

A process evaluation study of health promoting schools in Gauteng, South Africa

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DEDICATION

To God, the author and finisher of all that I am. You continuously gave me a second wind; “but those who hope in the Lord will renew their wings like eagles, they will run and not be weary, they will walk and not faint.” Isaiah 40:31

This study is dedicated to the late Michael Komape, who in 2014, at the tender age of five years, drowned in his school’s pit latrine in Limpopo province, South Africa. My life was forever changed upon hearing of his story, and I doubt I will ever get over the pain of what brought about his untimely and “unfair” demise. This study is also dedicated to all the children in South Africa, children who drowned in pit toilets while at school, who drowned while crossing a river to make it to school on time, who were hit by reckless drivers while walking unguided to school, who were raped while walking through the bushes to and from school, who died in an overloaded taxi that transported them to school, and who could not continue with school because of hunger and HIV/AIDS. It is dedicated to all the children who did not have a “fair” chance at life.

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All the participants who availed themselves to partake in this study during very trying times of COVID-19.

ABSTRACT

The health promoting school programme has been adopted in public schools across South Africa. However, there has been a dearth of research evaluating the implementation of these programmes in the local context. The original intention of this study was to evaluate the implementation of the programme in health promoting schools in the study area and develop a conceptual framework to improve programme implementation and evaluation of health promoting schools in South Africa. The study followed a pragmatist mixed methods approach, comprised of three phases. In Phase 1, an audit of health promoting schools (n=11) was conducted using an audit tool, and descriptive statistics were used to present the data. The findings showed that compliance to the programme was generally disappointing, with implementation fidelity being very poor. School processes such as leadership by the principal; support from staff, parents/community, and the school governing body; high priority for policy implementation; and clear and structured team responsibilities were found to facilitate implementation. The Kruskal-Wallis chi-square showed no evidence of significant differences in school performance ($p=0.44$). The tool was found to have a high internal consistency, with a Cronbach's alpha coefficient of 0.805. Two key performance areas—leadership, management, and communication; and curriculum provision and resources—were excluded from the tool, which compromised content validity. In Phase 2, data were collected from key participants through individual interviews (n=20) with principals, educators, and school governing body members. In addition, a focus group was held with health promoters. A grounded theory was developed which showed that lack of guidance and accountability resulted in poor implementation. This was evidenced in the poor training of implementers; poor leadership and collaboration; weak accountability structures; and lack of resources and communication. A draft conceptual framework was developed using grounded data. During Phase 3, the Delphi technique was employed to gain the opinions of local and international experts to refine the framework. A five-point Likert scale with seven questions was sent to experts in a series of two rounds. Findings were collated and used to refine the framework. This study added to the knowledge gap regarding HPS implementation in South Africa. It was concluded that further studies are needed in order improve implementation processes and evaluation and develop standardised tools and indicators for local schools.

Keywords: health promoting schools, school health programmes, health promotion in schools, education and health, South African schooling system

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ABBREVIATIONS

AIDS	Acquired immunodeficiency syndrome
COT	City of Tshwane
DOBE	Department of Basic Education
DOH	Department of Health
DSD	Department of Social Development
FGD	Focus group discussion
GA	General assistant
GDOE	Gauteng Department of Education
GT	Grounded theory
HIV	Human immunodeficiency virus
HPS	Health promoting schools
ISHP	Integrated School Health Policy
LO	Life Orientation
LS	Life Skills
MRC	Medical Research Council
MVPA	Moderate-to-vigorous physical activity
NCDs	Non-communicable diseases
NGO	Non-governmental organisation
NHPP	National Health Promotion Policy
NHPPS	National Health Promotion Strategy
NSFS	National School Feeding Scheme
PA	Physical activity
PE	Physical education
QPE	Quality physical education
RCT	Randomised controlled trial
SA	South Africa
SAPS	South African Police Service
SDOH	Social determinants of health
SGB	School governing body
SSI	Semi-structured interview
STI	Sexually transmitted infection
TB	Tuberculosis

WASH

Water–sanitation–hygiene

WHO

World Health Organization

GLOSSARY

Child

Defined by the Convention on the Rights of a Child (1989) as a person younger than 18 years, unless majority (i.e., the legal threshold of adulthood) is attained at a younger age in a particular country.

Adolescence

Defined by World Health Organisation as the period between ages 10 and 19 years.

Youth

Defined by the United Nations as those persons between the ages of 15 and 24, without prejudice to other definitions by Member States. South Africa's National Youth Policy defines youth as those between the ages of 14 and 35 years.

Young people

Defined by WHO as people aged between 10 and 24 years

Adulthood

Defined by the WHO as a person older than 19 years of age, unless national law defines a person as being an adult at an earlier age.

Programme implementers

The people responsible for delivering the services to the clients (principals, teachers, school governing body, health promoters).

Community participation

A process through which people are enabled to become actively involved in defining issues of concern to them, in making decisions about factors affecting their lives, in formulating and implementing policies, in planning, developing, and delivering services, and in taking action to achieve change.

Process evaluation

A study which aims to understand the functioning of an intervention by examining implementation, mechanisms of impact, and contextual factors.

Implementation fidelity

Whether the intervention was delivered as intended.

Dose

Quantity of intervention implemented.

Health outputs and outcomes

Health outputs are the actual goods or services produced by programmes or organisations (e.g., support group for people affected by chronic diseases). Health outcomes measure the impact or consequences of the output in the longer term (e.g., longer, and healthier lives).

CHAPTER 1

ORIENTATION OF STUDY

1.1 Introduction

The global community has recognised the need to improve the health of children in all countries, as poor health adversely affects children well into adulthood, both educationally and economically.⁽¹⁾ School health programmes have been identified as a means of improving the health of children. One such programme is the health promoting schools (HPS) programme of the World Health Organization (WHO), which is backed by scientific evidence of positive health and educational outcomes in settings where it is implemented well.⁽²⁾

South Africa (SA) has embarked on several school health initiatives, including HPS, to ensure that children get the best start in life, in terms of health and education. However, the challenges with poor health and educational outcomes persist in the country, which raises the question of whether these initiatives are well implemented to produce the expected effectiveness and outcomes. This question gave impetus to this process evaluation study, “how is the HPS programme implemented in Tshwane health promoting schools?” The study focused on the HPS programme because of the available body of evidence on its potential to improve outcomes, even in low-income settings such as South Africa. In this study, the health HPS programme is referred to as a programme, approach, intervention, concept, or initiative; these terms will be used interchangeably. This chapter outlines the study background, problem statement, rationale, research questions, overall aim, objectives, and the organisation of the thesis.

1.2 Background

Children and young people are important in public health.⁽³⁾ The early years of life are vital; experiences at this stage influence decisions made later in life.⁽¹⁾ An estimated 70% of deaths in adults are attributable to behaviours started in childhood.⁽⁴⁾ Ensuring that children have the best possible start in life has a significant effect on health, society and the economy.⁽⁵⁾ A growing body of evidence shows that there can be an anticipated 6–10% return on investment in economic terms because of prevention interventions implemented in childhood.⁽³⁾

The stages of life that present as the most opportune for making improvements to life are the first two years and adolescence, as these are the times when there is rapid brain development.⁽³⁾ These age groups account for a large number of the total population globally. In 2018, an estimated 26% of children in the world were under 15 years of age, and 41% of them lived in Africa.⁽⁶⁾ Young people (10 to 24 years) make up a quarter of the world's population, which is 1.8 billion. Nearly 90% of them live in low- and middle-income countries because of the high fertility rates in these regions.⁽¹⁾

The WHO Global Health Estimates showed that in 2016, over 1.7 million children and adolescents between the ages of 5 and 19 years died globally of preventable and treatable causes. The leading causes of deaths, disease and disability included cardiovascular disease, cancer, chronic lung diseases, depression, violence, substance abuse, injuries, nutritional deficiencies, human immunodeficiency virus/acquired immunodeficiency syndrome/sexually transmitted infection (HIV/AIDS/STI) and helminth infections in children between 5 and 14 years.⁽⁷⁾ Injury was the leading cause of death and disability in school-aged youth.⁽⁴⁾ Important nutritional deficiencies were Vitamin A and Iodine. Vitamin A deficiency was found to be the major cause of preventable blindness, and iodine deficiency was the leading cause of preventable mental retardation and brain damage in childhood.⁽⁴⁾

Health-related behaviours usually start in adolescence and contribute to the increasing prevalence of non-communicable diseases (NCDs) in societies.⁽⁷⁾ Obesity has increased over the years, from less than 1% in 1975 to 6% in girls and 8% in boys by 2018.⁽⁸⁾ Other causes of ill health are a result of environmental risks such as air pollution, unsafe drinking water, poor sanitation, poor hygiene and chemical exposure.⁽⁹⁾

Measures that will reduce and eliminate exposure of children and adolescents to risk factors that result in ill health are important. Intervention measures should start in childhood and need to be sustained through adolescence. The disease burden and causes of mortality in children and adolescents could be prevented or significantly reduced with the implementation of effective school health and youth programmes.⁽⁴⁾

School health programmes are not a new concept. Schools have been teaching health education for decades, and numerous networks exist globally.⁽¹⁰⁾ An effective school

health programme is potentially the most economical investment that any nation can make to improve both health and education in schools.⁽⁴⁾ They enable schools to be a setting which is child-friendly and improves health for all within the school community.⁽¹¹⁾ The WHO encourages the adoption of school health programmes as a strategic approach to prevent important health risks in young people and engage the education sector in efforts to change the educational, social, economic and political conditions that affect learners.⁽⁴⁾ Effective programmes are those that are equitable, sustainable and are able to reach a large population.⁽¹²⁾

Schools are an ideal setting for health education for several reasons. Children spend the bulk of their childhood within school premises⁽¹⁾, presenting the schools with enough time to teach health education within the school hours. Second, the increased enrolment rates across the world allow schools to have increased reach. According to the global school enrolment statistics, 91% of children were enrolled in primary schools and 80% enrolled in lower secondary education in 2015.⁽¹³⁾ The rise in the number of children attending school over the years presents a great opportunity for health education to reach a large population of children, globally and in Africa. Lastly, schools can provide services that are an extension of the primary health care services, providing preventative health services.⁽¹²⁾

The WHO expert committee developed and introduced the HPS approach/concept in the 1980s to improve the health-education link in schools. Previous programmes had failed to significantly reduce the number of individuals engaging in risky behaviour. The WHO defines a health promoting school as, “a school that is constantly strengthening its capacity as a healthy setting for living, learning and working.” This is a holistic, whole-school approach, with health education taught as part of the curriculum and promoted through the culture and ethos of the school; it does not require extra classes dedicated to health education.⁽¹⁴⁾ The foundation or central belief of the HPS framework is that, “for children to learn optimally, they must be healthy”.⁽¹⁾

The HPS framework is inspired by the Ottawa Charter’s action areas, developed at the first Health Promotion Conference in 1986.⁽¹⁵⁾ It has six key features, also called domains or action areas, which are: healthy school policies; physical school environment; social school environment; health skills and education; links with parents and community; and, access to (school) health services.⁽¹²⁾ See **Figure 1** below.

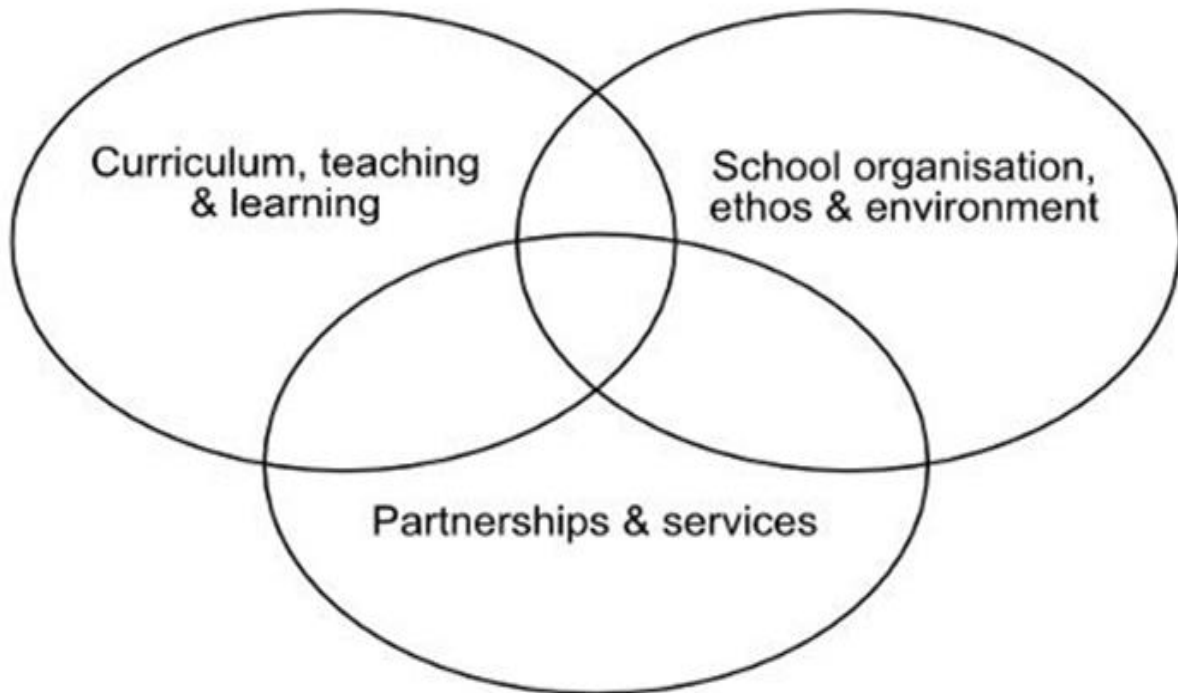


Figure 1: The WHO health promoting school framework ^(16, 17)

The HPS theoretical framework is built on a comprehensive, socio-ecological settings approach, where the learners and teachers are not treated in isolation from the larger social networks in which they live, work and play, with the creation of supportive health environments and community action as central to achieving the desired health outcomes.⁽¹⁸⁾ There is no shortage of evidence of the benefits of the HPS approach in the literature. A systematic review of 67 studies conducted globally showed that HPS produced positive results in schools where it was implemented well. The reported desired outcomes were: reduced body mass index, reduced physical inactivity, increased consumption of fruits and vegetables, prevention of tobacco use, and prevention of bullying.⁽¹⁹⁾

In a study done in Hong Kong health promoting schools, Lee⁽²⁰⁾ found that well-implemented interventions improve school achievements by improving the life satisfaction of learners. Through teaching and learning experiences initiated in the schools, the HPS approach addressed major public health challenges that adolescents experience in their daily lives.⁽²¹⁾ Research in both developed and developing countries has shown that HPS can decrease common health problems, increase the efficiency of the education system and advance public health in all nations. There is an inherent link between health and education; when children are

educated, their health is better in later stages of life and in adulthood.⁽²⁾ Thus, effective health promotion in early life has an impact on children's wellbeing, even beyond childhood.^(22, 23) As a result of its positive outcomes, there is an increasing HPS network made up of various countries that have adopted and implemented the HPS framework,^(24, 25) and South Africa is part of this wide network.

