analysis. *Greener Journal of Medical Sciences, 3*(6), 240-250.

Christiaans, D. J. (2006). Empowering teachers to implement the Life Orientation learning area in the Senior Phase of the General Education and Training Band. Western Cape, South Africa: University of Stellenbosch.

Clelland, T., Cushman, P., & Hawkins, J. (2013). Challenges of Parental Involvement Within a Health Promoting School Framework in New Zealand. *Education Research International*, 1-8. doi:10.1155/2013/131636

Clarke, V., & Braun, V. (2013). Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. *The Psychologist, 26*(2), 123-134.

Cloete, J. (2015). Management of severe acute malnutrition. *South African Medical Journal*.

Coghlan, D., & Brydon-Miller, M. (2014). *The SAGE Encyclopedia of Action Research .* London: SAGE Publications Ltd.

Cohen, L., Manion, L., & Morrison, K. (2005). *Research Methods in Education* (5th ed.). London: Routledge Falmer.

Cohen, L., Manion, L., & Morrison, K. (2007). *Research Methods in Education* (6th ed.). New York: Routledge.

Cohen, L., Manion, L., & Morrison, K. (2018). *Research Methods in Education* (8th ed.). London: Routledge.

Committee on World Food Security. (2012). *HLPE: Social Protection for Food Secuirity.* Rome: Committee on World Food Security.

Coovadia, H., Jewkes, R., Barron, P., Sanders, D., & McIntyre, D. (2009). The health and health system of South Africa: historical. *The Lancet Series*, 817-834.

Creswell, J. W. (2009). *Rsearch Design: qualitative, quantitative and mixed method approaches.* London: SAGE Publishers.

Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative and Mixed Method Approaches* (4th ed.). Thousand Oaks: SAGE Publications Inc.

Darlington, E. J., Violon, N., & Jourdan, D. (2018). Implementation of health promotion programmes in schools: an approach to understand the influence of contextual factors on the process? *BMC Public Health, 18*(163), 1-17. doi:10.1186/s12889-017-5011-3

Darragh, J. C. (2010). *Introduction to Early Childhood Education: Equity and Inclusion.* Upper Saddle River, New Jersey: Pearson Education, Inc.

Dass, S., & Rinquest, A. (2016). School Fees. In *Basic Education Rights Handbook* (pp. 141-159).

De Cock, K. M., Jaffe, H. W., & Curran, J. W. (2012). The evolving epidemiology of HIV and AIDS. *AIDS*, 1205-1213.

De Cock, K. M., Simone, P. M., Davison, V., & Slutsker, L. (2013). The New Global Health. *Emerging Infectious Diseases, 19*(8), 1192-1197.

de Villiers, A., Steyn, N. P., Draper, C. E., Fourie, J. M., Barkhuizen, G., Lombard, C. J., . . . Lamber, E. V. (2012). “HealthKick”: Formative assessment of the health environment in low-resource primary schools in the Western Cape Province of South Africa. *BMC Public Health Journal, 12*, 1-11.

de Vos, A. S., Strydom, H., Fouche, C. B., & Delport, C. S. (2011). *Research at Grass Roots: for the social sciences and human service professions* (4th ed.). Pretoria: Van Schaik Publishers.

de Witt, M. W. (2016). *The Young Child in Context: A psycho-social perspective.* Pretoria: Van Schaik Publishers.

Denzin, N. K., & Lincoln, Y. S. (2011). *The SAGE Handbook of Qualitative Research* (4th ed.). Thousand Oaks: SAGE Publications Inc.

Department of Basic Education (DBE). (2011). *Curriculum assessement and policy statement. Grade 1 to 3.* Pretoria: Department of Basic Education.

Department of Basic Education. (2011). *National Curriculum Statement: Curriculum and Assessment Policy Statement.* Retrieved from Governement Department of Basic Education: https://www.education.gov.za/Portals/0/CD/National%20Curriculum%20Statements%20and%20Vocational/CAPS%20English%20HL%20GRADES%20R-3%20FS.pdf?ver=2015-01-27-154201-167

Department of Basic Education. (2012). *Integrated School Health Policy.* Pretoria: Department of Basic Education.

Department of Basic Education. (2017). *Health Promotion.* Pretoria: Department of Basic Education Republic of South Africa.

Department of Education (DoE). (2000). *Norms and standards for Educators in schooling. Government Gazette No. 20844, 4 February 2000.* Pretoria: Depatment of Education.

Department of Health. (2014). *The National Health Promotion Policy and Strategy 2015-2019.* Pretoria: Department of Health Republic of South Africa.

Department of Higher Education and Training (DHET). (2010). *Draft Policy on the Minimum Requirements for Teacher Education Qualifications selected from the Higher Education Qualifications Framework (HEQF).* Retrieved December 20, 2017, from http://www.dhet.gov.za/Reports%20Doc%20Library/Draft%20Policy%20on%20minimum%20requirements%20for%20Qualifications%20in%20Education.pdf

Department of Justice and Constitutional Development. (1996). *The Constitution of the Republic of South Africa.* Pretoria: Department of Justice and Constitutional Development.

DeSocio, J., & Hootman, J. (2004). Children's Mental Health and School Success. *The Journal of School Nursing, 20*(4), 189-196.

Di Cesare, M., Khang, Y., Asaria, P., Blakely, T., Cowan, M. J., Farzadfar, F., . . . Ezzati, M. (2013). Inequalities in non-communicable diseases and effective responses. *The Lancet Series*, 585-597.

Draper, C. E., de Villiers, A., Lambert, E. V., Fourie, J., Hill, J., Dalais, L., . . . Steyn, N. P. (2010). HealthKick: a nutrition and physical activity intervention for primary schools in low income settings. *BMC Public Health*, 1-12.

Dreckmeier-Meiring, M. (2012). *Child Psychology.* New York: McGraw Hill Education.

Driscoll, A., & Nagel, N. G. (2008). *Early Childhood Education, Birth-8: The World of Children, Families, and Educators* (4th ed.). Boston: Pearson Education, Inc.

Dukhi, N., Sartorius, B., & Taylor, M. (2016). Stunting in children (0–59 months): what is the current trend in South Africa? *Early Child Development and Care*, 1-13.

Ebersöhn, L., Eloff, I., & Ferreira, R. (2016). First steps in action research. In K. Maree (Ed.), *First steps in research* (2nd ed., pp. 134-159). Pretoria: Van Schaik Publishers.

Elias, M., & Theron, L. C. (2012). Linking purpose and ethics in dissertation writing: South African illustrations of an international perspective. In J. G. Maree, *Complete Your Dissertation or Dissertation Successfully: Practical guidlines* (pp. 145-159). Cape Town: Juta and Company PTY LTD.

Emerson, R. M., Fretz, R. I., & Shaw, L. L. (2007). Participant observation and field notes. In P. Atkinson, A. Coffey, S. Delamont, J. Lofland, & L. Lofland (Eds.), *Handbook of Ethnography* (pp. 352-369). London: SAGE Publications.

Engelbert Bain, L., Kum Awah, P., Geraldine, N., Kindong, N. P., Sigal, Y., Bernard, N., & Tanjeko, A. T. (2013). Malnutrition in sub-Saharan Africa: burden, causes and prospects. *Pan Afican Medical Journal*.

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics, 5*(1), 1-4.

Faber, M., & Wenhold, F. (2007). Nutrition in contemporary South Africa. *Water SA*, 393-400.

Fairclough, S., & Stratton, G. (2005). ‘Physical education makes you fit and healthy’. Physical education's contribution to young people's physical activity levels. *Health Education Research, 20*(1), 14-23. doi:10.1093/her/cyg101.

Fereday, J., & Muir-Cochrane, E. (2006). Demonstrating Rigor Using Thematic Analysis: A Hybrid Approach of Inductive and Deductive Coding and Theme Development. *International Journal of Qualitative Methods*, 80-92.

Fernstrom, M. H., Reed, K. A., Rahavi, E. B., & Dooher, C. C. (2012). Communication strategies to help reduce the prevalence of non-communicabke diseases:Proceedings from the inugural IFIC Foundation Global Diet and Physical Activity Communications Summit. *Nutrition Reviews*, 301-310.

Flick, U. (2014a). *An introduction to qualitative research* (5th ed.). London: SAGE Publishers.

Flick, U. (2014b). *The SAGE handbook of qualitative data analysis.* London: SAGE Publications Ltd.

Flyvbjerg, B. (2006). Five misunderstandings about case-study research. *Qualitative Inquiry, 12*(2), 219-245.

Food and Agriculture Organization of the United Nations. (2017). *The State of Food Security and Nutrition in the World: Building resilience for peace and food security.* Rome: FOA.

Frank, J., & Jepson, R. (2013). High-Risk Versus Population Prevention Strategies for NCDs: Geoffrey Rose Revisited in the Twenty-First Century. In D. V. McQueen (Ed.), *Global Handbook on Noncommunicable Diseases and Health Promotion* (pp. 3-21). New York: Springer.

Frenk, J., & Moon, S. (2013). Governance Challenges in Global Health. *The New England Journal of Medicine*, 936-942.

Ghaye, T., Melander-Wikman, A., Kisare, M., Chambers, P., Bergmark, U., Kostenius, C., & Lillyman, S. (2008). Participatory and appreciative action and reflection (PAAR) – democratizing reflective practices. *Reflective Practice, 9*(4), 361-397.

Given, L. M. (2008). *The SAGE encyclopedia of qualitative research methods* (Vol. 2). Thousand Oaks: SAGE Publications Ltd.

Golden, S. D., & Earp, J. L. (2012). Social Ecological Approaches to Individuals and Their Contexts: Twenty Years of Health Education & Behavior Health Promotion Interventions. *Journal of Health Education and Behaviour, 39*(3), 364-372.

Gravetter, F. J., & Forzano, L. B. (2009). *Research methods for the behavioural sciences* (3rd ed.). Belmont: Wadsworth Cengage Learning.

Gray, G., Young, I., & Barnekow, V. (2006). *Developing a health-promoting school: A practical resource for developing effective partnerships in school.* International Planning Committe of the European Network.

Gupta, I., & Guin, P. (2010). Communicable diseases in the South-East Asia Region of the World Health Organization: towards a more effective response. *SciELO Public Health*, 199-205.

Gupta, R. P., de Wit, M. L., & McKeow, D. (2007). The impact of poverty on the current and future health status of children. *Paediatr Child Health*, 667-672.

Hamilton, L., & Corbett-Whittier, C. (2013). *Research Methods in Education: using case study in education.* London: SAGE Publications Ltd.

Hammond, R. A., & Dubé, L. (2012). A systems science perspective and transdisciplinary models for food and nutrition security. *Proceedings of the National Academy of Sciences, 109*(31). doi:1073/pnas.0913003109.

Haycock. (2010). The Education-Health Link: Why success in School Matters to Health Throughout Life. *NASN School Nurse*, 116-119.

Heath, M. A., Donald, D. R., Theron, L. C., & Lyon, R. C. (2014). AIDS in South Africa: Therapeutic interventions to strengthen resilience among orphans and vulnerable children. *School Psychology Internation*, 309-337.

Hendriks, S. L. (2015). The food security continuum: a novel tool for understanding food insecurity as a range of experiences. *Food Secuirity*, 609-619.

Hill, J., Draper, C. E., de Villiers, A., Fourie, J., Mohamed, S., Parker, W., & Steyn, N. (2015). Promoting healthy lifestyle behaviour through the Life-Orientation curriculum: Teacher's perceptions of the HealthKick intervention. *South African Journal of Education*, 1-9.

Hoadley, U. (2009). *Learning to teach the National Curriculum Statement in schools: A desk review of teacher education in the Foundation Phase in South Africa: An Umalusi Report.* Pretoria: Umalusi.

Hoddinott, J., Rosegrant, M., & Torero, M. (2012). *Hunger and Malnutrition.* Global Copenhagen Concensus.

Inman, D. D., van Bakergem, K., Larosa, A. C., & Garr, D. R. (2011). Evidence-based health promotion programs for schools and communities. *American Journal of Preventative Medicine, 40*(2).

Institute of Medicine of the National Academies. (2003). *The Future of The Public's Health in the 21st Century.* Washington: The National Academies Press.

Jansen, J. D. (2016). What is a research question and why is it important? In K. Maree (Ed.), *First steps in research* (pp. 2-14). Pretoria: Van Schaik Publishers.

Javadi, M., & Zarea, K. (2016). Understanding thematic analysis and its pitfalls. *Journal of Client Care, 1*(1), 34-40.

Jepkemboi, G., & Aldridge, J. (2014). Effects of HIV and AIDS on Children's Attitudes Toward Learning. Voices of Teachers and Caregivers in Western Kenya. *Childhood Education*, 219-224.

Johnston, M. P. (2014). Secondary data analysis: A method of which the time has come. *Qualitative and Quantitative Methods in Libraries*, 619-626.

Joubert, I., Bester, M., Evans, R., & Phatudi, N. (2015). *Literacy in the Foundation Phase.* Pretoria: Van Schaik Publishers.

Jourdan, D. (2011). *Health Education in Schools: the challenge of teacher training.* Saint-Denis: Jean-Marc Piton.

Jourdan, D., Samdal, O., Diagne, F., & Carvalho, G. S. (2008). The future of health promotion in schools goes through the strengthening of teacher training at a global level. *Promotion and Education*, 36-38.

Katz, D. L. (2009). School-Based Interventions for Health Promotion and Weight Control: Not Just Waiting on the World to Change. *The Annual Review of Public Health*, 253-272.

Ke, J., & Ford-Jones, E. L. (2015). Food insecurity and hunger: A review of the effects on children's health and behaviour. *Paediatric Child Health, 20*(2), 89-91.

Keenan, T., & Evans, S. (2009). *An Introduction to Child Development* (2nd ed.). Cornwall: SAGE Publishers.

Keikelame , M. J., Murphy, C. K., Ringheim, K. E., & Woldehanna, S. (2010). Perceptions of HIV and AIDS leaders about faith-based organisations' influence on HIV and AIDS stigma in South Africa. *African Journal of AIDS Research*, 63-70.

Kesharvarz Mohammadi, N., Nutbeam, D., Rowling, L., & Khavarpour, F. (2010). Schools as social complex adaptive systems: A new way to understand the challenges of introducing the health-promoting Schools Concept. *Social Science and Medicine*, 1467-1474.

Kieling, C., Baker-Henningham, H., Belfer, M., Conti, G., Ertem, I., Omigbodun, O., . .. Rahman, A. (2011). Child and adolescent mental health worldwide: evidence for action. *The Lancet Series*, 1-11.

Kimani-Murage, E. W., Kahn, K., Pettifo, J. M., Tollman, S. M., Dunge, D. B., Gómez-Olivé, X. F., & Norris, S. A. (2010). The prevalence of stunting, overweight and obesity, and metabolic disease risk in rural South African children. *BMC Public Health*, 1-13.

Kohl, H. W., & Cook, H. (2013). *Educating the Student Body: Taking Physical Activity and Physical Education to School.* Washington: National Academies Press.

Kohl, H. W., Craig, C. L., Lamber, E. V., Inoue, S., Alkandari, J. R., Leetongin, G., & Kahlmeie, S. (2012). The pandemic of physical inactivity: global action for public health. *The Lancet Series*, 294-395.

Krebs, R. J. (2009). Bronfenbrenner's Bio-ecological Theory of Human Development and the process of development of sports talent. *International Journal of Sport Psychology, 40*(1), 108-136.

Landsberg, E., & Matthews, L. (2016). Learning Support. In E. Landsberg, D. Kruger, & E. Swart (Eds.), *Addressing Barriers to Learning: A South African Perspective* (3rd ed., pp. 95-116). Hatfield:Pretoria: Van Schaik Publishers.

Langford, R., Bonell, C., Jones, H. E., Pouliou, T., Murphy, S., Waters, E., . . . Campbell, R. (2014). *The WHO Health Promoting School framework for*

improving the health and well-being of students and their academic achievement. Jonh Wiley & Sons Ltd.

Langford, R., Bonell, C., Komro, K., Murphy, S., Magnus, D., Waters, E., . . . Campbell, R. (2017). The Health Promoting Schools Framework: Known Unknowns and an Agenda for Future Research. *Health Education and Behaviour, 44*(3), 463-475.

Laurence, S., Peterken, R., & Burns, C. (2007). Fresh Kids: the efficacy of a Health Promoting Schools approach to increasing consumption of fruit and water in Australia. *Health Promotion International*, 218-226.

Laurie, S. M., Faber, M., & Maduna, M. M. (2017). Assessment of food gardens as nutrition tool in primary schools in South Africa. *South African Journal of Clinical Nutrition, 30*(4), 80-86.

Leavy, P. (2014). *The Oxford handbook of qualitative research.* New York: Oxford University Press.

Lester, D. (2013). Measuring Maslows Hierarchy of Needs. *Psychological Reports: Mental and Physical Health*, 15-17.

Lewis, A. (2001). *The issue of perception: some ducation implications.* Pretoria: UNISA.

Li, J., & Powdthavee, N. (2015). Does more education lead to better health habits? Evidence from the school reforms in Australia. *Social Science and Medicine, 127*, 83-91.

Libertus, K., & Hauf, P. (2017). Editorial: Motor Skills and Their Foundational Role for Perceptual, Social, and Cognitive Development. *Frontiers in Psychology, 8*(301).

Lichtman, M. (2014). *Qualitative research for the social sciences.* London: AGE Publications Ltd.

Lincoln, S. Y., & Guba, E. G. (1985). *Naturalistic Inquiry.* Thousand Oaks: Sage Publishers.

Lodico, M. G., Spaulding, D. T., & Voegtle, K. H. (2006). *Methods in Educational Research: From Theory to Practice.* San Franscisco: John Wiley & Sons, Inc.

Loening-Voysey, H. (2002). HIV/AIDS in South Africa: caring for vulnerable children. *African Journal of AIDS Research*, 103-110.

Lukenchuk, A. (Ed.). (2011). *Paradigms of research for the 21st century: Perspectives and examples from practice.*

Macnab, A. (2012). The Stellenbosch consensus statement on health-promoting schools. *Global Health Promotion, 20*(1), 78-81.

Maguire, M., & Delahunt, B. (2017). Doing a thematic analysis: A practical, step-by-step guide for learning and teaching scholars. *All Ireland Journal of Teaching and Learning in Higher Education, 8*(3), 2-14.

Maharajh, R. L., Nkosi, T., & Mkhize, C. M. (2016). Teachers' Experiences of the Implementation of the Curriculum and Assessment Policy Statement (CAPS) in Three Primary Schools in KwaZulu Natal. *Africa's Public Service Delivery & Performance Review, 4*(3), 371-388.

Mahlo, D. (2017). Teaching Learners With Diverse Needs in the Foundation Phase in Gauteng Province, South Africa. *SAGE Opn Journals*, 1-9.

Maphalala, M., & Adams, J. (2016). Introduction to Health and Health Education. In E. Weinstein, E. Rosen, J. Snowman, R. McCown, M. Maphalala, & R. Tabane, *Educational Psychology and Teaching Children About Health* (pp. 142-156). Hampshire: Cengage Learning EMEA.

Maree, K. (2016). Planning a research proposal. In K. Maree (Ed.), *First Steps in Research* (p. 44). Pretoria: Van Schaik Publishers.

Maree, K., & Pietersen, J. (2016). Sampling. In K. Maree (Ed.), *First steps in research* (2nd ed., pp. 192-202). Pretoria: Van Schaik Publishers.

Marrero, S., & Adashi, E. Y. (2015). Noncommunicable Diseases. *Seminars in reproductive medicine, 33*(1), 35-40.

Maxwell, J. (2013). Collecting qualitative data: a realist approach. In U. Flick, *The sage handbook of qualitative data collection* (pp. 19-31). London: SAGE Publications Ltd.

Mayosi, B. M., Flisher, A. J., Lalloo, U. G., Sitas, F., Tollman, S. M., & Bradshaw, D. (2009). The burden of non-communicable diseases in South Africa. *The Lancet Series*, 1-14.

McDevitt, T. M., & Ormrod, J. E. (2013). *Child Development and Education* (5th ed.). Upper Saddle River: Pearson Education, Inc.

McMillan, J. H., & Schumacher, S. (2014). *Research in education: Evidence-based inquiry* (7th ed.). London: Pearson.

Mensah, G. A. (2016). Tackling Noncommunicable Diseases in Africa: Caveat Lector. *Health Education & Behavior*, 75-135.

Menter, I., Elliot, D., Hulme, M., Lewin, J., & Lowden, K. (2011). *A guide to practitioner research in education.* London: SAGE Publishers.

Mertens, D. M. (2010). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods* (3rd ed.). Los Angeles: SAGE Publications.

Mertens, D. (2018). Ethics of qualitative data collection. In U. Flick, *The sage handbook of qualitative data collection* (pp. 33-48). London: SAGE Publications Ltd.

Migliorett, M., Velasco, V., Celata, C., & Vecchio, L. (2012). Teachers' ideas about health: Implications for health promotion at school. *Health Education Journal, 72*(6), 695-707.

Mihaela, T. I. (2015). "Promoting The Emotional Wellbeing of Preschoolers". *Procedia - Social and Behavioral Sciences*, 509 – 513. doi: 10.1016/j.sbspro.2015.11. 280.

Mills, A. J., Durepos, G., & Wiebe, E. (2010). *Encyclopedia of Case Study Research.* Thousand Oaks, California: SAGE Publications Ltd.

Moselakgomo, V. K., Shaw, B. S., & Goon , D. T. (2012). Overweight, obesity and underweight in rural black South African children. *South African Journal of Clinical Nutrition*, 57-61.

Mouton, J. (2001). *How to succeed in your master's and doctoral studies: A South African guide and resource book.* Pretoria: Van Schaik .

Muthukrishna, N., Tshauka, F., Ebrahim, E., Mbatha, T., & Ntoi, V. (2008). Doing Childhoods in the Context of HIV and AIDS: Young Children in Early Schooling Speak. *Journal of Psychology in Africa*, 385-391.

Mwoma, T., & Pillay, J. (2015). Psycho-social support for orphans and vulnerable children in public primary schools: Challenges and intervention strategies. *South African Journal of Education, 35*(3), 1-9.

Naidoo, R., Coopoo, Y., Lambert, E. V., & Draper, C. (2009). Impact of a primary school-based nutrition and physical activity intervention on learners in KwaZulu-Natal, South Africa: A pilot study. *South African Journal of Sports Medicine, 21*(1), 7-12.

Naidoo, J., & Rule, P. (2016). Teachers' subjectivities and emotionality in HIV/AIDS teaching. *African Journal of AIDS Research*, 233-241.

National Health Laboratory Service. (2018). *Strategic Plan Fiscal Years 2018-2020.* National Health Laboratory Service.

Neuman, L. W. (2000). *Social Research Methods: Qualitative and Quantitative Approaches* (4th ed.). USA: Allyn and Bacon Publishers.