Since its introduction, the approach has been widely adopted in South Africa, with schools in all nine provinces currently declared as health promoting schools. As with global studies, there have also been positive outcomes reported in South Africa. The reports have mainly come from the Western Cape province, where there has been more work done on HPS than anywhere else in the country. This means that there is some local evidence of the potential benefits of the approach, although the reports are limited and not comprehensive.⁽²⁶⁾ This is in line with international research findings by Weare⁽²⁷⁾, who indicated that the benefits of HPS have been far greater in settings where the children are at a higher risk of ill health, such as South Africa.

1.2.1 Recognition in policy

International and local Acts, policies and regulations guide the South African government in its dealings related to the health and education of children. South Africa is signatory to the 1989 United Nations Convention on the Rights of the Child, an obligation to make "the best interests of the child a primary consideration". The country is also signatory to the African Charter on the Rights and Welfare of the Child (1990). This is a follow-up to the United Nations Convention on the Rights of the Child that specifically addresses the dynamic needs of the African child. In September of 2015, the General Assembly adopted the 2030 Agenda for Sustainable Development, to which South Africa is also signatory. South Africa adopted the 2030 Agenda for Sustainable Development, which have placed health promotion within the 17 Sustainable Development Goals (SGDs). Of particular interest in this study were the following goals;

- Goal 3: Ensure healthy lives and promote wellbeing for all at all ages
- Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Trumping all other obligations and declarations is the Supreme Law of the country, the South African Constitution. It aims to ensure that the educational and health needs of the child are met and that their rights are not violated. The Constitution of the Republic of South Africa, Act 108 of 1996, states the following:

- *Section 24(a)*—Everyone has the right to an environment that is not harmful to their health or well-being
- *Section 28(1)(c)*—Children have the right to basic nutrition, shelter, basic health care services and social services
- *Section 28(2)*—A child’s best interests are of paramount importance in every matter concerning the child

Furthermore, there are school health policies in effect in South Africa. These include the National Health Promotion Policy (NHPP) 2015–2019, which is informed by and based on international and regional declarations.⁽²⁸⁾ In 2012, the amended Integrated School Health Policy (ISHP) was introduced.⁽²⁹⁾ It outlines the role of respective departments in addressing the health needs of learners, with the aim of ensuring that a strong school health service operates according to clear standards set across the country.⁽²⁹⁾

The ISHP focuses on addressing the immediate health problems of learners, as well as implementing interventions that can promote their health and wellbeing during childhood and into adulthood. Within this policy are school health initiatives that aim at addressing health and educational needs of children. The HPS framework is one of the international initiatives adapted within the ISHP.⁽²⁹⁾ Although it is promoted as an approach that can deal with public health challenges in the schools and communities, the extent of its effectiveness is not well known because of a lack of comprehensive evaluations of the approach.⁽¹⁹⁾

As mentioned previously, few studies globally have comprehensively evaluated the HPS approach, its implementation and effectiveness. This may, to some extent, be a result of the complexity involved in evaluating school health interventions, because of the multiple components of the interventions.⁽³⁰⁾ In South Africa, the numbers are even lower. The ISHP acknowledges the lack of evaluation studies in this regard and states that more evaluation studies need to be done in South Africa on school health

programmes so that findings may be used to influence public policy.⁽²⁹⁾ The shortcomings of the policy that may be improved by research are its lack of guidance on implementation, monitoring and evaluation processes and reporting mechanisms.

The Tshwane district in Gauteng has adopted the HPS approach in 13 schools. The highest proportion of South African children under the age 15 years live in Gauteng.⁽³¹⁾ This makes it a province that is critical in terms of healthcare and educational priorities for school-going-age children. However, there have been no evaluation studies conducted on the 13 health promoting schools in this district. The potential benefits of the HPS approach can only be experienced if the approach is well designed and implemented.⁽³²⁾ It crucial that both provincial and district health and education departments, and schools implementing the HPS approach, use evidence-based evaluation studies to gain full understanding of their implementation processes. High-quality process evaluations can be used by policy makers, public health workers and researchers to identify interventions that are effective and learn how to improve those that are not working well.⁽³³⁾

1.3 Problem statement

In Africa, most schools face serious health challenges. Some exist in the school while others are outside the school premises, in the community.⁽³⁴⁾ School health services are aimed at dealing with such challenges, by promoting healthy lifestyles and dealing with the psychosocial and physical health conditions of learners.⁽³⁵⁾

The HPS approach was introduced in South Africa post 1994 as a means of redress. It was favoured, alongside other policy reforms such as the Nutrition School Feeding Scheme and the 'No Fee' school policy, because it was seen to have the potential to improve disparities in education and health.^(36, 37) Despite these policy efforts, challenges still linger post-apartheid, and learners and teachers are still faced with health and educational issues that need immediate attention.

South Africa has an array of challenges regarding the health of school-aged children. There is an increase in NCDs and other infectious diseases such as HIV and tuberculosis (TB). There are high rates of teenage pregnancy, substance abuse, poverty, violence, environmental issues and poor educational outcomes.⁽²⁸⁾ These structural factors lead to school dropout, especially amongst the poor, which invariably

leads to poor health and unemployment in later life. The government has struggled to improve the quality of education and deal with unhealthy environments in which children live and learn.⁽³⁸⁾

Empirical data have shown the benefits of the HPS framework, internationally and locally, as an inexpensive, flexible and effective intervention that is well suited to health promotion in sub-Saharan African countries and other middle- and low-income countries.⁽³⁹⁾ The advantage of the programme is that it does not mean extra work for the teachers and learners but is a different and effective way of dealing with health problems found within and outside the school.⁽⁴⁰⁾ It is a framework that allows schools to benefit from improved health of the school community, while at the same time encouraging learners to seek and value education.⁽³⁹⁾ Few studies have been conducted to assess and describe the implementation processes of the HPS intervention. Additionally, these few available studies have not been comprehensive—most have not looked at the six domains of the HPS framework or clearly outlined the methodologies used.^(41, 42) Studies have also failed to detail how the context of the settings affected implementation. Understanding context is important, because the success of HPS is dependent on its implementation and the contextual factors where it is implemented. Therefore, there is a need for more research to fill the gaps in knowledge on the implementation of HPS under real-life conditions and to identify key barriers and facilitators to implementation in various contexts.⁽⁴³⁾

Despite its wide adoption in South Africa, few evaluation studies have been conducted to show the strengths, weaknesses, and effect of the programme in the local context. In a review by Mukoma⁽⁴¹⁾, there were no formal evaluations on HPS from Africa, with the bulk of published information on HPS in South Africa coming from conference reports and review meetings. Therefore, there is little evidence to show how HPS works in practice or to explain how confident the implementing teams at the schools feel in their ability to operationalise the comprehensive integrated programme.⁽⁴⁴⁾ Furthermore, there is a dearth of HPS evaluation studies that focus on the feasibility of HPS implementation based on the contextual factors, which contribute significantly to the health-seeking behaviours of any community.⁽⁴⁵⁾

In the City of Tshwane (COT), there are 13 schools that are accredited as health promoting schools, and they have never been evaluated since accreditation. During

the initial recruitment for this study, a Gauteng Department of Education (GDOE) official in charge of health promoting schools in Tshwane spoke of his curiosity as to whether what they were doing at the schools was being done properly and if it was worthwhile in terms of outcomes.⁽⁴⁶⁾ This lack of evaluation studies means that it is not known what is happening at the schools, what is being done, to what extent, by whom, why, the challenges faced by implementers, the effects of the intervention, and how the processes can be improved. Of the nine provinces, the Western Cape has done the most work in implementing and evaluating HPS, yet most of their work is reported in review documents, and the published studies have not looked at the six domains of HPS.⁽²⁶⁾

The City of Tshwane has 598 public schools⁽⁴⁷⁾, however, only 13 of those schools are health promoting schools. Given the potential benefits of the approach, there is a need for advocacy for the approach to be expanded to most schools in the country.⁽²⁹⁾ However, advocacy for any programme requires a sound body of evidence, showing what has been done and the effects thereof, and this information is currently not sufficient in South Africa. There is a need for evidence-based evaluations to describe how HPS has been implemented in COT, the extent of implementation, the sustainability of the intervention and to help improve on current evaluation tools, adding new knowledge on local HPS implementation.

1.4 Rationale

The success of the HPS approach is dependent on its implementation. There is a need for more research to fill the gaps in the implementation of HPS under real-life conditions, to identify key barriers and facilitators to implementation⁽⁴³⁾ and to develop tools and guidance needed by schools for HPS evaluation purposes.⁽²⁶⁾ Filling the gaps means providing new knowledge regarding the processes involved in HPS implementation. To meet this requirement, this evaluation will conceptualise, through research data, the concepts that are involved in HPS implementation in COT and describe how they are connected. This will facilitate a deepened understanding of the phenomenon, which will be depicted as a conceptual framework. Elements of Straussian grounded theory will be used in this study, as it gives freedom and license to concept generation and conceptualisation, resulting in new knowledge on the phenomenon.⁽⁴⁸⁻⁵⁰⁾

As reviewed in the literature above, there is still little knowledge on the implementation processes and outcomes of HPS in South Africa, and there is currently no conceptual framework on HPS implementation in COT. Conceptual frameworks make ontological assumptions relating to the “way things are”, “the nature of reality,” “real” existence, and “real” action. The epistemological assumptions relate to “how things really are” and “how things really work” in an assumed reality. The methodological assumptions relate to the process of building the conceptual framework and assessing what it can tell us about the “real” world.⁽⁵¹⁾

According to Peck⁽⁵²⁾, the ultimate aim of an evaluation study is that a person/agency will use the evaluation results for the improvement of programme operations or results. Other reasons for an evaluation study are to generate new knowledge for theoretical purposes, inform decision-making, get support for effective programmes and policies, take resources away from unproductive programmes and redirect them to where programmes are effective, and improve programme effectiveness as a response to social need. The ISHP makes an appeal for evaluation studies to be done on school health programmes to focus on the coverage, quality, and sustainability of services. Such evidence can be used to influence public policy.⁽²⁹⁾

This evaluation will cover the areas suggested by the ISHP⁽²⁹⁾ and other areas suggested by Moore et al⁽³³⁾ for evaluation studies to investigate. These include recruiting participants and keeping them in the programme, the social and environmental factors of the community, resources required and used in actual implementation versus the intended plan, barriers and problems encountered, and the continued use of the programme over time.

Schools need tools and guidance on how to evaluate the HPS implementation process.⁽²⁶⁾ The HPS approach is constantly evolving because of new knowledge gathered through scientific evaluation studies and policy development. Schools and school health practices are also not stagnant, and this should be reflected in the evaluation tools and processes used at any particular time.⁽¹²⁾ The tool used in Gauteng to evaluate schools has not been amended. Accordingly, this study intends to assess the appropriateness of the tool in the current dispensation of schooling in COT.

The significance of this study is that it will provide policy makers, government (health and education), academia, and schools with a framework to improve HPS implementation in the district and ultimately improve the health and educational outcomes of children and their surrounding communities. Secondly, other researchers who wish to conduct evaluation studies in other settings can adapt the framework. Thirdly, it could be used by researchers who wish to investigate the health outcomes of the HPS in COT and other settings where the intervention is implemented.

1.5 Research aim, questions, and objectives

A single process evaluation cannot answer all questions regarding an intervention. It therefore becomes necessary to choose the most important questions and answer them comprehensively rather than attempt to give unsatisfactory answers to numerous questions.⁽⁵³⁾ This evaluation has selected the most pressing questions to be answered in this study. The development of the questions was informed by the literature review and preliminary interviews with some of the implementers, guided by the Medical Research Council's functions of process evaluation.⁽⁵⁴⁾

Research aim
The overall purpose of this study was to evaluate the implementation of the health promoting schools programme to develop an HPS conceptual framework.
Central research question
What is happening at health promoting schools with regard to implementing the HPS programme?
Phase 1: Audit tool (fidelity and context)
<p>The research questions for this phase were:</p> <ol style="list-style-type: none"> 1. To what extent is the HPS concept implemented in COT? 2. What variations in implementation occur in the different schools? 3. Is the GDOE audit tool an appropriate tool? <p>Objectives were:</p> <ul style="list-style-type: none"> • To assess and describe the extent of implementation of the HPS concept across COT schools • To make recommendations on improving the audit tool • To discuss the findings and their implications for research, practice, and policy
Phase 2: Semi-structured interviews and a focus group discussion

(what is done and how, context, reach, and adaptations)

The research questions for this phase were:

1. What are the key implementers experiences, views, perceptions, and opinions of the HPS programme?
2. What are the barriers and facilitators for implementing the HPS programme in COT schools?

Specific aims for this phase:

1. To understand the experiences of the key implementers in implementing the HPS programme
2. To understand the processes involved in HPS implementation

Objectives were:

- To collect and analyse data on the experiences, views, perceptions, and opinion of key stakeholders
- To develop a framework of HPS implementation for COT schools
- To discuss the findings and its implications for research, practice, and policy

Phase 3: Delphi technique

The research question for this phase was:

How can the conceptual framework be refined?

Objectives were:

- To refine the conceptual framework
- To discuss the findings and their implications for research, practice, and policy

1.6 Organisation of thesis

This thesis is organised into nine chapters.