Neaum, S. (2013). *Child Development for Early Years Students and Practitioners* (2nd ed.). Dorchester: SAGE Publishers.

Nelson, J. R., & Lund, E. M. (2017). *Bronfenbrenner's Theoretical Framework Adapted to Women with Disabilities Experiencing Intimate Partner Violence.* USA: Springer International Publishing.

Niewenhuis, J. (2016). Analysing qualitative data. In K. Maree (Ed.), *First Steps in Research* (pp. 103-131). Pretoria: Van Schaik Publishers.

Niewenhuis, J. (2016). Introducing qualitative research. In K. Maree (Ed.), *First Steps in Research* (pp. 50-69). Pretoria: Van Schaik Publishers.

O'Connell, M. E., Boat, T., & Warner, K. E. (2009). *Preventing Mental, Emotional, and Behavioral Disorders Among Young People: Progress and Possibilities.* Washington: Nationall Academies Press.

Omidire, M. F., & Karp, S. (2016). Nutrition. In E. Weinstein, E. Rosen, J. Snowman, R. McCown, M. Maphalala, & R. Tabane, *Educational Psychology and Teaching Children about Health* (pp. 174-189). Hampshire: Cengage Learning EMEA.

Onya, H. (2007). Health Promotion in South Africa. *Promotion and Education, 14*(4), 233-237.

Onwuegbuzie, A. J., & Collins, K. M. (2007). A typology of mixed methods sampling designs in social science research. *The Qualitative Report, 12*(2), 281-316.

Organization for Economic Cooperation and Development (OECD). (2012). *Equity and Quality in Education: Supporting Disadvantaged Students and Schools.* OECD Publishing.

Ortlipp, M. (2008). Keeping and using reflective journal in the qualitative research. *The Qualitative Report, 13*(4), 695-705.

Oxford Committee for Famine Relief (OXFAM). (2014). *Hidden Hunger in South Africa: The faces of hunger and malnutrition in a food-secure nation*. Retrieved October 6, 2017, from https://www.oxfam.org/sites/www.oxfam.org/files/file_attachments/hidden_hunger_in_south_africa_0.pdf

Oxford Dictionaries. (2013). *Oxford English Dictionary.* Oxford University Press.

Patel, V., Flisher, A. J., Hetrick, S., & McGorry, P. (2007). Mental health of young people: a global public-health challenge. *The Lancet Series, 369*, 1302-1313.

Paulus, F. W., Ohmann, S., & Popow, C. (2016). Practitioner Review: School-based interventions in child mental health. *Journal Child Psychology and Psychiatry*, 1337-1359. doi:10.1111/jcpp.12584

Perez, A. M., Ayo-Yusuf, O. A., Hofman, K., Kalideen, S., Maker, A., Mokonoto, D., . .. Saloojee, Y. (2013). Establishing a Health Promotion and Development Foundation in South Africa. *South African Medical Journal, 301*(3), 147-149.

Peu, D., Mataboge, S., Ladzani, R., Wessels, L., Mostert-Wentzel, K., & Seane, N. (2015). Perceptions of educators regarding the implementation of the health promotion programme manuals for children in schools in Makapanstad, South Africa. *Curationis*, 1-8.

Peu, M. D., Napoles, L., Wenhold, F., Mostert-Wentze, K., & Seane, N. (2010). Health education training needs of educators at Makapanstad schools in the North West province. *Curationis, 33*(1), 33-41.

Phajane, M. (2016). Health promotion and consumer health. In E. Weinstein, E. Rosen, J. Snowman, R. McCown, M. Maphalala, & R. Tabane, *Educational Psychology and Teaching Children about Health* (pp. 190-203). Hampshire: Cengage Learning.

Pickering, M. J. (2011). Qualitative Content Analysis. In M. S. Lewis-Beck, A. Bryman, & T. F. Liao (Eds.), *The SAGE Encyclopedia of Social Sciences Research Methods.* SAGE Publications.

Potter, L. E., von Hellens, L., & Nielsen, S. (2010). The Practical Challenges of Case Study Research: lessons from the field. *5th Conference on Qualitative Research in IT.* Brisbane.

Priya, K. R., & Dalal, A. K. (2015). *Qualitative research on illness, well-being and self-growth: Contemporary Indian perspectives.* New Delhi: Routledge.

Rahman, S. (2017). The advantages and disadvantages of using qualitative and quantitative approaches and methods in language "testing and assessment" research: A literature review. *Journal of Education and Learning, 6*(1), 102-112.

Rakabe, E. (2014). *Equitable Resourcing of Schools for Better Outcomes*. Retrieved from file:///C:/Users/Ruzi/Downloads/2015-2016_TR_Chapter_3_Equitable_resourcing_of_schools_for_better_outcomes.pdf

Rendall-Mkosi, K., Wenhold, F., & Sibanda, N. B. (2013). *Case Study of the National School Nutrition Programme in South Africa.* Pretoria: University of Pretoria.

Resnicow, K., Dilorio, C., Soet, J. E., Ernst, D., Borrelli , B., & Hecht, J. (2013). Motivational interviewing in health promotion: it sounds like something is changing. *Health Psychology Journal*, 444-451.

Rivara, F., & Le Menestrel, S. (2016). *Preventing Bullying through Science, Policy and Practice.* Washington: National Academies of Science, Engineering and Medicine.

Ross, C. E., & Wu, C. L. (1995). The links between education and health. *American Sociological Review*, 719-745.

Rule, P., & John, V. (2011). *Case study research.* Pretoria: Van Schaik Publishers.

Salkind, N. J. (2004). Lev vygotsky's sociocultural theory of development. In *An introduction to theories of human development* (pp. 277-290). Thousand Oaks: SAGE Publications, Inc.

Salkind, N. J. (2010). *Encyclopedia of research design.* Thousand Oaks: SAGE Publication Ltd.

Schenker, K. (2016). Health(y) education in Health and Physical Education. *Sport, Education and Society*, 1-15.

Shariful Islam, S. M., Dannemann Purnat, T., Phuong, N. T., Mwingira, U., Schacht, K., & Fröschl, G. (2014). Non-Communicable Diseases (NCDs) in developing countries: a symposium report. *Globalization and Health*, 1-7.

Sharp, P. M., & Hahn, B. H. (2011). Origins of HIV and the AIDS Pandemic. *Cold Springs Harbor Perspectives in Medicine*, 1-22.

Silverman, D. (2010). *Doing qualitative research: A practical handbook* (3rd ed.). London: SAGE Publishers.

Simkins, C. (2013). *Performance in the South African Educational System: What do we know?* Johannesburg: Centre for Development and Enterprise.

Somerset, S., & Markwell, K. (2009). Impact of a school-based food garden on attitudes and identification skills regarding vegetables and fruit: a 12-month intervention trial. *Public Health Nutrition, 2*, 214-221. doi:10.1017/S1368980008003327

South African Social Secuirity Agency. (2016). *Social Grants.* Pretoria: SASSA.

St Leger, L., & Young, I. M. (2009). Creating the document ‘Promoting health in schools: from evidence to action'. *Global Health Promotion, 16*(4), 69-71.

Starks, H., & Trinidad, S. (2007). Choose Your Method: A comparison of Phenomenology, Discourse Analysis, and Grounded Theory. *Qualitative Health Research, 17*(10), 1372-1380. doi:10.1177/1049732307307031

Steyn, N. P., de Villiers, A., Gwebushe, N., Draper, C. E., Hil, J., de Waal, M., . . . Lamber, E. V. (2015). Did HealthKick, a randomised controlled trial primary school nutrition intervention improve dietary quality of children in low-income settings in South Africa? *BMC Public Health*, 1-11.

Steyn, N. P., Lambert, E. V., Parker, W., Mchiza, Z., & de Villiers, A. (2009). A review of school nutrition interventions globally as an evidence base for the development of the HealthKick programme in the Western Cape, South Africa. *South African Journal of Clinical Nutrition, 22*(3), 145-152.

Symon, G., & Cassell, C. (2012). *Qualitative organisational research: Core methods and current challenges.* Place: SAGE Publishers.

Tekin, A. K. (2011). Parent Involvment Revisited: Background, Theories and Models. *International Journal of Applied Environmental Sciences, 11*(1), 1-13.

The Glossary of Education Reform. (2013, August 29). *At-risk* . Retrieved from Defining Learners At-risk: https://www.edglossary.org/at-risk/

The Glossary of Education Reform. (2015, December 8). *Curriculum*. Retrieved August 18, 2018, from Glossary of Education Reform: https://www.edglossary.org/curriculum/

Thanh, N. C., & Thanh, T. T. (2015). The interconnection between interpretivist paradigm and qualitative methods in Education. *American Journal of Educational Science, 1*(2), 24-27.

Thomas, E., & Magilvy, J. K. (2011). Qualitative Rigor or Research Validity in Qualitative Research. *Journal for Specialists in Pediatric Nursing, 16*(2), 151-155. doi:10.1111/j.1744-6155.2011.00283.x

Thomlison, B. (2001). Descriptive case studies. In B. A. Thyer (Ed.), *The handbook of social work research methods* (pp. 131-141). Thousand Oaks, CA: SAGE Publications Ltd.

Trzesniewski, K., Donnelan, M., & Lucas, R. (2011). *Secondary Data Analysis: An introduction for Psychologists.* Washington: American Psychological Association.

Tudge, J. R., Mokrova, I., Hatfield, B. E., & Karnik, R. B. (2009). Uses and Misuses of Bronfenbrenner's Bio-ecological Theory of Human Development. *Journal of Family Theory & Review*, 198-210.

Ulfsdotter, M., Enebrink, P., & Lindberg, L. (2014). Effectiveness of a universal health-promoting parenting program: a randomized waitlist controlled trial of All Children in Focus. *BMC Public Health, 14*(1083), 1-11.

UNAIDS. (2011). *Global HIV and AIDS response. Epidemic update and health sector progress towards Universal Access.*

UNESCO. (2016). *UNESCO Strategy on Education for Health and Well-being: Contributing to the Sustainable Development Goals.* Paris: UNESCO.

USAID. (2009). *First Principles: Designing Effective Education Programs for School Health in Developing Countries.* USAID.

Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing and Health Sciences Journal*, 398-405.

Van Der Heide, I., Wang, J., Droomers , M., Spreeuwenberg, P., Rademakers, J., & Uiters, E. (2013). The Relationship Between Health, Education, and Health Literacy: Results From the Dutch Adult Literacy and Life Skills Survey. *Journal of Healh Communication, 18*(1), 172-184.

van Deventer, K. (2009). Perspectives of teachers on the implementation of Life Orientation in Grades R-11 from selected Western Cape schools. *South African Journal of Education, 29*, 127-145.

Van Rooyen, L., & van den Berg, D. (2009). Implementation of an HIV & AIDS Programme in South African Schools: Strengths and Weaknesses. *International Journal of Adolescence and Youth*, 81-102.

Vander Ploeg, K. A., McGavock, J., Maximova,, K., & Veugelers, P. J. (2014). School-Based Health Promotion and Physical Activity During and After School Hours. *American Academy of Pediatrics*, 371-378.

Vartanian, T. P. (2011). *Secondary Data Analysis.* New York: Oxford University Press.

Venkat Narayan, K. M., Ali, M. K., & Koplan, J. P. (2010). Global Noncommunicable Diseases — Where Worlds Meet. *The New England Journal of Medicine*, 1196-1198.

Venter, E., Haasbroek, C., Nthangase, S., Snowman, J., & McCown, R. (2016). Developmental Stages and Mental Health. In E. Weinstein, E. Rosen, J. Snowman, R. McCown, M. Maphalala, & R. Tabane, *Educational Psychology and Teaching Children about Health* (pp. 19-38). Hampshire: Cengage Learning.