Chapter 1: This chapter presents the overview of the study, including the aim, research questions, objectives, summary of the study design, ethical considerations, data management, and the organisation of the thesis.

Chapter 2: This chapter is a summary of the literature review conducted on health promoting schools locally and globally. The literature review informed the development of the research questions and the conceptual framework.

Chapter 3: This chapter outlines the researcher's philosophical approach and gives rationale for the use of mixed methods. This chapter also details the research methodology for the three phases and the quality criteria standards observed in the study.

Chapter 4: This chapter report the descriptive findings of school audits in Phase 1.

Chapter 5: This chapter discusses the audit data findings and their use in Phase 2.

Chapter 6: This chapter presents the findings from the qualitative analysis using grounded theory.

Chapter 7: This chapter discusses Phase 2 findings and presents the proposed framework.

Chapter 8: The chapter presents the Delphi study done with experts in order to refine the framework.

Chapter 9 is the conclusion to the study, which includes a summary of the findings, the limitations, implications, and recommendations.

1.7 Chapter summary

Children globally face challenges of ill health, and the WHO's annual mortality data indicate that death results mostly from preventable diseases and accidents. The increasing number of children affected by NCDs, communicable diseases and accidents has become an urgent public health issue. Additionally, these health challenges affect children and young people well into adulthood, with adverse outcomes for the individual and society as a whole.

Schools have been seen as an ideal setting for health education for various reasons, especially the fact that the majority of children spend most of their time in school. School health programmes have for decades been used as a means of educating children and young people on safer lifestyle choices. However, there have been some challenges, as some have yielded no significant outcomes. The WHO introduced the HPS framework, which had worked on fixing previous programme errors, mainly by dealing with the whole school community rather than individualised intervention strategies, as previously done by the other programmes.

Governments worldwide have adopted and adapted the framework, including South Africa. It has been a welcome initiative in South Africa where children live with poor health and substandard educational outcomes. The ISHP and other policies support the programme; however, the policy is vague on implementation and evaluation guidelines for the implementers and evaluation studies are limited. This means that the implementers and the commissioning government have no knowledge of their successes or failures with the intervention. The intention of this study to was to evaluate the implementation processes to explain factors impacting on implementation and develop a conceptual framework in order to improve implementation in the district and the province.

Chapter 1 has provided a background to the research, the problem statement, the rationale, and the research aim and objectives. It has also outlined how the thesis will be organised. The next chapter is a detailed literature review on health promoting schools.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

A literature review or systematic review on the topic of interest assists in giving the researcher direction on what is already available on the topic and points to gaps in the science. In grounded theory (GT) studies, the literature can be used (1) to improve theoretical sensitivity, (2) as data during analysis, and (3) as a source of theoretical codes.⁽⁵⁰⁾ This literature review includes multidisciplinary research from the fields of health, education and the social sciences, as well as local media reports and preliminary interviews with key implementers involved with the HPS programme in COT. The aim of the review was to find relevant peer-reviewed and “grey” data on the genesis, benefits, implementation processes, evaluation, and effectiveness of the HPS programme, both internationally and locally, and extract useful concepts from the data to assist in developing a conceptual framework suited to the COT context. The literature review informed the research questions, aim, objectives and study design.

2.2 Search strategy

The literature searches were conducted using the PubMed, MEDLINE, Google Scholar, and Google databases. Health promoting schools and evaluation fall under a number of disciplines, such as education, social sciences, health, economics, politics and monitoring and evaluation; thus, they were found in various academic journals. The following search terms were identified as most appropriate and used throughout the study: *health promoting schools, school health programmes, health promotion, education and health, South African schooling system, implementation, and evaluation of complex school programmes.*

2.2.1 Search for grey matter

Grey literature included local and international HPS policies, laws, and regulations and the South African Bill of Rights.

2.2.2 Inclusion criteria

For the purpose of this review, articles were included if they met the following criteria:

- Published in the English language
- Published between 2008 and 2021 (except for original research)

- Discussed health promoting schools globally, in Africa, and in South Africa

2.3 The concept of health promotion

The first conference on health promotion, called the Ottawa Charter for Health Promotion, was held in 1986 in Ottawa, Ontario, Canada. It addressed public health issues and expectations in the developed world and looked into health concerns from developing countries.⁽⁵⁵⁾ The WHO regards health as a fundamental right and defines health promotion as, “the process of enabling people to increase control over their health and its determinants, and thereby improve their health”.⁽⁵⁶⁾ Health involves social and personal resources and physical capacities—it is a necessity for everyday life.⁽⁵⁵⁾ This understanding of health demonstrates that health is not only achieved through efforts of the health departments; it transcends healthy lifestyles to become wellbeing.^(55, 57)

Consequently, the conference developed a health promotion logo that is still being used (see **Figure 2** below). It shows the five domains/action areas of health promotion:^(16, 55) These are:

- to build healthy public policy;
- to create supportive environments for health;
- to strengthen community action for health;
- to develop personal skills; and
- to re-orient health services.

The logo also includes three basic health promotion strategies: enable, mediate, and advocate.

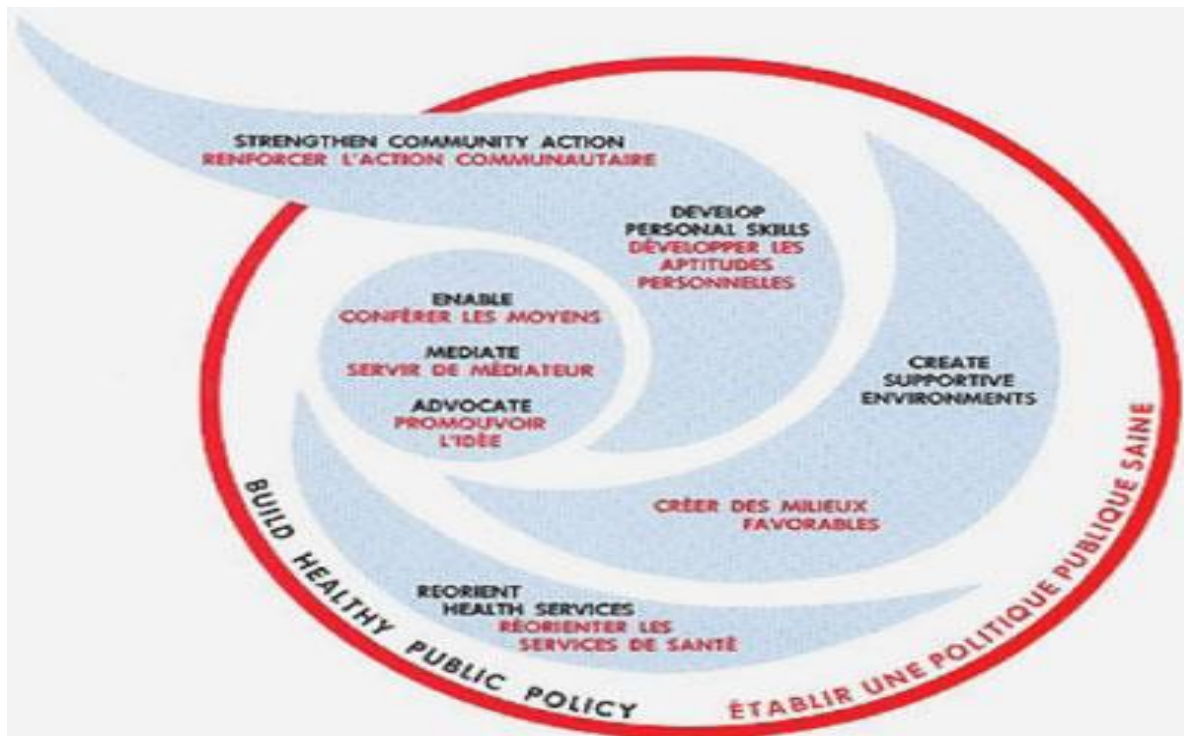


Figure 2: Health promotion logo—First International Conference on Health Promotion, Ottawa, 1986.⁽⁵⁵⁾

Since the first health promotion conference held more than 3 decades ago in Ottawa, there has been advancement in health promotion strategies. Over the years, there have been several evidence-based strategies developed to improve the implementation of the Ottawa Charter action areas. These strategies included having health in all policies, improving health literacy, determinants of health, community health approaches, and settings approaches.

There have also been subsequent international health promotion conferences including:

- examining healthy public policy-making (Adelaide 1988)⁽⁵⁸⁾ and the creation of supportive environments (Sundsvall 1991)⁽⁵⁹⁾;
- situating health promotion within the wider context of globalization (Ottawa 1986 and Bangkok 2005)⁽⁶⁰⁾;
- considering capacity building for health promotion and its role in addressing the determinants of health (Jakarta 1997⁽⁶¹⁾ and Mexico 2000⁽⁶²⁾);
- calling for action to close the implementation gap between evidence and its concrete application in health development (Nairobi 2009)⁽⁶³⁾ and;

- the 8th Global Conference on Health Promotion in Helsinki (2013) reviewed the health-in-all-policies approach and established guidance for concrete action in countries across all levels of development.⁽⁶⁴⁾

The latest conference was the 9th Health Promotion Conference held in Shanghai, which took a bold step to include health promotion within the 2030 SDGs. The Shanghai Declaration recognized that health and wellbeing are essential to achieving sustainable development. The conference focused on the challenges of transforming the Ottawa Charter action areas into tools that can be used in the current setting to promote health. The increase in globalisation, infectious diseases, noncommunicable diseases (NCDs), social inequalities, and the rise in mental health have prompted the urgency for new innovative means to address social determinates of health through SDGs.⁽⁶⁵⁾

The 17 SDGs were identified in 2015 during the United Nations General Assembly held on the 25th of September titled, “Transforming our world: the 2030 Agenda for Sustainable Development”. The 17 goals are aimed to “ensure that all human beings can fulfil their potential in dignity and equality in a healthy environment.” They also bring into sharper focus the many unprecedented and multi-faceted threats to health and well-being. The goals serve as a guideline on how countries can prioritize resources and develop national targets and responses.⁽⁶⁶⁾

The 17 goals cover a vast range of areas which are all somewhat related to health. These include poverty reduction, hunger, health, education, inequalities, sanitation, energy, social justice, the environment, and climate change.⁽⁶⁶⁾

2.3.1 Health promotion in South Africa

South Africa has its NHPP 2015–2019,⁽²⁸⁾ informed by and based on international and regional declarations, to which SA is signatory, as well as national policy and legislative mandates. See **Appendix 1** for international declarations and South African key Acts and regulations.

The policy takes into cognisance the fact that health promotion is not limited to certain populations, specific groups, individuals, or specific behaviours in certain settings but should be inclusive. It also recognises that when health promotion is implemented

together with other strategies such as education, community development, policy, legislation, and regulation, it produces far better results than when it is applied in isolation. An example is in education, where health education has become a comprehensive programme in schools.⁽²⁸⁾

To show its commitment to health promotion, the South African National Department of Health has created the Health Promotion Directorate, with provincial units tasked with running health promotion activities.⁽⁶⁷⁾ The health promotion policy provides a broad framework for health promoters and other stakeholders at national, provincial and district levels to implement health programmes; it also provides direction to other stakeholders on how to promote health. ⁽²⁸⁾

In the education sector, provision of school health services is an urgent matter, and it is prioritised in national school policies and programmes. During the 2010 State of the Nation Address, the then President Mr Jacob Zuma committed to reinstating school health programmes across the country. He stated that this would be done as part of the health sector's efforts to re-engineer and strengthen primary health care services. This urgency to meet the needs of children led to the redesigning of the 2003 School Health Policy, which had some shortcomings and had been poorly implemented previously.⁽²⁹⁾

In 2012, an amended policy called the Integrated School Health Policy⁽²⁹⁾ was introduced as a follow-up to the president's commitment made in 2010. It outlined the role of respective departments in addressing the health needs of learners, with the aim of ensuring that a strong school health service would operate according to clear standards across the country. This policy focuses on addressing the immediate health problems of learners, as well as implementing interventions that can promote their health and wellbeing during both childhood and adulthood. It includes programmes such as the Care and Support for Teaching and Learning programme, which aims to realise the educational rights of all children, including those who are most vulnerable, through schools becoming inclusive centres of learning, care, and support. The policy contains international, regional, and national initiatives. One of the key initiatives is the HPS initiative. It also outlines what needs to be done and the structures of responsibility to implement the initiatives, yet what seems to be missing is guidance

on the “how” of the implementation of these school health initiatives and their monitoring and evaluation.⁽²⁹⁾

This policy states that “health promotion aims to create a healthy school environment by promoting the general health and wellbeing of learners and educators, and by addressing key health and social barriers to learning in order to promote effective teaching and learning”.⁽⁶⁵⁾ There are four strategic objectives for school health promotion, and they are:

- to increase knowledge and awareness of health promoting behaviours
- to increase sexual and reproductive health knowledge, skills and decision-making among learners, educators, and school support staff;
- to develop systems for the mainstreaming of care and support for teaching and learning; and
- to facilitate early identification and treatment of health barriers to learning.

Despite these sound objectives, school health programmes have not yet achieved the desired outcomes, leading to a number of challenges relating to health and other issues that prevent many children from growing up into productive and capable citizens.⁽⁶⁸⁾

2.4 School health programmes

The introduction of school health programmes dates back to about four decades ago. They have produced very welcome results in terms of improving health knowledge and behaviours in learners. The most documented improvements in health-related behaviours included reduced smoking, increased good food choices and increased physical activity. The reported success of school health programmes has inspired the development of more comprehensive curricula and teaching manuals. This has also led to an appreciation of the influence that the wider school community has on health and health behaviours within the school.^(40, 68) It is, however, unfortunate that despite the potential benefits of these school health programmes, implementation success and sustaining the outcomes in a complex and ever-changing school system has remained a major challenge in most settings. This could be as a result of the government giving health promotion low priority, resulting in fragmentation and poor coordination. The new genre of school health programmes has attempted to be all-inclusive and holistic in their approach to school health. One such intervention is the HPS concept.