Vergnani, T., Filsher, A. J., Lazarus , S., Reddy, P., & James, S. (1998). Health Promoting Schools In South Africa: Needs And Prospects. *Southern African Journal of Child and Adolescent Mental Health, 10*(1), 44-58.

Visser, M., & Moleko, A. G. (2012). *Community Psychology in South Africa.* Pretoria: Van Schaik Publishers.

Vorster, H. H. (2010). The link between poverty and malnutrition: A South African perspective. *Health SA Gesondheid*, 1-6.

Wallace, A., Holloway, L., Woods, R., Malloy, L., & Rose, J. (2011). *The Psychological and Emotional Wellbeing Needs of Children and Young People: Model of Effective Practice in Educational Settings.* Urbis Pty Ltd.

Walsh, C. M., & Van Rooyen, F. C. (2015). Household Food Security and Hunger in Rural and Urban Communities in the Free State Province, South Africa. *Ecology of Food and Nutrition*, 118-137.

Watling Neal, J., & Neal, Z. P. (2013). Nested or Networked? Future Directions for Ecological Systems Theory. *Social Development Journal, 22*(4), 722–737.

Wahyuni, D. (2012). The research design maze: Understanding paradigms, cases, methods and methodologies. *Journal of Applied Management Accounting Research, 10*(1), 69-80.

Webb, P., Stordalen, G. A., Singh, S., Wijesinha-Bettoni, R., Shetty, P., & Lartey, A. (2018). Hunger and malnutrition in the 21st century. *The Biomedical Journal*, 1-5. doi:doi.org/10.1136/bmj.k2238

Williams, S. E., & Greene, J. L. (2018). Childhood overweight and obesity: Affecting factors, education and intervention. *Journal of Childhood Obesity, 3*(2).

Willig, C. (2013). *Introducing qualitative research in psychology* (3rd ed.). Berkshire: Open University Press.

Willis, P. (2001). The “Things Themselves” in Phenomenology. *Indo-Pacific Journal of Phenomenology, 1*(1), 1-12. doi:10.1080/20797222.2001.11433860

Winton, A. (2016). Using Photography as a Creative, Collaborative Research Tool. *The Qualitative Report, 21*(2), 428-449.

World Bank. (2017, October 7). *Upper middle-income countries*. Retrieved from World Bank: https://data.worldbank.org/income-level/upper-middle-income

World Health Oganization (WHO). (2017). *Better health is central to human happiness and well-being. It also makes an important contribution to economic progress, as healthy populations live longer, are more productive, and save more.* Retrieved October 11, 2017, from http://www.who.int/hdp/en/

World Health Organization (2009). *Health Promoting Sschools: A Framework for Action.* Geneva: Switzerland: World Health Organization.

World Health Organization. (1998, March 22). *Health Promotion Glossary*. Retrieved from WHO: http://www.who.int/healthpromotion/about/ HPR%20Glossary% 201998.pdf

World Health Organization. (2005). *What are the main factors that influence the implementation of disease prevention and health promotion programmes in children and adolescents?* Copanhagen: World Health Organization.

World Health Organization. (2013). *Mental Health Action Plan 2013-2020.* Geneva: World Health Organization.

World Health Organization. (2015, December). *Health and human rights*. World Health Organization. Retrieved September 7, 2017, from http://www.who. int/mediacentre/factsheets/fs323/en/

World Health Organization. (2016). *Ending childhood obesity.* Geneva: World Health Organization.

World Health Organization. (2017). *WHO: Health Promotion*. Retrieved from World Health Organization: http://www.who.int/healthpromotion/conferences/ previous/ottawa/en/

World Health Organization. (2018). *Global Strategy on Diet, Physical Activity and Health: The Role of Parents*. Retrieved from WHO: http://www.who.int/ dietphysicalactivity/childhood_parents/en/

Yin, R. K. (2012). *Applications of Case Study Research.* Thousand Oaks: SAGE Publications Inc.

Zhang, Y., & Wildemuth, B. M. (2005). Qualitative analysis of content. 1-12.

Zimmerman, E. B., Woolf, S. H., & Haley, A. (2014). *Understanding the Relationship Between Education and Health.* Washington: Institute of Medicine.

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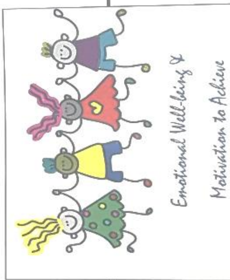
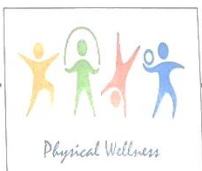
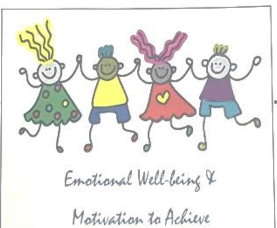
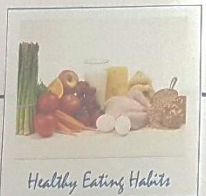
APPENDIX A
SAMPLE OF PRA-BASED POSTERS



What can be included in an after-school program for grade 1 to 3 learners to further promote ....

KNOWLEDGE / INFORMATION	•associating certain words with healthy food habits •dangers of unhealthy eating. •get professionals eg. doctors to speak to them. •dramatisation: eg. vegetables vs. sweeties.	• Art: positive experiencing of the self; self-confidence. : relationships eg. at home : + release of emotions eg. with clay.	•Mid-line crossing; •Balancing •Catching + throwing •swinging •introduction to sports like baseball / golf.
	 Healthy Eating Habits	 Emotional Well-being & Motivation to Achieve	 Physical Wellness
SKILLS/HABITS	•Assess own habits / plates of food.	• Motivation to read a short piece in context, everyday eg. 5 mins	•Try new activities •Practice independently. •Work individually / in a group.

APPENDIX B

SAMPLE OF FIELD NOTES
(School A and School B)

Field notes: School A

Participants: 8 teachers (7 Afrikaans; 1 English)

General Background and discussion

School A consists of Black learners only who travel very far to attend the school. Some of them need to get up at 4:00 am to start travelling, to be on time. Transport is a huge problem for those kids attending this school.

They also rely on donation (food) for kids such as soya, frozen veggies and fruit.

This school is only able to provide 1 meal a day (Monday-Thursday) to 45 learners. On Fridays they do get hotdogs.

They don't receive any support from the DoE in terms of feeding hungry learners. Although they attempted several times to setup meeting/communicate with them… they did visit the school, but since then haven't heard anything from them.

Because of the distance some of these learners travel, they also fall asleep before second break.

The church also visits the school once a week to motivate learners and teach them about values. During parent evenings we also try to discuss lunch boxes, healthy eating, and wellness with parents, but parents also don't attend these evenings regularly. Teachers also mention that as teachers they also need support… they don't always know how to handle/support difficult behavior and learners who experience barriers to learning. Teachers also mention that learners struggle to regulate their emotions.

Feedback from Group 1[teachers 1-3, poster 1] School A

Teachers (1-3) mentioned their concern about malnutrition and how household food security of the learners. They highlighted vegetable gardens as an aspect that must be included as part of the intervention. Learners will be able to also inform their parents about starting a vegetable garden if they have knowledge about it. They also suggested theme tables with different kinds of healthy food - to introduce healthy food types to learners. They also suggested visual material - posters that learners can see and read every day – posters must for example focus on the negative effects of unhealthy eating habits and food types. These teachers also suggested videos that learners can watch on the negative consequences of following a sugary diet. They also referred to obesity and the negative influences it has. Learners will also benefit from learning basic table

manners. Teachers also referred to motivational speakers that can come to motivate learners – motivation must form part of any health promotion intervention. Teachers mentioned the influence of bullying, indicating that one component may potentially focus on the influence bullying and what can be done by learners to protect themselves against bullies at school and in life in general. Teachers mentioned that learners must learn that hard work and determination always deliver results – they also verbally referred to commitment – if you are committed and willing to work hard you will get far in life. Also, the value of positive role models… Teachers emphasized that it must form part of the intervention. Teachers (1-3) said that learners must also exercise at home – they must have an age appropriate gym programme at home that they can follow – also they must have access to equipment or at least learn how to exercise without any equipment. These exercises must be fun and also include a wide variety of different kinds of exercises. This might also support learners to become more aware of their own abilities. Teachers (1-3) mentioned that learners lack basic gross-motor skills and that is an important skill that will benefit them. It is a skill that must be developed and nurtured.

Teachers mentioned that they are already doing a lot to support health promotion. As part of the current grade 1-3 curriculum group 1 indicated that they focus on the different food groups and the food pyramid to teach learners about types of healthy food. They elaborated by giving practical examples: according to these participants they focus on meal plans and 'menus' for breakfast, snacks, lunch and supper to support learners to able to have the necessary knowledge regarding healthy eating habits. They also mentioned that they do incorporate other learning material, such as posters and videos regarding food and/or healthy food choices to make it more interesting for learners. Teachers also mentioned the value of theme tables where they display examples of healthy food types on the table for learners to see, feel, smell and taste. Learners usually enjoy this a lot! They also mentioned that learners and parents (during parents evening or by means of informational letters) are informed about healthy food items and options for learner's lunch boxes. Teachers also mentioned that they attempt to motivate learners to promote healthy food choices when they are buying food from the tuck-shop. In terms of emotional well-being, teachers indicated that they have classroom discussions with learners about acceptable morals and values, and utilise stories with life lessons on values and morals to motivate learners and support them with their morals and values. They also have regular discussions on good and bad qualities/characteristics. They motivate learners to share their stories

and news on a daily basis and make use of worksheets that form part of the curriculum to develop and enhance learner's emotional well-being and motivation in general. Teachers also mentioned the value and importance of physical fitness and highlighted that they do have physical education two hours per week in order to improve the learners' physical wellness. They also have discussions with learners on being active at home without any expensive equipment but also going to the gym with their parents. During a more informal (Ad hoc) discussion, one of the teachers mentioned: "Through education, we can impact on the health-related knowledge and skills of learners and their parents. This will enable them to make better choices, not only in terms of food, but also in terms of their fitness and emotional well-being. Health-related literacy skills are essential to combat poor lifestyle choices and through these health promotion interventions we can strengthen these skills" (Teacher 2, School A).

Field notes: School B (1 June 2016)
Session 1 (14:10 – 16:40)
Participants: 9 Female (Afrikaans) teachers

General discussion with teachers:

1) "Any health promotion intervention should focus more on parents – learn them skills about healthy eating habits, physical fitness, how to motivate their children and also how to support/develop their children's emotional well-being: (Teacher 2, School B)(Parent training/home based support)
2) "Yes, parents need to learn specific skills to be able to support learners better" (Teacher 5, School B)(Parent training/home based support)
3) "I think any health promotion programme should start with parents or at least include them in any possible way" (Teacher 4, School B)(Parent training)
4) "We can teach learners as much as we wants, but the parents… they are the main issue" (Teacher 6, School B)(Parent training)
5) "Children can tell their parents about healthy eating and emotional well-being etc, but parents won't listen to their children, they won't take their children seriously" (Teacher 3, School B)(Knowledge transfer)
6) "In some cultures small children won't even attempt to tell/advise their parents on healthy eating, and exercise…" (Teacher 1, School B)

7) "If their emotional well-being is not the way it is supposed to be – positive/motivated, supporting, healthy relationships with others – nothing is going to work (Teacher 8, School B)
8) "We need to do something about the kiosk (snoepie), they must also start selling healthier food" (Teacher 9, Teacher 4, School B) (health awareness)
9) "Our school is surrounded with people with selling a very unhealthy food – and the children are the ones buying all these unhealthy food (Teacher 2, School B)

10) "We can maybe give parents guidelines about healthy food during parent information evenings" (Teacher 4, teacher 8, School B) (health awareness)
11) "I agree, they (parents and learners) need more knowledge and skills about healthy eating practices… although I think we have done this in previous years… but parents are unfortunately not involved in the learner's lives…" (Teacher 9, School B) (Parent training/home based support)
12) "We are not supported by the department in terms of a feeding scheme, because we are a quintile 5 school… We are regarded the same as Waterkloof High (Teacher 7, School B)
13) "Unfortunately only the poorest of the poor do get food here at school… Although most of our learner's actually do need it…" (Teacher 6, School, B) (Poverty/food insecurity)
14) "Yes, mostly the White kids are the poorest of the poor… Because their parents are the ones drinking and smoking… They are mostly extremely poor…" (Teacher 3, School B) (ill-health/poverty/) socioeconomic status
15) "I agree, more than 80% of our Black learners are from middle class families with enough income to support their kids sufficiently (socioeconomic status)… Although their eating habits are also unhealthy… They keep on buying unhealthy food on a regular basis, especially KFC, Steers and McDonalds… " (Teacher 1, School B) (unhealthy food consumption)
16) "A lot of the White kids wear the same filthy clothes for a whole week" (Teacher 4, School B) (personal care and hygiene)
17) "Churches do sponsor food for the poor kids, also we do have a volunteer youth worker at school who arranges food parcels for children and their families" (Teacher 3, School B) (School based support)

18) "A lot of the poor learners also struggle with head lice… we do try and help these learners at school… try to get sponsors for shampoo and to cut their hair… (Teacher 9, School B) personal care and hygiene) (School based support)

19) "Solidarity has been a consistent sponsor the past few years for all the grade R learners… Every single Grade R learner do get three meals at school every day… Before school, during the first and second break they do get something to eat... Solidarity also sponsors school bags for every single Grade 1 learner through their Helping Hand School Bag Project" (Teacher 7, School B) (Community support/ School based support)

20) "Most of our learners don't know how to regulate their emotions… and as teachers we also don't have enough time to support learners on an individual level… So many parents abandon their children… and we cannot rely on the DBST…They don't support us… As teachers we do everything…" (Teacher 2, School B)

21) "Yes, only in extreme cases the DBST will come to the school to an assessment… And then we wait forever to get feedback from them"

22) "Our school fees are furthermore every expensive…" (Teacher 3, School B)

23) "Support for learners (apart from teachers) with barriers to learning are done by volunteers… We do have an occupational therapist who do group work and a play therapist that do support us with extreme cases… But they are working as volunteers only…(Teacher 4, School B) (School based support)

24) "Our volunteer social worker resigned – She also did support the school on a volunteer bases…" (Teacher 7, School B) (School based support)

25) "We currently do have a lot of Grade 7 bullies – who are threatening both teachers and other learners" (Teacher 5, School B)

26) "We do have 'value' programme at our school – where we focus on important values… We try to teach these to learners in a practical manner" (Teacher 6, School B) (life skills)

27) "Teachers focus on basic Life Skills… But it is very basic and not nearly enough…" (Teacher 3, School B) (life skills)

28) "Due to the extreme levels of poverty that many of our learners do experience on a daily basis – they will take anything from anyone…" (Teacher 9, School B) (poverty)

29) "I can give you an example… sometimes five learners will share a small yoghurt and the same lollipops (Teacher 3, School B) (Poverty/food insecurity)

30) "Most learners think that you can fix everything with their fists… Household violence do occur on a daily basis in this community…" (Teacher 5, School B) (family dynamics)

31) "In some cases parents do get more violent if you phone them or ask them to come to school to discuss the matter and then they abuse those children even more" (Teacher 8, School B) (family dynamics)

APPENDIX C

REFLECTIVE JOURNAL OF THE DATA ANALYSIS PROCESS

Ruzaika Shaik Mahomed

Reflective Journal 2018

Date: 15/7/18

Event: Selection of the data sets

The PRA-based posters generated during the initial school-based health promotion project, which were stored safely by the University of Pretoria was sampled by me with the guidance of my supervisor, to conduct the analysis stage of the study. The data was collected during the initial health promotion project; hence I was not entirely sure what to expect from the posters as visual data. I felt anxious about beginning with the first phase of the analysis, however once I transcribed the posters, I felt a bit more comfortable as I already got a basic understanding of the information the posters contained. Importantly, I learned that transcriptions actually serve as a pre-screening of the data. Though it was overwhelming, I have come to learn that once you have a slight idea of the contents of the data and begin to see the links it has with your study, it becomes easier to progress through each of the data analysis phases.

Date: 17/7/18

Event: Reflecting on the data analysis process

To begin with the initial phase of my analysis, I laid each of my posters and the transcriptions in an orderly fashion. I read through each of the transcriptions with the actual poster alongside it in order to ensure I did not make any errors in my transcriptions. As I studied the posters, I kept a mental note of any specific information as well as any unusual information I found interesting. For instance, I immediately identified with common responses of the participants but had to make note of those responses I found unusual, for example I did not understand what the teacher participants were referring to by mention of the ECHO programme and 100% Nellie, particularly with regard to current activities teachers communicated. I also found that some of the responses of participants were very brief, which made me think it would be difficult for me to continue with my analysis. At this point, a little bit of uncertainty crept in, making me feel unable to move on with any deeper reading for interpretations. In this regard, I ensured that I first got clarification from my Supervisor (Mrs Karien Botha).

Date: 23/7/18

Event: Reflecting on the data analysis process using primary inductive thematic analysis (Phase 1 and 2 of visual data- posters)

Once I engaged in discussion with my supervisor regarding the visual data, I was better able to understand what the teachers were referring to or implying in their responses. My understanding of the data is critical as, without getting clarification I would not be able to begin coding the data. After having reread the data, I began with the first level open coding. I coded

all those responses which I found to be relevant in terms of its appearance as a common response by the different participants, information which teach participants clear made mention of something being important. I also coded information which linked clearly to my literature or related back to a theory or concepts I had come across in my research. I also coded responses which I found interesting and which I thought may have some underlying meaning or pattern forming in data. As I coded, I highlighted each code in a different colour. I also made use of a coding table to keep track of my codes along with each unique colour code. Although I experienced moments of uncertainty and anxiety in the coding process, the participants' responses to each of the questions were clear enough which made it easier for me to apply a particular code. The Life Skills curriculum is significant in promoting health. Fostering healthy eating habits, learner's emotional well-being and physical wellness all form part of the Life Skills curriculum, hence participants applied there current knowledge, skills and practices in their responses to what could be included in an after school health promotion programme. Educating learners about healthy eating, using the incentive system and encouraging physical activity through games and sports were emphasised mainly by participants in school A. As a researcher, I learnt that I could not impose my views on the responses given by the participants but rather I had to understand it from the participants view in terms of how they perceive health promotion and a health promotion intervention.

Date: 25/7/18

Event: Reflecting on the data analysis process (field notes)

Alongside the posters, my supervisor handed over to me field notes and reflective notes which were also generated during the initial School-based health promotion project. These field notes were generated during observation of the PRA-based poster activities and during discussion with participants after completion of the activity. The actual field notes were recorded in Afrikaans and translated in to English by my supervisor for my study. At the outset, I felt overwhelmed to see so many field notes (School A and School B), as these field notes needed to be transcribed. During discussion with my supervisor, she had informed me that although the field notes seem to be a much, they are information rich and reflect more elaborately on the responses of the participants which was already briefly noted on the posters. Additionally, the field notes provided me with background information and other valuable information which the posters did not contain.

Date: 26/7/18

Event: Reflecting on the data analysis process using primary inductive thematic analysis (Phase 1 and 2 of visual data- field notes and reflective notes)

Following the same procedure as I did with posters, I engaged in meaningful discussions with my supervisor regarding the data, after having read and familiarised myself with the data. Once I received clarification, I was able to code the field notes accordingly, using the coded posters. As I coded the data, I noticed new codes emerging, in addition to the codes generated

on the posters. To keep track of my coding, I created a code table (Annexure ???). Teachers, particularly from School B mentioned a lot about the family context; what the parents are like and how parents/caregivers influence the learner's health. It surprised me to know that many parents, as teachers mentioned, parents abuse drugs and alcohol and are not emotionally involved in their children's lives or their development. I furthermore came to find that learners are sexually abused. I found such information to be rather disturbing but had to remain aware of my own emotions and biases regarding the data at all times. Hence, in order to avoid personal influence on the interpretation of data, I engaged in further discussions about these matters with my supervisor. My understanding of the family and school contexts enabled me to reflect on the kinds of responses teachers gave with regard to school-based health promotion. I also identified many creative suggestions teachers made for including in a health promotion intervention, in terms of nutrition, physical fitness and socio-emotional health. The curriculum was central to all the current classroom practices and thus influenced teacher's ideas for what could possibly include in an intervention. Constant reference to the curriculum and suggestions, helped me identify what could become possible themes and categories surrounding health promotion in terms of curricula and extra-curricular activities. Training was also a very important feature that kept recurring, hence at this stage it also appeared to be a possible theme.

Date: 10/8/2018

Event: Reflecting on the data analysis process using primary inductive thematic analysis (Phase 3)

After having completed phase 1 and phase 2 of the analysis using a coding table, I discussed with one of my co-supervisors, Dr Safia Mahomed my thoughts on possible themes. Dr Mahomed had a discussion with me regarding the data and the generation of my codes before moving forward to identifying themes. I spent almost 2 hours with Dr Mahomed working through my coding table in order to categorise the data for identification of possible themes. Before this meeting I was so stressed out about generating the themes, I almost felt lost in my own coding. Thankfully, after sorting all the codes, Dr Mahomed helped me gather my thoughts to decide on possible themes and sub-themes.

Date: 15/8/2018

Event: Event: Reflecting on the data analysis process using primary inductive thematic analysis (Phase 4-6)

To complete phases 4 and 5 of the analysis process, I engaged in a very informative meeting with both my co-supervisors, Professor Ebersohn and Dr Mahomed. To ensure that phase 4 of the analysis was underway, Prof Ebersohn assisted me in reviewing the possible themes and sub-themes originally generated with Dr Mahomed. I explained my reasoning behind each of the possible themes and sub-themes to Prof Ebersohn in order to check for suitability in relation to the data. To this end, Prof Ebersohn guided me in reorganising my themes and sub-

themes. In agreement with both my co-supervisors based on the reorganization, the themes and sub-themes were named and defined. Thereafter, I was advised by both my co-supervisors to assign a final working title to my themes and prepare inclusion and exclusion criteria on the defined themes and subthemes to continue with the presentation of the final analysis report. The assistance of my co-supervisors during the scheduled meetings was a great blessing as I managed to work through the data analysis process much quicker than I would, being completely on my own.

APPENDIX D

ADAPTED LIFE SKILLS CURRICULUM GRADE 1-3

Life Skills for grades R-3 is divided by four study areas, namely; Beginning Knowledge, Personal and Social Well-being, Creative Arts (including two sub-areas i.e. visual arts and the performing arts), and Physical Education. In the foundation phase, a total of 60 hours per term is allocated to Life Skills for Grades R to 2, and a total of 70 hours per term for Grade 3 (DBE, 2011).