2.4.1 The health promoting school framework

Traditionally, the focus of health education has been on furnishing individuals with information on health or developing their skills and attitudes to enable better health-related choices.^(40, 69) These approaches have not been successful, as they have not shown any worthwhile decrease in risky health behaviours amongst individuals. In response to this failure of health education, in the early 1980s, the WHO expert committee developed the HPS approach. This is unique in that it is a whole-school approach that includes the learner and the whole school community in health promotion activities and learning.^(69, 70)

2.4.1.1 Programme theory and causal assumptions

Programme theory and causal assumptions represent what the intervention assumes to be the cause/s of the problem and what actions should be taken to solve that problem.⁽⁶⁸⁾ There are simple and complex interventions based on the number of causal assumptions and proposed solutions. For example, a simple intervention may assume that lack of knowledge is the problem. It then proposes that the way to solve risky health behaviours will be to supply the target population with pamphlets on the subject. Complex interventions, on the other hand, tend to have many causal assumptions, with more actions necessary to change the health behaviours. This is the case with the HPS intervention, where six action areas have been proposed to solve a myriad of school health problems. It is important that an intervention is explicitly defined, as this will allow for meaningful evaluation at a later stage. It helps in assessing whether the assumptions of the intervention play out as assumed real life.⁽³³⁾

The theoretical underpinnings of the HPS framework are based on the WHO “settings” approach to school health promotion.⁽⁶⁸⁾ In the school context, this involves a new way of teaching health education. The traditional teaching method is combined with actions to improve the physical and social environments, school policies, and the relationship between the school, home and local community in ways that promote health.⁽⁵⁴⁾ There is scientific evidence supporting the effectiveness of school health promotion programmes that take a whole-school approach, as is the case with the HPS. For instance, evidence has shown that health education in schools is only successful when it is done in conjunction with other health promoting programmes and involves parents,

families and the community at large.⁽²²⁾ According to the Ottawa Charter, “Health is created and lived by people within settings of everyday life; where they learn, work, play and live”.⁽²⁰⁾

The HPS framework targets learners and their community to identify health risks and prevent the risks. This is done by empowering the community to work together with the health, education, and other available social services. The HPS framework’s purpose is to bridge the gap between different sectors and foster a working relationship between the various departments, in order to promote healthier public policy and cost effective, equitable and higher quality health promotion actions.⁽⁷¹⁾ The HPS framework was developed for schools as they are seen as an ideal setting to achieve the aims of a holistic school intervention.⁽⁷²⁾

2.4.2 The school as an ideal setting for health education

Schools create ideal spaces for health education. They are ideal for a number of reasons. Learners and school staff spend most of their lives at work and school; health programmes can reach the parents and the school community.⁽⁷³⁾ Using schools for health education in developing countries is a useful strategy in the control of both communicable diseases and NCDs. These countries can use cost-effective school-based treatment to fight disease and improve the health of learners.⁽⁷⁴⁾ The utilisation of schools in this manner has been implemented in low- and middle-income countries, and the outcomes have been positive. Developed economies, on the other hand, use schools as an extension of primary health care because they provide basic health care services to learners.⁽⁷³⁾

Additionally, schools have now increased reach as it pertains to children compared to any other platform. This is due to declarations such as Article 26 of the Universal Declaration of Human Rights (1948), which states, “Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages.”⁽⁷⁵⁾ Such laws and obligations for governments have improved the viability of using schools for health education, as a greater number of children can now be reached in schools.⁽⁷³⁾ The challenge has been to convince all stakeholders that schools can be used for more than teaching the formal academic curriculum.

2.5 Contextual factors: the health-education link

The common perception that education is just a gathering of information and basic life skills and has no connection with health has minimised the potential of schools as ideal settings for health education.⁽⁷⁴⁾ The relationship between health and education is often overlooked. Schools have been reserved for only achieving academic outcomes, while health outcomes have been excluded as part of a school's responsibility. Education and health have been treated separately from each other, education being achieved within the school and health outside the school.⁽⁴⁵⁾

On the contrary, "education is a prerequisite for health" as noted in the WHO Constitution.⁽⁷⁶⁾ Education gives the learner the skills needed for employment, a healthier life and to contribute positively to the lives of their families and communities.⁽⁷⁷⁾ Good health supports improved learning, while health-related factors such as illness, fear, violence, and poor hygiene and sanitary conditions decrease reaching learning outcomes and undermine the investment made into education. This suggests that education and health cannot and should not be treated separately.⁽⁴⁵⁾

Efforts to reform schools and close the educational achievement gaps have not yet targeted the reduction in educationally relevant health inequalities, which adversely affect educational outcomes, such as assessment scores.⁽⁷⁸⁾ There is a clear causal reciprocal link between the following three factors: familial, social, physical and economic environment; academic achievement and educational attainment; and health. Therefore, regardless of the educators' dedication to teaching effectively and other appropriate schools structures, educational attainment will remain a challenge and limited as long as learners are not motivated or able to learn due to various health-related factors.⁽⁴⁵⁾ **Figure 3** below shows the relationship between health and education.

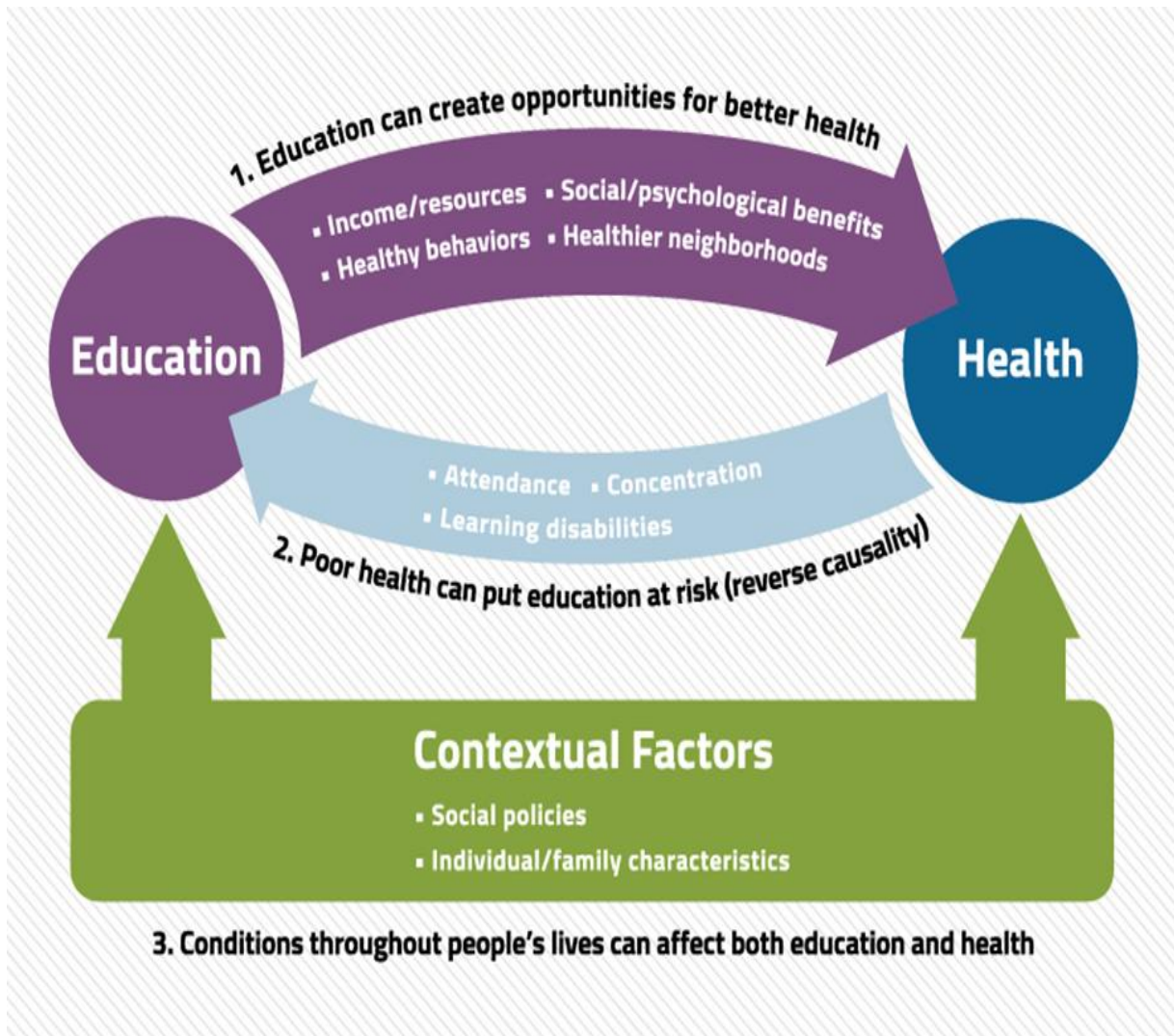


Figure 3: The three main connections between health and education⁽⁷⁷⁾

In South Africa, learners produce far worse academic outcomes when compared with countries of similar economic development. The Economist rated South Africa 75th out of 76 countries in the 2015 rankings of the Organisation for Economic Co-operation and Development.⁽⁷⁹⁾ In a 2016 survey, the main reasons provided by learners for not attending any educational institutions in South Africa were lack of money and poor academic performance.⁽⁸⁰⁾ This is despite various policy efforts to improve school retention and educational outcomes in schools across the country. Available research has shown that learners are affected by an array of social determinants of health (SDOH) that adversely affect their health and educational outcomes.⁽⁴⁵⁾

2.5.1 Social determinants of health

The WHO has named unhealthy diets, tobacco use, alcohol and physical inactivity as the four major causes of NCDs in children and adolescents.⁽⁷³⁾ Children worldwide are

exposed to the same health conditions as adults, but are even at greater risk because they do not have the experience of dealing with the risk factors and the condition itself. These children have an increased risk of developing NCDs in adulthood, mostly being cardiovascular diseases, cancers, chronic respiratory diseases, and diabetes. There is a high prevalence of mental disorders in adolescents globally, with half of adult mental disorders having started in childhood. These statistics underpin the importance of prevention in childhood rather than implementing treatment measures in adulthood.⁽⁷³⁾

In the South African context, an increasing number of NCDs in both rural and urban settings have strained the economy and health system. Unique to South Africa is the quadruple burden of communicable diseases, NCDs and maternal and injury-related disorders.⁽⁸¹⁾ In 2015 the National Strategic Plan for the Prevention of NCDs 2020-2025 was developed to serve as a guide for the implementation of actions to redress and reverse potential adverse consequences of an increasing rate of NCDs. The policy recognises that there needs to be urgent and targeted interventions to promote health and provide equitable care for all people with NCDs.⁽⁸²⁾

Much of the health challenges faced by children and adolescents are related to social determinants. TB and HIV are serious concerns, with an estimated 6.1% of the population living with HIV and the country having the third largest number of TB incidences in the world.⁽⁴⁰⁾ These infectious diseases seem to affect the poor and disadvantaged more than other groups. To clarify, structural factors are a major cause of poor health, especially income inequality and poverty. The high TB and HIV infection rates are not only a result of poor disease knowledge; the fact that most people live under poor conditions is a contributing factor. For instance, poor ventilation in homes contributes significantly to the spread of TB in disadvantaged South African communities. Likewise, childhood NCDs and malnutrition are mainly due to poor dietary intake and poor nutrition caused by poverty.⁽⁸³⁾

However, HIV infection remains a challenge in school-aged children. Although the infection rates have decreased over the years, there is a concerning spike in HIV infection as adolescents' transition into adulthood, especially amongst orphans and other vulnerable children. Ill health, such as HIV infection, results in children missing school and even dropping out.⁽⁸⁴⁾ Teenage pregnancy is also on the rise, a total of 106

383 registered live births occurred among adolescents 10-19 years in 2019.⁽⁸⁵⁾ Pregnant teenagers are more likely to experience adverse outcomes because of the pregnancy and are more likely to not achieve optimum academic attainment, compared to their counterparts who had delayed pregnancies.⁽⁸⁶⁾

An edition version of the *Cape Argus* on 13 April 2018 ran an article with the title, “Toilets still the pits at schools despite deaths” written by Bhagwan.⁽⁸⁷⁾ The article discussed the case of five-year-old Lumka Mthethwa, who fell into a pit latrine at her school in the Eastern Cape and died from drowning in 2014. It also referred to Michael Komape, a five-year-old learner who died from drowning in a pit latrine at his school in Limpopo in 2014. And in 2015, while four-year-old Samuel was playing at his school in Limpopo, he fell into a pit latrine and drowned. The Water Research Commission study reported that sanitation challenges in schools are widespread across South Africa, particularly in the rural schools. The poor state of sanitation compromised the learners’ ability to concentrate and perform at their best in the classroom. Besides, poor sanitation in schools is a violation of the rights of children to safety, health and dignity.⁽⁸⁸⁾

In the past few years, the Gauteng Member of the Executive Council (MEC) of Education has been in the media frequently, discussing cases of violence, assault, sexual assault, and vandalism in the schools. Countrywide, there has been a scourge of violence in the schools, and numerous videos have gone viral on social media, showing learners fighting each other or the educators. On 2 November 2018, Riaan Grobler⁽⁸⁹⁾ wrote an online article for NEWS 24 called “Violence and killing at SA schools: These stories shocked us in 2018”. It highlighted some of the violent acts committed in schools by learners in 2018. The incidents included stabbings, throwing of stones, assault, and sexual assaults, with some incidents resulting in deaths:

- Grade 1 pupil stabbed to death by a high school learner, stone thrown at teacher, water poured on a teacher's face, attempted stabbing, learner taking bodyguard to school as protection from bullies, learner killed over a cell phone, toy gun pointed at teacher, bus driver assaulted, teacher stabbed to death and learner stabbed to death by schoolmate

South Africa is described as having a “culture of violence. Public spaces in the country are often unsafe, and on a daily basis, young people are exposed to different types of crime in the home, in public spaces and in the schools.”⁽⁹⁰⁾

In South Africa, amongst other benefits, schools have the potential to reduce HIV and TB infections because they can develop skills and knowledge to learners on the prevention of TB and HIV and increase the use of preventative measures and services such as condoms, HIV testing and counselling, medical male circumcision and health care facility consultations.⁽⁸³⁾ Nevertheless, it would be unrealistic to expect that schools would be able to solve all the health issues faced by learners. Schools can only but contribute in part to improving educational disparities. There are other stakeholders that need to be part of the workforce tackling health and educational challenges, such as families, communities, health care systems, legislators, media and economic policies.⁽⁴⁵⁾

As can be seen above, the South African learner is faced with numerous challenges including ill health, poverty, poor environmental conditions (violence and sanitation) and educational inequalities, all linked to social determinants of health. The socio-ecological framework is often used to provide better understanding of SDOH (see **Figure 4** below). The framework identifies and describes the interconnectedness of influences on health seeking behaviour such as family, community relationships and the societal and cultural norms that can either promote or hinder health promotion efforts.⁽¹⁶⁾ Basch⁽⁴⁵⁾ elaborated that since educational outcomes are influenced by various factors, each health factor impacting on a learner should not be treated in isolation.