However, the study areas which play an important role in health promotion are Personal and Social well-being, and physical Education. The Life Skills curriculum for the target group of my study, according to the relevant study areas is outlined as follows:

Grade 1 (Term 1 -3) **Basic Knowledge and Personal and Social Well-being (2hrs/per week)**	
Topics relating to health promotion: **Term 1- Topic: Healthy habits - 4 hours** Themes discussed: • Sleep, • Eating healthy food, • Proper use of toilet, • Washing hands, • Keeping clean - Hair, teeth and nails - Washing regularly, • Regular exercise and play, • Limited television **Term 2- Topic: Keeping my body safe - 4 hours** Themes discussed: • Protecting our bodies from illness - Covering mouth and nose when sneezing or coughing, - Never touching another person's blood, - Washing fruit and vegetables before eating, - Making water safe to drink **Term 3- Topic: Food - 6 hours** Themes discussed: • Foods we eat, • Where different foods come from: fruit; vegetables; dairy; meat, • Healthy eating - Healthy and unhealthy foods - Healthy choices and the right amount of food, • Storing food - fresh, tinned, dried, frozen **Term 4** N/A	
Time contributed to health promotion (per year)	**Total-14 hours**

Grade 1 (Term 1-4) **Creative Arts (5 hrs/ per term)** **Performing arts (Creative games and skills)** Creative arts involve all locomotor and non-locomotor skills. Teachers are required to choose relevant Life Skills topics in order to teach these skills	
Time contributed to health promotion (per year)	**Total-20 hours**
Grade 1 (Term 1-4) **Physical Education (20hrs/ per term)** In physical education all perceptual skills are practiced, including Locomotor, Perceptual motor, Rhythm, co-ordination, balance, spatial orientation, latterly and various sports and games.	
Time contributed to health promotion (per year)	**Total- 80 hours**
Grade 2 (Term 1 and 3) **Basic Knowledge and PSW (2hrs/per week/term)**	
Topics relating to health promotion: **Term 1- Topic: Healthy living - 4 hours** ***Themes discussed:*** • Protecting food we eat - include protection from flies, keeping food cool, • Simple ways of purifying water, • Things that harm us - smoking, alcohol, drugs, • Good habits - such as regular exercise, limited television **Term 2** N/A **Term 3-Topic: People who help us - 4 hours** ***Themes discussed:*** • People who help us in our community - such as clinic nurse, after-care teacher, librarian, • How different people help me, • How I ask for information and assistance - Good manners, • How I ask for help in an emergency - Who to contact - What information to give **Term 4** N/A	
Time contributed to health promotion (per year)	**Total- 8 hours**

Grade 2 (Term 1-4) **Creative Arts (5 hrs/ per term)** Creative arts involve all locomotor and non-locomotor skills. Teachers are required to choose relevant topics in order to teach these skills	
Time contributed to health promotion (per year)	**Total- 20 hours**
Grade 2 (Term 1-4) **Physical Education (20hrs/ per term)** In physical education, all perceptual skills are practiced, including Locomotor, Perceptual motor, Rhythm, co-ordination, balance, spatial orientation, laterality and various sports and games.	
Time contributed to health promotion (per year)	**Total- 80 hours**
Grade 3 (Term 1 and 2) **Basic Knowledge and Personal and Social Well-being(3hrs/per week)**	
Term 1-Topic: Health protection – 3hrs ***Themes discussed:*** • Basic first aid practices in situations such as nose bleeds, animal bites, cuts and burns, • Basic health and hygiene - include not touching other people's blood **Term 2-Topic: Healthy eating – 6hrs** ***Themes discussed:*** • Food groups - Vitamins - fruit and vegetables - Carbohydrates - bread, maize/mielie meal - Proteins - eggs, beans, meat, nuts - Dairy - milk, cheese, yoghurt, • A balanced diet **Term 3** N/A **Term 4** N/A	
Time contributed to health promotion (per year)	**Total- 9 hours**
Grade 3 (Term 1-4) **Creative Arts (5 hrs/ per term)** Creative arts involve all locomotor and non-locomotor skills. Teachers are required to choose relevant topics in order to teach these skills	
Time contributed to health promotion (per year)	**Total- 20 hours**

<table>
<tr><td colspan="2">Grade 3(Term 1-4)
Physical Education (20hrs/ per term)
In physical education, all perceptual skills are practiced, including Locomotor, Perceptual motor, Rhythm, co-ordination, balance, spatial orientation, latterly and various sports and games.
Physical education in grade 3 for each of the perceptual skills is mostly sports based.</td></tr>
<tr><td>Time contributed to health promotion (per year)</td><td>Total- 80 hours</td></tr>
</table>

Appendix E

SAMPLE OF DATA ANALYIS CONDUCTED

PHASE 2

Colour coded transcriptions of posters and field notes

SCHOOL A - GROUP 1

WHAT IS CURRENTLY DONE IN YOUR CLASS/SCHOOL/COMMUNITY TO PROMOTE GRADE 1 TO 3 LEARNERS KNOWLEDGE/ INFORMATION IN TERMS OF THE FOLLOWING:

Healthy Eating Habits	Emotional Well-being and Motivation to Achieve	Physical Wellness
▪ Different food groups (nutritional information) ▪ Food pyramid (nutritional information) ▪ Perishable and Non-perishable products ▪ Meal plans/ Menu's (Breakfast, snacks, lunch and supper) (foster healthy eating/school feeding scheme/school based support) ▪ Posters/Videos regarding food/healthy choices (nutritional information/ healthy eating) ▪ Theme tables (nutritional information/healthy eating) ▪ Parents evening – discuss lunch boxes (healthy eating/home-based support strategy)	▪ Discussion on values and morals (Emotional support/life skills) ▪ Discussion on good/bad qualities/characteristics (Emotional support) ▪ Stories with values and morals (life lessons) (Emotional support/life skills) ▪ Telling news/ sharing stories (Emotional support/life skills) ▪ Worksheets regarding topics covered in the curriculum (life skills)	▪ Discussions on being active/ going to the gym with parents (physical activity/home-based support

WHAT IS CURRENTLY DONE IN YOUR CLASS/SCHOOL/COMMUNITY TO PROMOTE GRADE 1 TO 3 LEARNERS SKILLS/ HABITS IN TERMS OF THE FOLLOWING:

Healthy Eating Habits	Emotional Well-being and Motivation to Achieve	Physical Wellness
▪ Try and promote healthy choices when buying from the tuckshop (nutritional information/healthy eating) ▪ Encourage healthy eating habits at home as well as packaging a healthy lunch box (nutritional information/healthy eating) ▪ Discussion on expiry dates (nutritional info/ food safety)	▪ Motivation to achieve: Boys vs Girls competitions (emotional support/extrinsic motivation) ▪ Rewarding good behavior (Incentive system) extrinsic motivation) ▪ ECHO* (School based support) ▪ Prize giving extrinsic motivation) ▪ 100% Nellie * (School based support)	▪ Physical Education (2 hours per week) (physical activity/life skills/ Curriculum) ▪ Extra-mural activities (Netball, Soccer, Rugby) (physical activity/outdoor sports) ▪ Indigenous games played during break-time (traditional games)

WHAT CAN BE INCLUDED IN AN AFTER-SCHOOL PROGRAM FOR GRADE 1 TO 3 LEARNERS TO FURTHER PROMOTE KNOWLEDGE AND INFORMATION IN TERMS OF:

Healthy Eating Habits	Emotional Well-being and Motivation to Achieve	Physical Wellness
▪ Vegetable gardens (healthy eating/ Self-sufficiency) ▪ Theme tables with different foods (nutritional information/healthy eating) ▪ Food tasting (after School event) ▪ Videos on bad consequences when following a sugary diet/obese children and how it negatively influences their physical activity (life skills/nutritional information, facilitating intrinsic motivation) ▪ Posters on all the negative effects with regards to unhealthy eating habits (life skills/nutritional information, facilitating intrinsic motivation)	▪ Influences that bullying has on learners ▪ Showing results of hard work and determination (facilitating intrinsic motivation) ▪ Motivational speakers (facilitating intrinsic motivation) (school-based support)	▪ Gym program at home (age appropriate) (physical activity/home-based support ▪ Making learners aware of their abilities (Disabled person speak to them/ video) (facilitating intrinsic motivation/ school-based support/ inclusivity) ▪ Different types of exercise (swimming) (physical activity/outdoor sports) ▪ Accessible equipment to exercise with/demonstration

WHAT CAN BE INCLUDED IN AN AFTER-SCHOOL PROGRAM FOR GRADE 1 TO 3 LEARNERS TO FURTHER PROMOTE SKILLS/HABITS IN TERMS OF:

Healthy Eating Habits	Emotional Well-being and Motivation to Achieve	Physical Wellness
▪ Table manners (after school event/life skills)	▪ Role-models (after school event/facilitating intrinsic motivation)	▪ Basic Gross-motor skills through games (Skills development/Game playing

Field notes: School A

Participants: 8 teachers (7 Afrikaans; 1 English)

General Background and discussion

School A consists of Black learners only who travel very far to attend the school. Some of them need to get up at 4:00 am to start travelling, to be on time. Transport is a huge problem for those kids attending this school.

They also rely on donation (food) for kids such as soya, frozen veggies and fruit.

This school is only able to provide 1 meal a day (Monday-Thursday) to 45 learners. On Fridays they do get hotdogs.

They don't receive any support from the DoE in terms of feeding hungry learners. Although they attempted several times to setup meeting/communicate with them… they did visit the school, but since then haven't heard anything from them.

Because of the distance some of these learners travel, they also fall asleep before second break.

The church also visits the school once a week to motivate learners and teach them about values. During parent evenings we also try to discuss lunch boxes, healthy eating, and wellness with parents, but parents also don't attend these evenings regularly. Teachers also mention that as teachers they also need support… they don't always know how to handle/support difficult behavior and learners who experience barriers to learning. Teachers also mention that learners struggle to regulate their emotions.

Feedback from Group 1[teachers 1-3, poster 1] School A

Teachers (1-3) mentioned their concern about malnutrition and how household food security of the learners. They highlighted vegetable gardens as an aspect that must be included as part of the intervention. Learners will be able to also inform their parents about starting a vegetable garden if they have knowledge about it. They also suggested theme tables with different kinds of healthy food - to introduce healthy food types to learners. They also suggested visual material - posters that learners can see and read every day – posters must for example focus on the negative effects of unhealthy eating habits and food types. These teachers also suggested videos that learners can watch on the negative consequences of following a sugary diet. They also referred to obesity and the negative influences it has. Learners will also benefit from learning basic table manners. Teachers also referred to motivational speakers that can come to motivate learners – motivation must form part of any health promotion intervention. Teachers mentioned the influence of bullying, indicating that one component may potentially

focus on the influence bullying and what can be done by learners to protect themselves against bullies at school and in life in general. Teachers mentioned that learners must learn that hard work and determination always deliver results – they also verbally referred to commitment – if you are committed and willing to work hard you will get far in life. Also, the value of positive role models… Teachers emphasized that it must form part of the intervention. Teachers (1-3) said that learners must also exercise at home – they must have an age appropriate gym programme at home that they can follow – also they must have access to equipment or at least learn how to exercise without any equipment. These exercises must be fun and also include a wide variety of different kinds of exercises. This might also support learners to become more aware of their own abilities. Teachers (1-3) mentioned that learners lack basic gross-motor skills and that is an important skill that will benefit them. It is a skill that must be developed and nurtured.

Teachers mentioned that they are already doing a lot to support health promotion. As part of the current grade 1-3 curriculum group 1 indicated that they focus on the different food groups and the food pyramid to teach learners about types of healthy food. They elaborated by giving practical examples: according to these participants they focus on meal plans and 'menus' for breakfast, snacks, lunch and supper to support learners to able to have the necessary knowledge regarding healthy eating habits. They also mentioned that they do incorporate other learning material, such as posters and videos regarding food and/or healthy food choices to make it more interesting for learners. Teachers also mentioned the value of theme tables where they display examples of healthy food types on the table for learners to see, feel, smell and taste. Learners usually enjoy this a lot! They also mentioned that learners and parents (during parents evening or by means of informational letters) are informed about healthy food items and options for learner's lunch boxes. Teachers also mentioned that they attempt to motivate learners to promote healthy food choices when they are buying food from the tuck-shop. In terms of emotional well-being, teachers indicated that they have classroom discussions with learners about acceptable morals and values, and utilise stories with life lessons on values and morals to motivate learners and support them with their morals and values. They also have regular discussions on good and bad qualities/characteristics. They motivate learners to share their stories and news on a daily basis and make use of worksheets that form part of the curriculum to develop and enhance learner's emotional well-being and motivation in general. Teachers also mentioned the value and importance of physical fitness and highlighted

that they do have physical education two hours per week in order to improve the learners' physical wellness. They also have discussions with learners on being active at home without any expensive equipment but also going to the gym with their parents. During a more informal (Ad hoc) discussion, one of the teachers mentioned: "Through education, we can impact on the health-related knowledge and skills of learners and their parents. This will enable them to make better choices, not only in terms of food, but also in terms of their fitness and emotional well-being. Health-related literacy skills are essential to combat poor lifestyle choices and through these health promotion interventions we can strengthen these skills" (Teacher 2, School A).

Table of codes

Code number	Colour	Code name	Category organization round 1	Category organization round 2
1	Yellow	Nutritional info	1	1
2	Green	Healthy eating	1	1
3	Light blue	Home based support	5	4.2
4	Purple	Life Skills	1	5
5	Dark green	Emotional support	2	5
6	Red	Physical activity	1	3
7	Teal	Extrinsic motivation	2	2
8	Royal blue	Outdoor sports	3	3
9	Fuschia	food safety	1	1 or 2
10	Dark yellow	Self-sufficiency	5 or 4	4.1
11	Grey	Traditional games	3	3
12	Orange	School-based support	2	4.1
13	Blue	Facilitating intrinsic motivation	5	5
14	Turquoise	Home-based support		4.2
15	Pink	Inclusivity	2	4.1
16	Brown	After School event	3	4
17	Lime green	Skills development	5	5
18	Light yellow	Game playing	1 or 3	3
19	Aqua	Curriculum		
20	Beige	Personal care and hygiene	1	1
21	Light green	Associations		4 or 5
22	Rust	Self-awareness	5	5
23	Cherry	Play-based learning	1	3
24	Mauve	Health awareness	4	1
25	Peach	Teacher training	3	4.5
26	Off white	Fitness education	1	3
27	Light purple	Parent training	6	4.5
28	Dusty pink	Poverty	4	4.4
29	Avocado green	Food insecurity	2	4.1
30	Green aqua	Ill-health	4	4.4
31	Cream	Knowledge transfer	6	4.1
32	Ceres pink	Unhealthy food consumption	5	1
33	Blue accent 1	Religious/community support	5	4.1
34	Gold	Lack of DBST support	5	4.3
35	Light Brown	Family dynamics	1	4.4

APPENDIX F
SAMPLE OF DATA ANALYIS CONDUCTED
PHASE 3

Possible themes and sub-themes

Life skills curriculum
Nutritional information
Healthy eating
Physical activity (PE)
Food safety/unhealthy food consumption
personal care and hygiene
Play-based learning

Teacher support
Emotional support
Extrinsic motivation
School-based support
Inclusivity
School-feeding scheme

Extra-curricula support
Physical activities
Tradional gameplaying
Outdoor sports
After school events/programmes

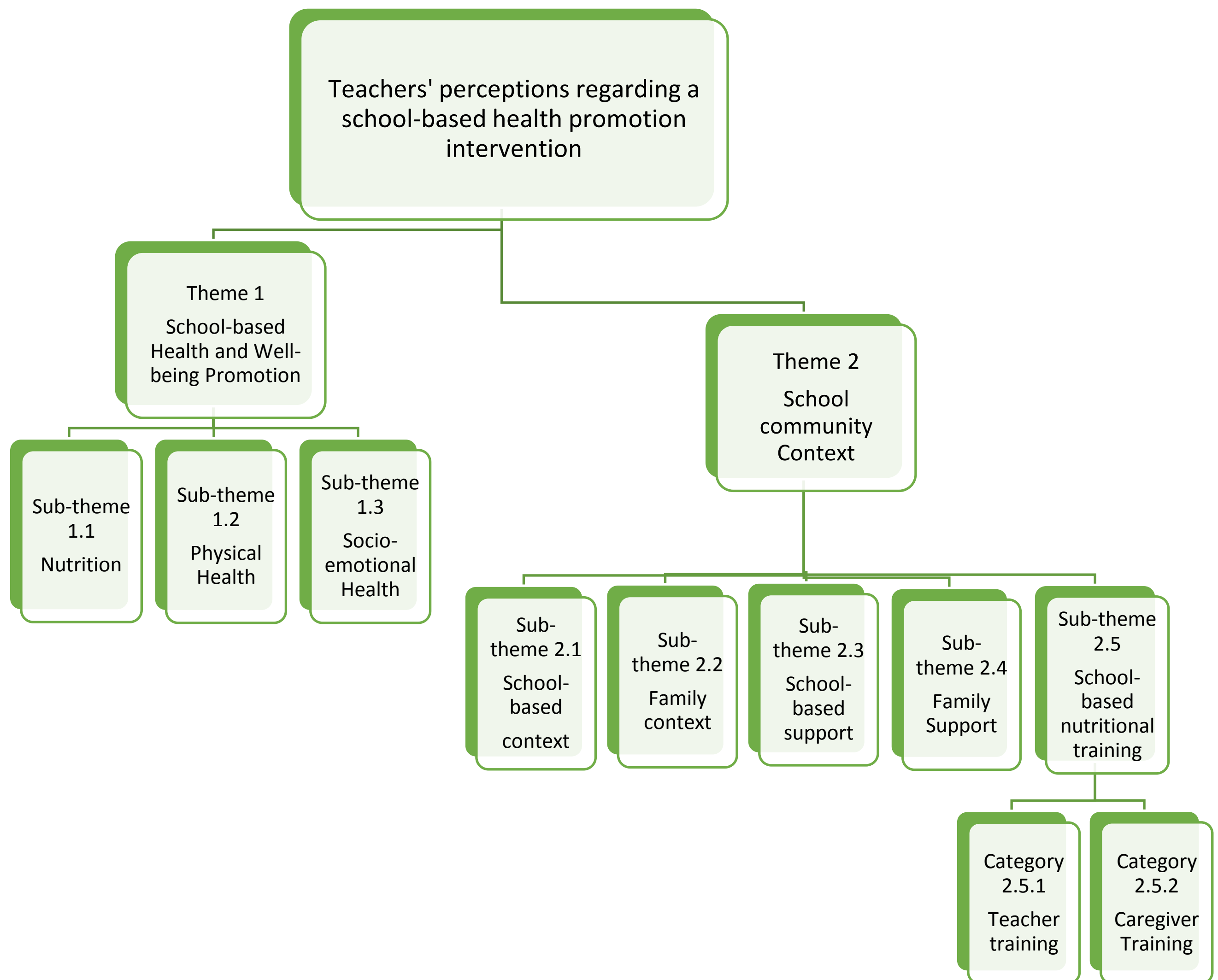
Self-suffiency
Vegetable gardens
Health awareness
Poverty/food insecurity
Illness
Family dynamics

Learner socio-emotional development
Intrinsic motivation
skills dvelopment
self-awareness
Religious and community support

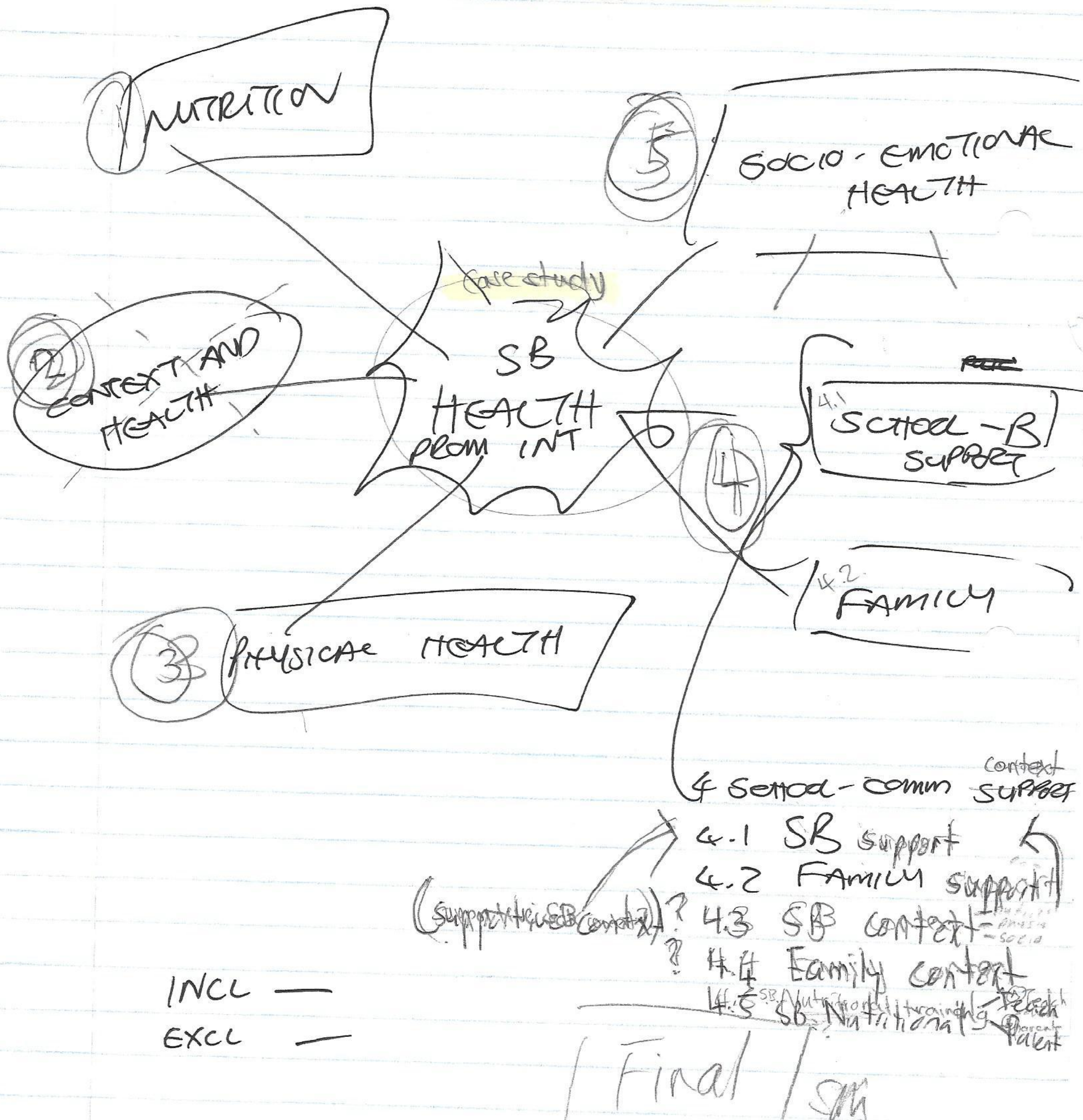
Training programmes
Teacher training
Parent training
Knowledge transfer

APPENDIX G
SAMPLE OF DATA ANALYSIS CONDUCTED
PHASE 4

Visual representation of preliminary themes



APPENDIX H
SAMPLE OF DATA ANALYIS CONDUCTED
PHASE 5



APPENDIX I
INFORMED CONSENT

Faculty of Education

REQUEST FOR INFORMED CONSENT: TEACHERS

Dear teacher

As you are aware we are conducting a research project titled *Supporting primary school children's holistic well-being by means of a multi-disciplinary health-promoting intervention*. This project involves a partnership between the University of Pretoria, South Africa and Fordham University, New York City, and is undertaken in schools in the Pretoria area and the Bronx (USA). As part of the project, we will present a programme to Grade 1 to 3 learners, focusing on their general health and well-being. We will include topics like physical fitness, healthy eating, a healthy lifestyle and feeling good about oneself, when presenting information and activities on these topics to the learners in the third school term.