Figure 4: A framework reflecting five key areas of social determinants of health⁽⁹¹⁾

The encompassing objective of the HPS approach is to achieve academic goals, through addressing various health issues within the education framework, and improve health literacy, to improve the health-education link.^(21, 92) According to the WHO Expert Committee, “HPS could simultaneously reduce common health problems; increase the efficiency of the education system; and thus advance public health, education, social and economic development”.⁽⁷⁴⁾ The framework is based on the principle that health and education should not be addressed in isolation—hence the six broad action areas of the HPS framework, which include policies that address the physical school environment, the social school environment, links with parents and community, and access to school health.

Studies have also focused on the role of government in enabling the success of HPS implementation and have not looked deeply into the roles and perceptions of the key implementers (usually locals) and other community-related factors or SDOH. In South Africa, a few studies have looked at barriers to implementation. This studies in Mohlabi

et al⁽⁷²⁾ and Macnab et al.⁽³⁹⁾ They listed barriers to implementation, but have not described the local-context influencers, such as family and the community's social factors, and their influence on the HPS implementation success. These aspects greatly impact on implementation success and need to be researched. Furthermore, schools as a system are diverse, and each school should be treated according to its own particular context.⁽⁹³⁾

The gaps seen in the literature may be attributed to the fact that HPS has multiple pasts, and it requires comprehensive evaluations to cover all aspects that affect its implementation. Part of the purpose of this study was to understand the contextual factors that affect implementation in the various communities of interest and also explain how key implementers adapt the programme for their context.

2.5.2 Adopting the health promoting school concept in South Africa

Since the first democratic elections in 1994, the South African schooling system has gone through a protracted period of transformation, mainly mandated by local and international laws and Acts. Firstly, the Constitution of South Africa states that the government has the responsibility to improve the quality of life of its citizens and allow each person the freedom to reach their full potential.⁽³⁷⁾ It also has responsibility of funding education through public funds (Section 34).⁽⁸³⁾ Secondly, the Freedom Charter of 1955 states that "the doors of learning shall be open to all".⁽⁹⁴⁾ Thirdly, the South African Schools Act developed in 1996 aims to close the imbalances caused by the previous government, especially concerning governance and funding methods.^(37, 95)

South African schools are plagued by numerous challenges, namely poor access to education, high school dropout rates, poor learning outcomes, and increased danger in the learners' environment.⁽²⁶⁾ In addition, most schools in previously disadvantaged communities are poorly resourced, have limited facilities, experience poor parental involvement,⁽⁹⁶⁾ are overcrowded, and have inexperienced teachers.⁽³⁷⁾ The post-apartheid government has, however, been working to correct the challenges and achieve their mandate, as required by the Constitution.

To achieve this, the following policy and institutional reforms were introduced in schools:⁽³⁷⁾

- No-fee schools: Schools were designated into quintiles, so that the poorest schools could get more funding and support from the government. This system is based on the socioeconomic conditions of the schools and the community around them.⁽³⁷⁾ Quintiles 1, 2 and 3 are the poorest schools; therefore, they receive more funding from the government and are called no-fee schools, while Q4 and 5 schools are fee-paying schools and receive less funding.⁽³⁷⁾
- Compulsory schooling: The 1996 School Act declares that education is compulsory for all children aged 7 (Grade 1) to 15 years.⁽²⁶⁾
- The National School Feeding Scheme (NSFS), aimed at improving learner concentration and school attendance, was implemented so that learners remain in school and learn effectively.⁽³⁶⁾ Faber et al(97) reported that a considerable proportion of South African schoolchildren attend school hungry or without having had any type of breakfast, which affects their ability to learn. Quintile 4 and 5 schools have no NSFS.⁽³⁶⁾

These reforms have resulted in significant increases in the number of learners attending and remaining in school, especially in previously disadvantaged communities.⁽³⁶⁾ In addition to the above-mentioned reforms, the government still needed to do more in the way of redress and complying with the Constitutional mandate. In addition to the no-fee schools, the compulsory education and the NSFS, the government also introduced the health promoting school approach in 1994.

The country took to the new initiative well, and the adoption was countrywide. By the year 2006, there were schools in all nine provinces that were identifying themselves as health promoting schools.⁽⁹⁸⁾ The first HPS national conference was held at the University of the Western Cape in 1996 and 1997. By the end of 2000, a draft of national guidelines for HPS in SA had been developed.⁽²⁶⁾ After six years (1994 to 2000) of institutionalising the concept and integrating it, it was adopted into the 2003 School Policy.⁽²⁶⁾ The departments of health and education have endorsed the HPS approach and have policies that support it. These include:⁽²⁶⁾

- The 2003 School Health Policy (the 2003 School Health Policy was amended as it had some shortcomings, and as of 2012 it is called the Integrated School Health Policy);

- The 2006 Health Promotion Policy; and
- The 2006 Health and Wellness in Education Framework.⁽²⁶⁾

The Western Cape has done much work on the health promoting schools and has reported some promising outcomes due to the intervention. Johnson and Lazarus⁽⁹⁹⁾, in the early years of health promoting schools in the Western Cape, found that schools that implemented the HPS approach had good outcomes. They found that the school functioned in an all-inclusive fashion in dealing with the needs of the learners; there was an increase in learner confidence and a positive relationship amongst members of the school community. In addition, food gardens and an animal enclosure were started; learners, teachers and parents became more involved in matters relating to their health. This is an indication that poor schools in SA can benefit from the HPS approach. A paradigm shift and refinement in educational investment is required to reap the benefits of the approach, rather than large investment into new resources and international donor funding.⁽⁷¹⁾

In spite of the known benefits of the approach and the government support, HPS is only implemented in quintiles 1, 2 and 3 public primary schools. The HPS programme is implemented as the health education lesson taught in the Life Skills (LS) subject in grades R to 6. In grades 7 to 12, it is called Life Orientation (LO) and is designed to accommodate older learners.⁽¹⁰⁰⁾ The subject was established in 2003 as an intervention to teach learners about healthy lifestyle and sexual choices; it is a compulsory component of primary school education. The 2012 INSP stated that although the delivery of school health services would initially start in the most disadvantaged schools, the immediate target was to progressively extend service delivery to all schools in the country^(26, 101). However, this has not yet materialised.

2.5.3 Process of becoming a health promoting school

The process of a school becoming a health promoting school starts with the health promoters. Health promoters identify schools in the community to become health promoting schools. Once a school has been identified, they approach the school principal. If the school principal agrees to the initiative, the health promoter works with the school principal to set up the HPS committee and they work towards making the school HPS-complaint. Once the school is ready to be assessed, the Department of Health (DOH) and GDOE accreditation team are invited to evaluate the school using

the GDOE audit tool. Schools that comply with the standards for HPS in Gauteng are awarded an HPS certificate and declared as health promoting schools. The health promoter is required to maintain a long-term relationship with the school, support the school in maintaining its HPS status and be the bridge of communication and support between the schools and the district Health Promotion Directorate.⁽⁴⁵⁾

Although HPS is currently not implemented in all schools around the country, it remains important that we understand how it is working in the schools where it is implemented and the effects of the intervention. The country's poor educational and health outcomes of learners, as outlined above, warrant that school interventions that work well should be noted and advocated for in terms of increased resources and wider implementation across the country. This information can be obtained through evaluation studies, which is the intention of this study.

2.6 Process evaluation of complex interventions

Complex interventions are interventions that involve numerous interacting parts. The complexity of the intervention may be further heightened by its level of difficulty and the number of organisational levels it aims to influence. The dimensions of complexity are identified as follows:⁽⁵³⁾

- The number and difficulty of skills required by implementers to deliver the intervention
- The number of groups or organisational levels targeted by the intervention
- The number and variability of outcomes
- The degree of flexibility or tailoring the intervention permits

The intent of any intervention is to change or transform the normal functioning of the system, such as a school or any other organisation; however, the system involved may respond in an unpredictable way. In fact, complex interventions are known for being unpredictable, with nonlinear outcomes.⁽¹⁰²⁾ Interventions use different prescribed courses of action in an attempt to deal with a certain problem; hence, its evaluation is concerned with cause and effect.

There is still no standard or universal definition of what process evaluation is, with some studies conducting it with simple methods such as satisfaction questionnaires

and others using complicated mixed methods studies,⁽⁵³⁾ such as this one. This process evaluation study defined process evaluation according to the UK Medical Research Council Guidance for Process Evaluation of Complex Interventions definition: “process evaluation can be used to assess fidelity and quality of implementation, clarify causal mechanisms, and identify contextual factors associated with variation in outcomes.”⁽⁵³⁾ This is the understanding of process evaluation that was used throughout this study to evaluate HPS implementation processes in COT.

2.6.1 Key functions of process evaluations

Studies evaluating the HPS programme tend to evaluate the immediate and visible changes in learners’ behaviours, which are long-term expectations of the intervention (health outcomes). This neglects of the main idea behind the HPS framework, which holds the view that long-term changes will only occur if the approach is made part of other health promotion initiatives in the school. The focus on individual changes, instead of measuring success at school or operational level, has the potential to lead to schools becoming discouraged and losing interest in the intervention because of a lack of expected outcomes.⁽¹⁰³⁾

Therefore, researchers should not consider health promotion evaluation studies useful only if they study the changes in the health status of the population. Rather, they should also give attention and appraisal to studies that have sought to understand the means employed by the intervention (implementation process) to achieve any change in the school.⁽¹⁰⁴⁾ Assessing the success of a school health intervention should focus on health promotion outcomes (health literacy, social actions, health public policy and organisation policies) that actually take into account the educational dynamics of the school, rather than studies that focus on health and social outcomes⁽³²⁾ (see **Figure 5** below).

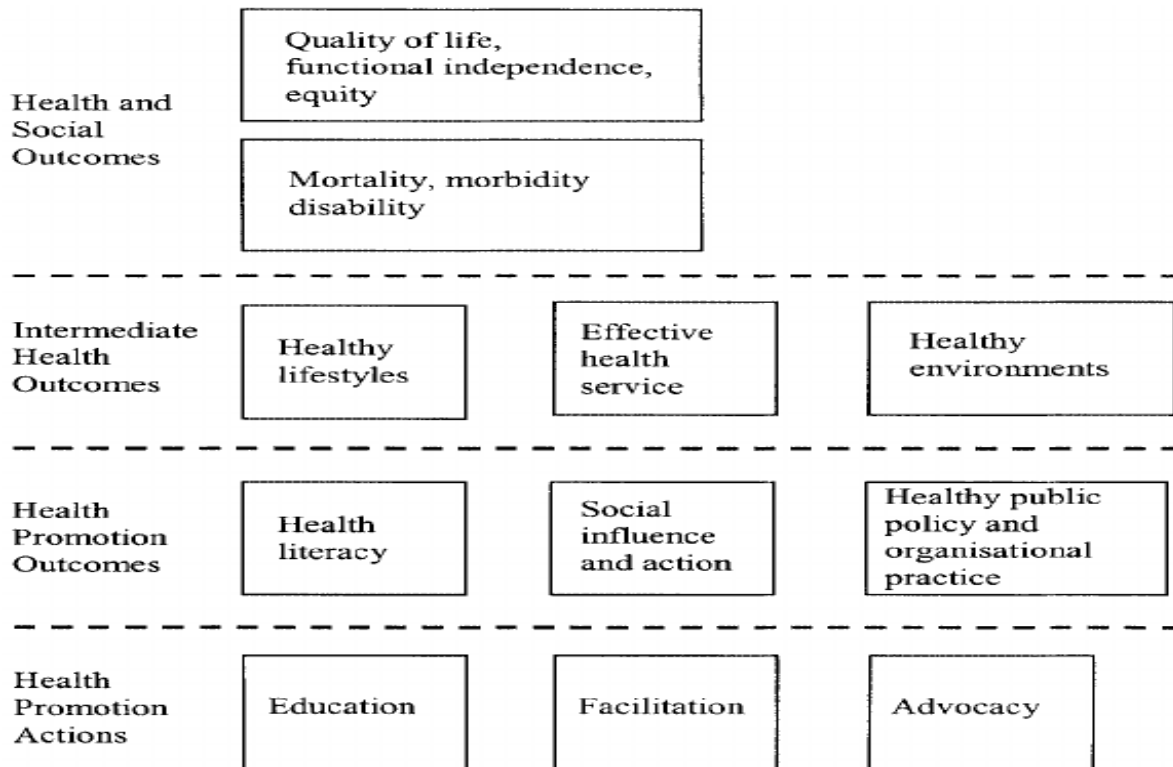


Figure 5: An outcome measure for health promotion⁽¹⁰⁵⁾

The main objective of most evaluations is to assess whether the intervention is implemented as intended. Over the decades, many frameworks have emerged with evaluation priorities. A process evaluation study may look at the following components of an intervention, depending on the scope and purpose of the study:^(33, 106)

- the context in which the programme is conducted and evaluated, local factors that influence implementation and resources required and used
- initial use or engagement in programme activities at the start of the programme
- fidelity (the extent to which the intervention is delivered as planned and attainment of quality standards)
- dose delivered (the amount of intervention offered to participants)
- dose received (the extent of participant engagement in the intervention)
- reach and recruitment
- barriers and problems encountered, the magnitude of exposure to materials and activities
- continued use of the programme over time (sustainability)

One evaluation may not answer all questions, so the researcher, guided by literature and preliminary interviews, has chosen the most relevant components of an evaluation to answer this study’s research question and achieve the objectives.

2.6.2 Guiding evaluation framework

This process evaluation looks into the health promotion actions by assessing the implementation processes of the intervention in COT health promoting schools, its focus being “what” was delivered and “how” it was delivered in the particular “context”. It is conducted using guidance from the UK Medical Research Council (MRC) process evaluation framework, which guided the research question and objectives⁽⁵⁴⁾ (see **Figure 6** below).

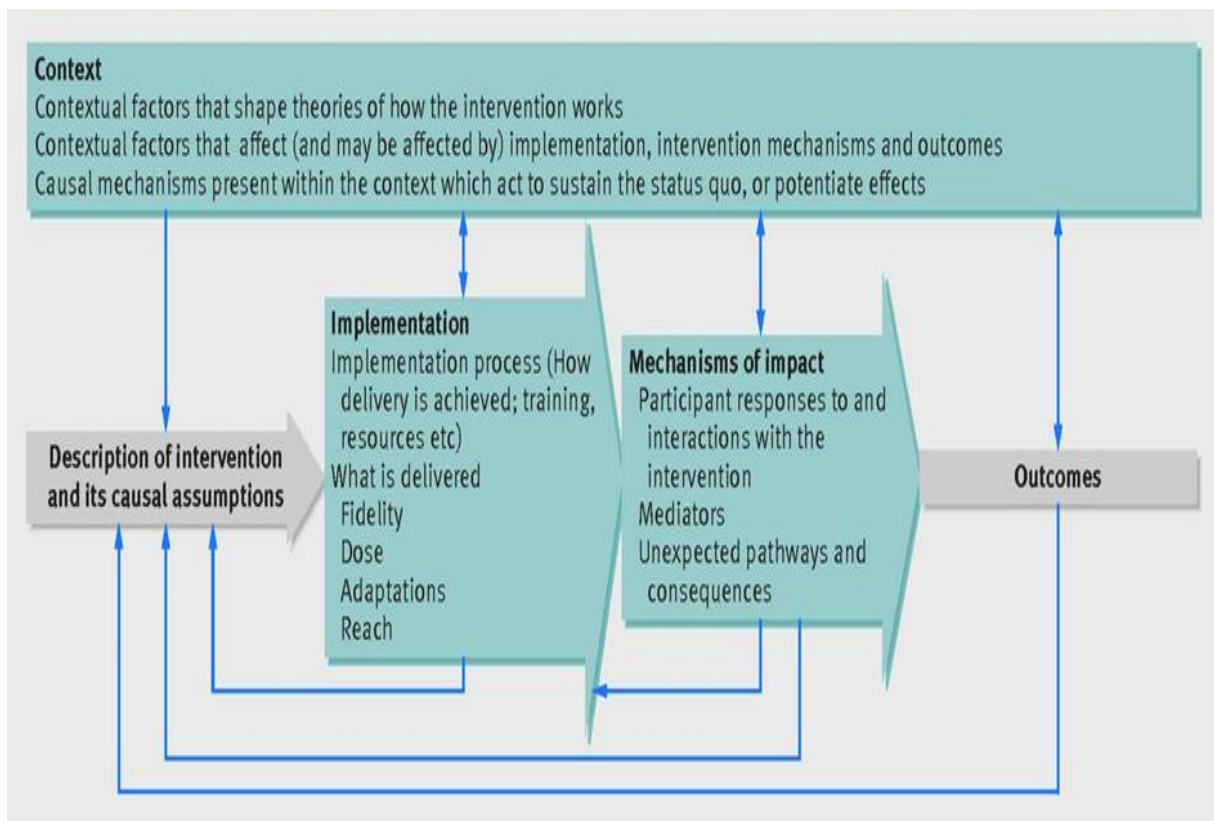


Figure 6: Key functions of process evaluation and relationships amongst them⁽⁵⁴⁾

Figure 6 above outlines the pathways of a process evaluation, linking the hypothetical intervention, with its underlying causal assumptions, to the outcomes achieved, as explained **Table 1** below.

Table 1: Key functions of process evaluation and relationships amongst them⁽⁵⁴⁾

Implementation	
<p>How is delivery achieved and what is actually delivered?</p> <p>Implementation process, fidelity, adaptations, dose, and reach.</p>	<p>This looks into the quality (fidelity) and quantity (dose) of what was implemented in real life and the extent to which the intervention reached its target audience.</p>
Mechanisms of impact	
<p>How does the delivered intervention bring about change?</p>	<p>This is the process of linking intervention activities to outcomes. In order to get an understanding of how interventions work, process evaluations need to understand how participants interact with the intervention, mainly because the outcomes observed are a result of these interactions.</p>
Context	
<p>How does the context in which the intervention occurs affect what is implemented, and how are outcomes achieved?</p>	<p>Context may be regarded as any factor outside the intervention that may improve or hinder implementation, such as readiness of the implementers to implement, attitudes, skills and knowledge, organisational norms and regulations, and availability of resources.</p>

2.6.2.1 Complexity of context

There has been little research done on the application of the HPS intervention in different geographical settings—for example, rural versus urban. Rural schools in South Africa are still poorly resourced compared to urban schools, meaning that resources are not equitably distributed and what is available in the rural areas may be of lesser quality.⁽¹⁰⁷⁾ In addition, most evaluation studies are conducted in developed countries that do not face inequalities like those in South Africa. There is also the issue of diversity. Diversity among agents and between schools, and its impact on programme outcomes, answers the question, “why do evidence-based policies work well in one setting but fail in a different setting?”. Implementers and donors who ignore the science behind diversity may have unrealistic expectations of schools regarding programme outcomes and sustainability.⁽¹⁰⁷⁾ The conceptual framework developed in this study will include factors that may impede HPS implementation in the different school contexts using data grounded data, which are the perceptions, experiences

and views of HPS implementers.⁽⁵⁴⁾ The causal pathways that exist may differ from one context to another because pre-existing conditions and the adaptations that implementers may need to incorporate in the different settings.⁽⁵⁴⁾

The SDOH framework and Basch⁽¹⁰⁷⁾ speak of the influence that contextual factors have on health: how they influence health seeking behaviour in communities; the different social and environmental factors that influence communities; the link between health, educational attainment and family, community; and social factors. To illustrate using a local case, during the initial recruitment of this study, a health promoter from the Department of Health expressed his frustration at the difficulty in implementing HPS because of the social environments in some of the school communities.⁽¹⁰⁸⁾ However, Inchley⁽¹⁰³⁾ opined that HPS can be successfully implemented in all settings, despite background and other contextual factors. The key to success in such cases is in acknowledging that schools are systems and then endeavouring to understand how these systems work.⁽¹⁰⁹⁾

2.6.3 Schools as complex systems

Each school is unique in how its system works, how it is affected by change, and how it adapts to the change. This is largely controlled by various dynamic elements and agents within and outside the school, such as the learners' home environment, community and other microsystems.⁽⁹³⁾ This means that schools should be conceptualised and understood as complex systems and not treated as homogenous, even in regards to interventions. Bartelink et al⁽⁹³⁾ found that different school contexts influenced the progress, implementation and outcomes of their school health intervention in four Dutch primary schools, highlighting the importance of factoring in context in programme delivery and evaluation.

In a study done by Keshavarz et al⁽¹⁰⁹⁾ in Australia, it was found that diversity was not confined to the school grounds, but that there was diversity even in schools within close proximity to each other, in terms of administration and location. Though schools did have some similarities, the existing differences had an impact on the operations of the different schools. This inevitably influenced management goals, school targets and priorities, academic outcomes in health, and education of the learners. He lists the differences as the size of the schools, financial and human resources, the physical and social environment, the stability of the community, the financial and socio-cultural

status of the community, school–home interaction and school–health sector interaction.^(54, 68)

2.7 Implementation of the HPS concept

Although the HPS approach has existed for decades and is lauded globally for its benefits, Langford et al⁽¹¹⁰⁾ argued that there is still no full-scale proof of its effectiveness. However, the available evidence does show that it is effective in improving some aspects of learners’ health that had significant potential at population level.⁽¹¹⁰⁾ The WHO⁽⁷³⁾ also noted that evidence of effectiveness of HPS in controlling the risk factors of NCDs was scarce, but promising. So far, countries such as Canada, Scotland, the Netherlands, Mexico, Australia, the USA, and China (Hong Kong) have conducted and published most of the research on the HPS concept. Research remains limited and is not comprehensive, as most studies do not cover all six domains of the HPS framework. For instance, in a Cochrane review by Langford,⁽¹¹⁰⁾ only 67 cluster randomised controlled trials on HPS were described—29 from North America, 19 from Europe, 11 from Australasia and eight from low- and middle-income countries, with only two from Africa but none from sub-Saharan Africa.

The success of HPS is dependent on its implementation; it may fail as a result of poor implementation and not because of the weakness of the approach.⁽⁴¹⁾ A poorly implemented programme can undermine the credibility of the intervention by resulting in sub-optimal outcomes. Potential positive outcomes of HPS are often derailed by poor understanding of the complex processes involved in implementing a whole-school intervention.⁽⁹³⁾ In this study, implementation is understood as, “how is delivery achieved, and what is actually delivered?”, as defined by the MRC evaluation guideline⁽⁵³⁾. Programmes are rarely carried out as designed and planned; however, there still needs to be clear accountability and detailing of what was done and the reasons for doing so. This information not only helps in developing evidence that activities occurred, but also helps to evaluate the outcomes.⁽¹¹¹⁾

2.7.1 Implementation research

Only a few studies have evaluated HPS implementation. The findings show that when the HPS approach is well implemented, it improves health and learning outcomes. The findings further show that there are many barriers to HPS implementation; however, these can be mediated with facilitators that produce positive outcomes. For instance,

nine schools in Hong Kong applied for accreditation from the Healthy Schools' Award after adopting the HPS concept for two years. Lee and colleagues⁽²⁰⁾ compared the implementation processes of HPS that received the award and those that did not. They found that the schools that did not meet the standards had challenges such as policies that were not comprehensive and staff who were not well trained in health education and did not manage to create school environments that were friendly, safe, and encouraged healthy eating. They also found poor family and community involvement in school activities and did not do well in forming relationships with other schools and communities. On the other hand, schools that received awards had reduced risky health behaviours and increased emotional wellbeing in learners. Learners also had higher life satisfaction levels, better health status, better eating habits and improved academic achievements. Furthermore, schools that received the award showed more commitment to the intervention and adopted it to a greater extent. All these positive outcomes are important in improving learning outcomes, the core function of a school.⁽²⁰⁾

St Leger,⁽²¹⁾ in his study conducted in Scotland, found that teachers were the most important part of HPS implementation in any school. If teachers were neglected and did not fully comprehend the HPS approach, the impact of HPS was limited. He suggested that it was important to truly understand teacher dynamics. This entailed understanding how teachers worked and the type and amount of support they needed to embrace the HPS approach. In addition, resource allocation, political issues, environmental contexts, administrative support, lack of trained and skilled teachers, and poor understanding of the value of the HPS approach were barriers to implementation. Additionally, Fathi et al,⁽⁶⁹⁾ in their study conducted in Iran, found that a poor working relationship between health and education departments was a hindrance to implementing the HPS. They stated that several structural barriers to implementation exist globally and become even more detrimental when the departments of health and education work in silos.

Similarly, Macnab et al⁽³⁹⁾ found that the most persistent challenges to HPS implementation in Africa were the governments' unreliable motivation and leadership in promoting the HPS approach, limited institutional capacity, and poor community and institution relationships. Ownership, leadership, collaboration, and integration were

found to be essential for improving schools from within. These four factors have the potential to help schools with the adoption and implementation of HPS, regardless of conditions and context.^(69, 103, 112)

In South Africa, implementation findings are in line with those seen internationally. Implementation of HPS in South Africa is hindered by competing priorities, overlapping policies, poor collaboration and high expectations of teachers that lead to “transformation stress”.⁽²⁶⁾ A qualitative study done by Mohlabi et al⁽⁷²⁾ in Gauteng and Mpumalanga found that barriers to implementation were many and varied. They were reported in four main themes, namely governance issues, programme-related issues, management-related issues, and community-related issues. In the Western Cape, it was found that factors such as committed teachers, community leaders, and individuals were facilitators to the success of HPS implementation. Starting food gardens and progress in early childhood development and malnutrition were some of the successes in implementation that were seen in the Western Cape.^(26, 99)

To improve HPS programmes in South Africa, there needs to be improved collaboration across all departments involved in the HPS implementation process. These include departments such as the Department of Sports and Recreation, for promotion of physical activity, and other relevant partners such as the Department of Housing, Social Development, and Education. Secondly, HPS programmes should be standardised in all provinces through research on existing programmes (curricula and approaches).

The above studies notwithstanding, there is still need for more research to fill the gaps on implementation of HPS under real-life conditions and to identify key barriers and facilitators to implementation.⁽⁴³⁾ This is especially true in South Africa, which stands to gain immensely from HPS approach. There is a need for evaluation studies that not only describe the barriers and facilitators but also endeavour to explore the implementation extent and processes involved from the viewpoint of the implementers.⁽¹¹³⁾

2.7.2 Benefits of evaluating the HPS implementation

Process evaluation allows for the identification of problems and for modifications to be made as the programme is being implemented.⁽³³⁾ It should be able to fully understand

the processes that form part of the implementation, as well as the social and environmental context in which they take place. Its purpose is to assess and advise if the programme components, methods, human and physical resources, and the target activities are adequate and appropriate to achieve desired outcomes.⁽²⁾ Evaluation is especially important because monitoring and evaluating changes that are happening in the schools is essential to the process of maintaining an HPS status.⁽⁹⁸⁾

The outputs and outcomes of HPS evaluations may vary between the different schools, networks, and regions; however, indicators need to be standardised. Evaluation findings help to develop standardised HPS evaluation indicators—indicators that are universal and applicable globally. This also ensures that indicators used to evaluate processes are clearly defined, valid and feasible.⁽⁷²⁾ Well-researched indicators will help with trustworthy evaluation processes and reporting. At the 2006 University of the Western Cape Health Promoting School Conference, delegates involved in implementation requested standardised tools and instruments to evaluate and monitor the HPS approach in their schools.⁽²⁶⁾ In brief, well-evaluated programmes lead to intended implementation and result in desired outcomes.⁽¹⁶⁾

As with any other health programmes, there can only be a strong case to advocate for investment in the HPS approach if there is a well-built evidence base of their positive outcomes. This evidence base has the potential to influence public health policy.⁽⁴¹⁾ Therefore, an evaluation study should give detail on the design and the implementation process of an intervention, the background of conditions in which the intervention was implemented, and how the target audience accepted the intervention.⁽¹¹³⁾ Currently, only a few comprehensive evaluation studies and frameworks are available globally.⁽¹¹⁴⁾ The COT district has not yet conducted a comprehensive evaluation study on health promoting schools, especially looking into the six domains of the HPS framework. This study intended to conduct an evaluation of the COT health promoting schools and develop a framework for the district to explain current implementation and improve the implementation process for the future.