For us to be able to plan the programme we will present to the learners, we first require some input from learners, parents and teachers. For this purpose, we would like to invite you to participate in the project. *If you agree, you will participate in two, two hour workshop sessions, which will be recorded in the form of posters, photographs and audio recordings. During the workshop sessions we will ask you to tell us what is currently included in the curriculum, as well as what you think can be done in addition to the curriculum to support the children's physical and emotional well-being.* Your participation in the project is voluntary and you will have the right to withdraw from the project at any time if you wish to do so. The ethical principles of confidentiality and anonymity will be adhered to throughout the project, and you will not be asked to reveal any information that could allow your identity to be established. We will use pseudonyms to protect your identity, as well as that of the school. You will have full access to any of the collected data during your involvement, as well as to the final

results of the project. The collected data will be stored in an Open Access repository at the University of Pretoria and Fordham University for 15 years.

The overarching benefit of this study will be to enhance the holistic well-being among participating primary school learners who face vulnerability due to poverty and related risk factors. As such, a secondary benefit of the study, based on the selected approach of Participatory Reflection and Action (PRA), will be the facilitation of changed lifestyle patterns amongst the participating learners that would positively impact on their health and well-being as adults, thereby facilitating social change in the broader community and combating the detrimental effect of poverty on lifestyle patterns. In addition resource constrained communities might take ownership in looking after their own health. Such ownership may in turn result in sustained adjusted healthful consumer and lifestyle patterns, which could for example be demonstrated in the consumption of healthful diets that are affordable and culturally acceptable. Subsequently, improved levels of nutrition, food security and well-being may be detected. No risks are foreseen at this stage.

Throughout the process it will thus be our aim and responsibility to respect the dignity and promote the well-being of all participants. If you are willing to participate, please sign this letter as declaration of your consent, i.e. that you agree to participate in this project willingly and that you understand that you may withdraw from the project at any time.

Thanking you in advance,

Ronel Ferreira, ronel.ferreira@up.ac.za

Signature .... Date ……………………………………

Researcher .... Date ……………………………………

Witness .... Date ……………………………………

APPENDIX J

SAMPLE OF LITERATURE CONTROL (in table format)

Theme 1

Categories	Findings in relation to literature
Sub-theme 1.1 **Needs in the school context**	**Confirm** In agreement with the literature, the lack of DBST support is due to the schools being recognized as a quintile 5 school. However, less than 60% of learners pay fees (Maharajh, Nkosi, Mkhize, 2016). Consistent with literature is that large classrooms (40 learners or more) and lack of resources hamper implementation of health promotion interventions (Mahlo, 2017; Maharajh, Nkosi, Mkhize, 2016). **Different** Participants acknowledged communication with the DBST with regard to school circumstances in order to obtain resources, however no support is provided and arranges for assistance are made my participants themselves. **Silent** N/A **New** N/A
Subtheme 1.2 **Needs in the family context**	**Confirm** Like others (Faber & Wenhold, 2007), I found that the challenge of malnutrition on both ends of the spectrum; undernutrion and overnutrition is a result of a nutrition transition caused by urbanisation, globalization, changing demographics as well as poverty and socio-economic inequalities. (Dukhi, Sartorius & Taylor, 2016; Kimani-Murage et al., 2010; Hammond & Dubé, 2012; Venket Narayan, Ali, & Koplan, 2010; Shariful Islam et. al, 2014). Indicators of these factors referred to as 'drivers' of a nutrition transition are evident in the findings (Dukhi, Sartorius & Taylor, 2016; Kimani-Murage et al., 2010; Hammond & Dubé, 2012). Risk factors for NCD's such as obesity, unhealthy diets, sedentary lifestyles, smoking, alcohol consumption and high prevalence for hypertension (Shariful Islam et. al, 2014)are consistent with literature as particpants indicated are affecing learners homes. In agrreement with literature, it is evident that malnutrtion is a major consequnc of food insecuirty and thereby hunger (Dukhi, Sartorius & Taylor, 2016; Hammond and Dube, 2012).

	Further, literature confirms that food insecuirity is a result of widespread poverty , inflation, income inequality and unemployment(Altman, Har & Jacobs, 2009). Literature is also consistent with regard to other risk factors such as adversity in the home relating to sexual abuse and drug addiction (Kieling et. al, 2011) affecting psycho-social well-being. **Different** Child aggression and violence in the school were not mentioned in the literature. Hygiene matters **Silent** The struggle of instance of HIV silent in the data though expected **New** N/A

Theme 2

Categories	Findings in relation to literature
Theme 2.1 **Category 1: Nutrition education as part of Life skills**	**Confirm** Literature is also consistent with the study in terms of health education being part of a formal Life -Skills curriculum (Driscol ad Nagel, 2010). The shift from traditional Health Education as a separate subject towards Life Skills as a core subject focusing on the holistic development of learners by including content on the social, emotional, personal and intellectual and physical grows of learners and the ways in which these are integrated, was confirmed when compared to evidence from official curriculum documents and other studies (Department of Basic Eduction, 2011; Mwoma & Pillay, 2015; Deventer, 2009). This is in line with the objectives of a health-promoting school which emphasis on developing educational outcomes through a holistic approach to well-being; focusing on health knowledge and skills in the cognitive, social and behavioural domains (Buijs, 2009; Maphalala & Adams, 2016; Macnab, 2012; & Langford et al, 2017). The current Life Skills curriculum does include nutrition education, focusing on topics for grades 1-3 which participants indicated such as: Eating healthy food, Washing fruit and vegetables before eating, - Making water safe to drink, Foods we eat, • Where different foods come from: fruit; vegetables; dairy; meat, • Healthy eating - Healthy and unhealthy foods - Healthy choices and the right amount of food, • Storing food - fresh, tinned, dried, frozen and Food groups - Vitamins - fruit and vegetables - Carbohydrates - bread, maize/mielie meal - Proteins - eggs, beans, meat, nuts - Dairy - milk, cheese, yoghurt, • A balanced diet (DBE, 2011) (Refer to appendice ???) These topics are taught to learners over two terms and is allocated only 4 hours in term 1 and 6 hours in term 2 for grade 1; 4 hours in term 1 for grade 2 and 6 hours in term 2 for grade 3(DoBE, 2011) which is not sufficient for to producing stronger health outcomes in terms of health promotion (Naidoo, Coopoo,Lambert & Draper, 2009, Hoadley, 2009). **Different** N/A **Silent** N/A **New** N/A
Category 2: existing nutritional support for	**Confirm** N/A **Different**

learners at school	Support to at-risk school communities according to the literature should be provided through national government funded programmes such as the food for Education programme, the care and support for teaching and learning (CSTL) (DoBE, 2017), however this was not part of the findings presented in the study as participants indicated that they do not receive support from DBST). According to the literature (DoBE, 2017; Rendall-Mkosi, Wenhold & Sibanda, 2013) the objectives of the national school nutrition programme (NSNP) is to provide healthy meals to school learners and support them to make wiser choices through nutrition education in the curriculum as well as provide support for development of food gardens. In terms of the data, participants highlight these measures of support but indicate that it is through private sponsorships and donations. **Silent** Literature identifies school-based interventions delivered through the school system, reinforced by a school health policy. These include HIV and AIDS prevention and care, malaria control, deworming and immunization, oral health care and micronutrient supplementation (Bundy, 2011, World Health Organization, 2017). The data was silent about policies even though participants elaborated on the ways in which they support learners. **New** N/A
Category 3: Suggestions to include in supporting learners nutritional needs	**Confirm** Literature confirms educating learners also results in the message being disseminated to families and the broader community (Vergani, Flisher, Lazarus, Reddy & James, 1998). This is one of the main aims of HP which participants indicated. Consistent with the data, the production of vegetable gardens as an intervention, particularly in schools is great for health promotion as this form of intervention benefits learners and their families in terms of knowledge, attitudes and practical skills to improve nutritional practices (Laurie, Faber & Maduna, 2017). The inclusion of parents in a health-promoting school's framework is critical to intervention (World Health Organization, 2009). **Different** N/A **Silent** N/A **New** In addition to what the literature indicates should be included in health promotion for young learners, the data reflected additional examples of

	suggestions such as incorporation of drama, motivational speakers and public figures as well as constructive school field trips such as visits to food produce farm, restaurant days etc.
Theme 2.2 **Category 1: Physical education as part of Life Skills**	**Confirm** Literature (Darragh, 2010) confirms that topics on general health and physical fitness also serves as tool to support holistic well-being and which results in preventing illness in adulthood. The current Life Skills curriculum does include physical education and hygiene in the curriculum, focusing on topics which participants indicated: Physical education is included for each grade 1-3 and is allocated 20 hours per term including learning of perceptual skills, sports and games (DoE, 2011)- equivalent to what participants mention 2hrs/week. **Personal Hygiene** Basic health and hygiene is included for grade and allocated 3 hours in term 1 • Proper use of toilet, • Washing hands, • Keeping clean - Hair, teeth and nails - Washing regularly is included for grade 1 and allocated 4 hours in term 1 (DoBE) again this is not sufficient (Hoadley, 2009). **Different** N/A **Silent** The data was silent about creative arts and performing arts in learner's development **New** N/A
Category 2: Existing physical health support	**Confirm** Consistent with literature is the support for learners in terms of perceptual skills per grade. All skills mentioned by participants is included for grades 1-3 (DoBE, 2011). Collaboration with professionals from other sectors is also confirmed in supporting health promotion (Frank & Jepson, 2013). Participants indicated assistance of counselors, social workers, occupational therapists. **Different** Support to at-risk school communities according to the literature should be provided through national government funded programmes such as CSTL (DoBE, 2017), however this was different to the data as participants indicated they do not receive support.

	The CSTL support includes provision of curriculum materials, curricula and co-curricular support) but participants have indicated lack of sufficient equipment with no support from DBST In terms of personal hygiene, school should receive support from government funded programmes (Bundy, 2011). In terms of the data, participants highlight these measures of support but indicate that it is through private sponsorships and donations. **Silent** N/A **New** N/A
Category 3: Suggestions to include in supporting learners physical health needs	**Confirm** The findings suggested parental involvement in improving learner's physical health through exercise and play. The literature confirms that parental and qualified teacher involvement are two strong contributors for improvement in physical health with an an intervention such as the KYBP intervention (Steyn, Lambert, Parker, Mchiza & De Villiers, 2009; Reniscow et. al, 2013; De Villiers et al., 2012) **Different** In addition to what the literature indicates should be included in health promotion for young learners, the data reflected additional examples of suggestions such as role models, sports teams as motivational speakers and public figures as well as home exercise programmes/kids gym with parents. **Silent** Interventions for personal hygiene **New** N/A

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