2.8 Developing the conceptual framework

The intention of the study was to develop a framework to explain the processes involved in implementing the HPS intervention using COT as the study site. The researcher decided on the development of a conceptual framework because,

currently, none exists in South Africa. It is clear from the literature reviewed above that for any country to benefit from the HPS programme, it is necessary to have a clear understanding of how the programme is implemented (the extent of implementation across the district, the barriers, and facilitators, impacting contextual factors, assumptions of the programme and the reality in implementation) and to find the most appropriate ways to evaluate the processes. It is the hope of the researcher that this framework will provide the much-needed understanding and subsequently improve the effectiveness of programme implementation.

Conceptual frameworks are networks of interlinked concepts that come together collectively to give extensive and integrated understanding of a particular research problem.^(51, 115) It is essential that the small pieces, called concepts, within the framework support each other, while each clearly expresses its phenomenon. This is an inductive process, where concepts are put together to give a clearer picture of the relationships.⁽¹¹⁵⁾ In accordance with grounded theory, conceptual framework development is iterative, with constant comparison of concepts against data. Concepts emerge according to similarities and are narrowed down to control the conceptual level and scope of the emerging theory. The development of a conceptual framework uses multidisciplinary data derived from different types of sources such as books, journal articles, newspapers, interviews and theories.⁽⁵¹⁾

2.8.1 Programme logic

The framework is based on the HPS framework logic, which has been covered in the literature above as the “programme theory and assumptions”. Understanding the theory of the programme is crucial in evaluation studies, as it assists the evaluation to focus on the most urgent uncertainties of the intervention. It also allows the evaluation provide understanding of the implementation processes and the operations of the intervention under question. Understanding programme assumptions is even more important when the evaluation is concerned with how the intervention works in practice versus its theoretical assumptions.⁽⁵⁴⁾ For this process evaluation, the programme theory will be depicted in a form of a diagrammatic presentation called a programme framework/logic model/conceptual framework. A logic model is a diagrammatic representation of an intervention describing anticipated delivery mechanisms (e.g., how resources will be applied to ensure implementation) intervention components

(what will be implemented), mechanisms of impact (the mechanisms through which an intervention will work) and intended outcomes.⁽³³⁾ The study started by developing a draft programme framework/logic model that was based on the literature reviewed up to this stage of the study (see **Table 2** below). The COT framework will be developed based on this framework and the subsequent data collected from participants and supporting literature.

Table 2: Initial HPS logic model

Target audience: Learners, educators, parents, and community				
INPUTS (resources)	ACTIVITIES	OUTPUTS (results)	INTERMEDIATE OUTCOMES	OUTCOMES (impact)
Leadership (national) <ul style="list-style-type: none"> • School health policies and guidelines • Health education (HE) curriculum 	<ul style="list-style-type: none"> • Develop school health policies and guidelines • Develop a HE curriculum 	<ul style="list-style-type: none"> • School health policies and guidelines available for implementation • HE curriculum available to all schools 	<ul style="list-style-type: none"> • Increased health awareness and knowledge • Improved attitudes towards health decisions 	<ul style="list-style-type: none"> • Improved learning outcomes for learners • Bridged the health inequity gap • Improved health outcomes of school community • Improved learners' health outcomes into adulthood
Leadership(provincial) <ul style="list-style-type: none"> • Province specific policies and guidelines 	<ul style="list-style-type: none"> • Develop province specific policies and guidelines • Implement policies and guidelines 	<ul style="list-style-type: none"> • Province specific policies and guidelines disseminated for implementation in schools 		
Leadership (district) <ul style="list-style-type: none"> • District level HPS planning meetings • Support visits to schools 	<ul style="list-style-type: none"> • Conduct local level HPS planning • Conduct support visits to schools • Conduct support visits in schools 	<ul style="list-style-type: none"> • District plans for HPS outlined • Number of support visits conducted 		

INPUTS (resources)	• ACTIVITIES	• OUTPUTS (results)	INTERMEDIATE OUTCOMES	OUTCOMES (impact)
<ul style="list-style-type: none"> • HPS school committee • HPS committee meetings <p>Disease prioritisation</p>	<ul style="list-style-type: none"> • Conduct HPS committee meetings • for coordination of activities • Conduct an assessments of priority diseases for the particular schools 	<ul style="list-style-type: none"> • Number of meetings conducted by the HPS committee • List of identified priority diseases 		
<p>Research</p> <ul style="list-style-type: none"> • Standardised monitoring and evaluation (M&E) tools • Filed experts 	<ul style="list-style-type: none"> • Develop evidence-based M&E tools for schools 	<ul style="list-style-type: none"> • Evidence based tools available for schools to use for effective monitoring and evaluation assessments 		

INPUTS (resources)	ACTIVITIES	OUTPUTS (results)	INTERMEDIATE OUTCOMES	OUTCOMES (impact)
Training <ul style="list-style-type: none"> • HPS workshops for implementers • Skills development for educators 	<ul style="list-style-type: none"> • Conduct HPS workshops for implementers • Facilitate skills development for educators 	<ul style="list-style-type: none"> • Number of implementers trained • Percentage of educators trained 		
Financial <ul style="list-style-type: none"> • Budget 	<ul style="list-style-type: none"> • Allocate adequate funds for HPS activities 	<ul style="list-style-type: none"> • Amount of funding provided for HPS activities 		
Human resources <ul style="list-style-type: none"> • Support services 	<ul style="list-style-type: none"> • Support services visit schools 	<ul style="list-style-type: none"> • Frequency of visits to schools by support services 		
HE teaching materials Health promotion manuals for Life Skills classes	<ul style="list-style-type: none"> • Develop and supply schools with HE manuals 	<ul style="list-style-type: none"> • Number of HE manuals supplied to schools 		

INPUTS (resources)	ACTIVITIES	OUTPUTS (results)	INTERMEDIATE OUTCOMES	OUTCOMES (impact)
<p>Collaboration</p> <ul style="list-style-type: none"> • Partnership— Multiple sectors collaboration • Parental and community involvement 	<ul style="list-style-type: none"> • Foster partnerships with multiple stakeholders • Conduct meetings with parents and community on health education topics 	<ul style="list-style-type: none"> • Number of partners involved in HPS implementation in each school • Number of meetings held with parents and the community annually 		

Assumptions	External factors
<ul style="list-style-type: none"> • Educators have the ability to teach health topics in the curriculum • Learners, teachers, and the community have interest in and accept the intervention activities • Programme features are effective in changing behaviours and attitudes • Learners maintain changed behaviours into adulthood 	<ul style="list-style-type: none"> • Governments continue to support the intervention • No natural disaster occurs that will result in stopping programme implementation

2.9 Chapter summary

The literature review above gives evidence of the benefits of the HPS intervention in different settings globally. It also highlights the fact that, to optimise success, there needs to be continuous programme evaluation and understanding of the different contexts in which the programme is applied. The same intervention may have different outcomes in different groups or subgroups because of different contextual factors that determine the implementation success and outcomes.⁽⁵⁴⁾ There are gaps in the current literature on HPS, and there is a need for science-based evaluation studies. This evaluation intends to develop an evaluation framework for the district, to bring understanding of the implementation processes and aid in improving implementation processes. The literature review has revealed the paucity of HPS evaluation studies and the gaps in the available work. Local and comprehensive evaluation studies are essential for influencing policy, through describing SODH of communities, showing effectiveness of programmes, and improving implementation by developing standardised evaluation tools to improve evaluation processes.

Intervention policy needs to focus on factors that will improve the education–health link and give guidance to the implementers. It should not be vague on issues such as leadership, accountability, resources, training, and support, but should give clear directives on how these should be acquired or implemented. It also needs to be informed by local social and environmental factors such as poverty, the disease burden and other community factors. This ensures that policy is relevant to the particular setting and addresses appropriate challenges that face the community.

Identifying SDOH (poverty, unequal access to health care services, poor environmental conditions, and educational disparities) for the specific community is important. This will also lead to the identification of the health status and educational challenges of learners in a particular setting. For example, children in rural settings may not share the same challenges as those in affluent areas. Poor learners are more likely to attain less academic achievement than their affluent counterparts, leading to school dropout.^(45, 78) Likewise, learners in developed countries may not share the same disease profile as those in resource poor countries. These factors on health and education need to be used to develop health-related priorities for the schools.

Schools cannot address all their problems at once but need to strategically choose priority issues as an entry point to health education. In addition, not all schools have the same challenges; the priority list should be based on the particular school.⁽⁷⁸⁾ Therefore, policy cannot be a universal document. International interventions like HPS need to be adapted to the settings where they are applied—from provincial to district level, and even lower, to the sub-district level, to engender improved outcomes.

As mentioned before, schools cannot solve all the health and education challenges alone; other sectors need to be involved, and all stakeholders need to work together to implement evidence-based interventions. When different stakeholders work in silos, children cannot benefit optimally from the interventions. Communities, health, education, policy makers and other departments have an important role to play in improving educational outcomes.⁽⁴⁵⁾

CHAPTER 3

RESEARCH PARADIGM AND MIXED METHODS METHODOLOGY

3.1. Introduction

The previous chapter highlighted the need for more evaluation studies of school health programmes in the local context and the development of science-based tools to guide schools for effective implementation of school health programmes. To evaluate a complex intervention such as the HPS programme and develop a context-based framework for effective implementation, a mixed methods methodology, aligned with the philosophical approach of pragmatism, was the most suitable. This study is an explanatory sequential study comprised of three distinct phases, each with its own objective(s). In the first phase, quantitative methods were used to assess the extent of programme implementation in the different school contexts. Data were collected using an audit tool and presented as descriptive statistics. The findings were used to inform theoretical sampling in Phase 2. Phase 2 collected qualitative data using a focus group and individual interviews to get the views and perspectives of the key implementers, in order to develop a programme framework. In Phase 3, a Delphi technique with field experts, was conducted to refine the framework developed in Phase 2. This chapter presents the methods, procedures and the philosophical approach used in this study. It focuses on the study setting, research design, sampling, data collection, data analysis, quality criteria, ethical considerations, and data management. See **Table 3** for a summary of the research design.

Table 3: Summary of research design and methods

	<u>Phase 1</u> Audit implementation fidelity	<u>Phase 2</u> Conceptualise HPS implementation processes and develop a conceptual framework	<u>Phase 3</u> Refine conceptual framework
Setting	Health promoting schools in COT		
Population	Health promoting schools in COT	Key implementers— principals, LS teachers, SGB members and health promoters	Field experts— health, education, private sector, and academia

Sampling method	Purposive	Purposive and theoretical	Purposive sampling, snowballing
Sample size	11 participants	7 participants (FGD) 20 participants (SSIs)	9 experts
Data collection	Audit tool	FG discussion and SSIs	Delphi technique
Data analysis	Descriptive statistics	Grounded theory analysis	

3.2 Study setting

The study was conducted in COT, in the Gauteng province of South Africa; see **Figure 7** for a map of the Tshwane Metropolitan Area and **Table 4** below for the Tshwane Metropolitan Area profile.



Figure 7: Map of the Tshwane Metropolitan Area in Gauteng province, South Africa⁽¹¹⁶⁾

Table 4: Tshwane Metropolitan Area profile⁽¹¹⁷⁾

Population size	3 275 152 million 79% Black 17% White 2% Coloured 2% Indian
Language most spoken at home	Sepedi
Households that are informal dwellings (shacks)	16.4%
Households with women as their head	37.5%
Have no access to electricity	5.2%
Employed	51.4% with 75% in the formal sector
Completed matric or higher	58%
School-aged children (5 to 17 years old) in school	95.5%
Children between 15 and 17 in the labour force	15.9%
Households with heads under 18 years old	3 762
Child-headed households that are informal dwellings (shacks)	30%
Average annual child-headed household income	R2 400

3.2.1 Site selection

The site selected for the evaluation study was the 13 public (government) schools in COT that are declared as health promoting schools. The schools included in the study are located in three different sub-districts within COT.

Inclusion criteria: Health promoting school in Tshwane district, Gauteng, South Africa

Exclusion criteria: Health promoting schools in COT that did not consent to participate in the study

3.3 Rationale for using mixed methods

A mixed methods study design is better suited for evaluating complex interventions that have multiple interconnected parts, such as school-based and community interventions.⁽³²⁾ In light of this, a mixed methods sequential explanatory design was used to evaluate health promoting schools in COT and achieve the research objectives. The data were collected and analysed in three phases, as explained below. Utilising multiple sources, as well as both qualitative and quantitative methods ensures that the evidence of the success of the intervention is comprehensive.⁽³²⁾

3.3.1 Philosophical underpinnings: Pragmatism and mixed methods

The researcher pondered the question of which methods to use in this study to obtain the “desired data, knowledge and understanding” of the phenomenon to be able to (1) answer the research problem as fully as possible and (2) make a worthwhile contribution to the body of knowledge.⁽¹¹⁸⁾ Pragmatism resonated with the views of the researcher on what is important when conducting research. Pragmatists are not concerned with the methods they use in research but with the question of whether the used methods have the potential to answer the research question.⁽¹¹⁹⁾ Furthermore, this study’s phenomenon being a multidisciplinary and complicated intervention, it called for more flexible and innovative ways to best answer the research problem. A mixed methods research design was suitable to answer the research question and is linked to pragmatism. Lastly, today’s research world has become increasingly complicated, interdisciplinary, and dynamic. It is therefore important that researchers understand all research methods to help with communication and collaboration and allow for superior research.⁽¹¹⁹⁾

3.3.2 Benefits of using mixed methods

Blended research or mixed methods research has gained traction over the years and is now seen as the third major research approach. It has been welcomed as a response to the long-standing paradigm wars between positivists and constructivists.⁽¹¹⁹⁾ It is a design that falls between two extreme schools of thoughts, quantitative research and qualitative research. The positive aspects of this study design that led to the researcher choosing blended research over other methods are as follows.

- Completeness—the study design respects the wisdom from both methods and aims to bridge the gap.⁽¹²⁰⁾ It allowed for a complete representation of experiences and associations.⁽¹²¹⁾
- Complementary—The quantitative part was used to measure some aspects of the research question, while the qualitative was used to answer other aspects of the phenomenon.⁽¹¹⁹⁾
- Expansion—Qualitative findings in Phase 2 were used to clarify quantitative findings from Phase 1. This increased trustworthiness of the findings as it provided the researcher with better understanding and provided a fuller picture of the phenomenon being studied.⁽¹²¹⁾

- Development—The quantitative findings were used to inform the planning and development of questions used in the qualitative phase.⁽¹²¹⁾
- Corroboration and/or confirmation—The assessment of the trustworthiness of findings increased the richness of the data.⁽¹²¹⁾
- Triangulation—Defined as “the combination of methodologies in the study of the same phenomenon”, it is the use of multiple methods to validate that the observed results are truly due to the observed phenomenon and not because of the method used.^(120, 122) Triangulation allows for the testing of convergence, inconsistency or contradiction in the data.^(120, 123) In this study, there was data and method triangulation. This process further improved the study findings by increasing the richness of the data, minimising bias, and identifying inconsistencies. Using triangulation minimised any inherent bias that could be present when only a single method or data-source methods had been employed.^(120, 123, 124) **Figure 8** below shows the study’s mixed methods design.

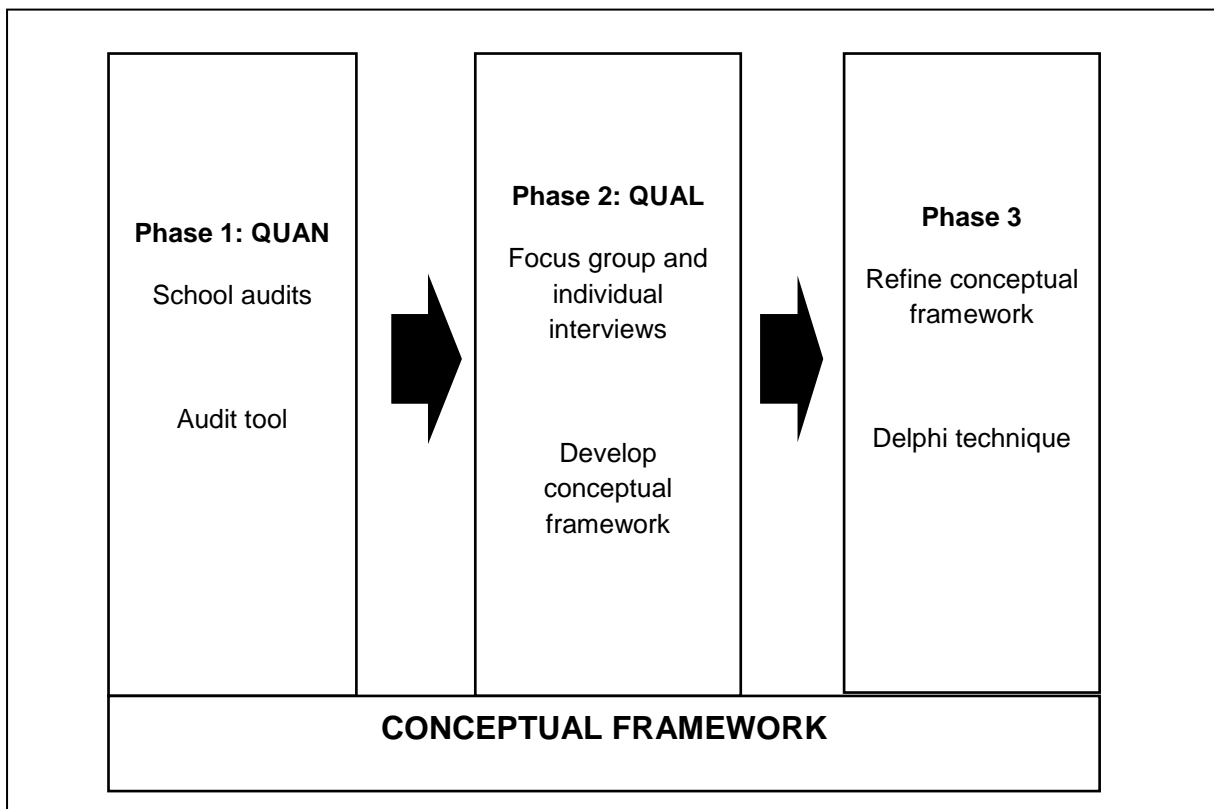


Figure 8: A multiphase sequential mixed methods design

3.4 Phase 1

The first phase of this mixed methods study employed descriptive statistics to present the results of the Likert scale data.

3.4.1 Sampling

Multistage sampling was used as a sampling technique at different phases of the evaluation to select the participants at each phase. A sample is a portion of the population. It can be a number of people, things or cases the researcher is interested in investigating.⁽¹²⁵⁾ At the time of writing the proposal for this evaluation, there were only 13 schools in the entire COT that are registered with the DOH and GDOE as health promoting schools.

The participants in this phase were purposively selected because they met the inclusion criteria.⁽¹²⁶⁾ Schools that were not declared as HPS were excluded. It is ideal that the whole population be studied in any research, although rarely possible.⁽¹²⁶⁾ However, in this study, due to the small size of the population that met the inclusion criteria, the whole population of interest was included, which is called census sampling.

Inclusion criteria

- Schools accredited as health promoting schools in COT

Exclusion criteria

- Health promoting schools in COT that did not consent to participate in the study

3.4.2 Recruitment

In 2018, during the initial phase of recruitment, the researcher approached the Health Promotion Directorate in Pretoria with the study proposal. The researcher also discussed the research proposal with the chief liaison officers of the various sub-districts, two health promoters in the schools and the Department of Education Directorate officer involved with health promoting schools. All parties contacted stated that the study would assist them with their work in health promoting schools and were willing to assist as far as possible.

After receiving ethical approval from the University of Pretoria Health Sciences Ethics Committee (ref: 609/2019) (see **Appendix 2**) and permission to conduct research from

the GDOE (see **Appendix 3**), the researcher contacted the school principals telephonically and requested permission to visit the schools and explain the study. Eleven school principals agreed to participate in the study and made an appointment with the researcher. The other schools stated that it was not safe to have visitors at the school because of COVID-19 regulations in the country. One principal said that the school was too busy with exams, and they did not want disturbances as they were behind with the syllabus because of COVID-19 delays.

3.4.3 Data collection

Data collection took place at the 11 participating schools. The GDOE audit tool was used to quantify the level of compliance in the schools.⁽¹²⁷⁾

3.4.3.1 Obtaining consent

During visits to the participating schools, the researcher explained in depth to the principals or their deputies the purpose of the study and the benefits of participating. It was also explained that there were no potential dangers of participating. The principals were informed that the researcher was a doctoral student from the University of Pretoria conducting the research in hopes of helping to improve the HPS programme at their schools. No additional details of the researcher were disclosed. A consent form was given to principals who agreed to the research, and they were requested to read and sign the form (see **Appendix 4**).

3.4.3.2 Structure of the audit tool

Reliable school audit tools with well-defined scales are a commendable way of evaluating schools. These tools convert qualitative evaluations of current school status into a quantitative assessment that can be used by public agencies, schools, and health and education authorities to help them to focus on the gaps, as well as affirming the quality of the schools' work.^(20, 128) The GDOE uses an audit tool to evaluate schools for accreditation as health promoting schools (see **Appendix 5**). The tool is based on the WHO HPS framework/model and aims to comply with the standards stipulated in the framework. It uses a Likert scale of 1 to 4 for assessment of the various key variables/indicators. It includes the following weightings: 1 = Not Yet Achieved; 2 = Partially Achieved; 3 = Satisfactory; 4 = Outstanding.

The tool is comprised of 72 items. The first five relate to school demographic details such as school name, location, number of school staff, number of general assistants and learner enrolment number. The rest of the questions comprise 67 Likert items organised into nine Likert scales, based on the HPS key performance areas, namely Environment and safety (n=10), Hygiene and sanitation (n=9), Nutrition (n=10), General safety and security (n=8), Policies (n=5), General (n=6), Skills development (n=6), Community/parental involvement (n=3), and Services (n=9). Water supply and safety (n=1) had one item and was therefore not classified as a Likert scale.

The WHO framework has nine key performance areas of school life that are based on the six action areas.⁽¹²⁹⁾ According to Struthers et al,⁽¹²⁹⁾ these performance areas should be included in the HPS development plan and used in the evaluation process. The GDOE audit tool included 80% of the key performance elements but has restructured the elements and ended up with ten. **Table 5** below compares the key performance areas in the HPS framework with those in the GDOE audit tool. There were two key HPS elements that the GDOE tool does not include; these are (1) leadership, management, and communication and (2) curriculum provision and resources.

Table 5: HPS Key performance areas⁽¹²⁹⁾

HPS framework	Gauteng Department of Education audit tool
1. Basic functionality of the school	Hygiene and sanitation, Water supply and safety, General
2. Leadership, management, and communication	Missing
3. Governance and relationships	Services, Policies, Skills development
4. Curriculum provision and resources	Missing
5. Learner achievement	Learner development
6. School safety, security, and discipline	General safety and security
7. School infrastructure	Environment and safety
8. Parent and community	Community/parental involvement

3.4.3.4 Altering the audit tool

The audit tool was not altered or improved for the study but used in its current form for various reasons. First, the main objective of Phase 1 was to measure the extent of implementation, comparing the accreditation status and current status of the schools.

This necessitated that the same tool be used. Second, it was beyond the scope of this study to change the tool used to evaluate the schools, but the intention was to assess the appropriateness of the tool. Using this tool in its current form allowed for the researcher to identify challenges with it. The GDOE audit tool has not been amended since it was developed. This is despite the fact that schools and school health practices are constantly changing.⁽¹²⁾

3.4.4 Assessors

The study included a research assistant to conduct audits at the schools alongside the main researcher. The assistant was trained by the main researcher on the audit tool, HPS guidelines for schools, and the objectives of the audits. The researcher and assistant conducted the audits in the schools together.

Inclusion criteria for research assistant

- Post-matric qualification
- Proficiency in English
- No prior involvement with the schools
- A minimum of one year's research or fieldwork experience
- Available for duration of study

3.4.5 Data analysis

A letter of support was received from a biostatistician for this study (see **Appendix 6**). Data analysis methods for this study were discussed with a statistician. The audit tool data were captured into a Microsoft Excel spreadsheet; each school was assigned a numerical value to identify the school, i.e., School 1 to School 11. After capturing and verifying the data, they were imported into SPSS version 27 for analysis.

Implementation fidelity in the schools was evaluated and presented as scores for each of the nine scales and the one Likert item of the audit tool. The scores showed the overall performance of the schools, and the item scores reflected the performance of the schools on each Likert item. Descriptive statistics were employed to calculate, describe, and summarise the data. The data were illustrated in frequencies and percentages, depicted as bar charts, pie charts and histograms.

The sum score was calculated for each scale, and the Kruskal-Wallis method, a rank-based non-parametric test ⁽¹³⁰⁾, was used to measure the associated 95% confidence intervals for the measurements of quantitative variables⁽¹³¹⁾ in order to assess variations in schools' performance. In addition, the KMO and Bartlett's tests were used to assess for the possibility of factor analysis.⁽¹³²⁾

Non-parametric analytical tools were used due to the ordinal nature of the data derived from the Likert scale and the small sample size. There were no inferential statistics employed in this study due to the small population size.

3.4.6 Quality criteria

One way to increase the trustworthiness of a study is by making use of triangulation, which is the cross-checking of data.⁽¹³³⁾ Data and method triangulation was used to validate findings.

- Multiple data sources: empirical studies, school records and documents, and study participants
- Multiple methods: audit tool, individual interviews, a focus group discussion (FGD) and Delphi technique (Phase 1, 2 and 3)

These methods allowed the researcher to reduce potential bias⁽¹³³⁾ and increased the richness of the data.⁽¹⁰⁶⁾

3.4.6.1 Validity

Validity determines whether the research truly measures that which it was intended to measure or how truthful the research results are.^(134, 135) Important to this study was content validity. Does the instrument cover the entire domain related to the variable, or what it was intended to measure?⁽¹³⁶⁾ The audit tool, which is based on the nine key performance areas of HPS, failed to include two key areas, (1) leadership, management and communication and (2) curriculum provision and resources. The lack of these two key areas reduces the tool's ability to accurately assess the HPS programme implementation in its totality.

3.4.6.2 Reliability

This is the extent to which the results would be consistent if the study were to be repeated.⁽¹³⁷⁾ If the study were to be repeated with the same methodology, would the tool give the same results?^(134, 135) Internal reliability of the audit tool was measured,

and the tool was found to have high internal reliability. See Chapter 4 for detailed results.

3.5 Phase 2

Phase 2 is a qualitative phase concerned primarily with providing understanding on HPS implementation.⁽¹³⁸⁾ Qualitative research is “any kind of research that produces findings not arrived at by means of statistical procedures or other means of quantification.”⁽¹³⁹⁾ A qualitative evaluation describes events, meanings, needs, expectations, feelings, challenges, and problems that are faced by the stakeholders of a programme on a daily basis.⁽⁸²⁾ Data collection was conducted in two parts; the first part was through an FGD with key health promoters working with COT schools, and the second part was through individual interviews with school staff.

3.5.1 Grounded theory methods

The qualitative phase of this evaluation utilised grounded theory methods. This research design is known for its unique set of methods that distinguish it from other methods.⁽¹⁴⁰⁾ See **Figure 9** for the seven steps of grounded theory.

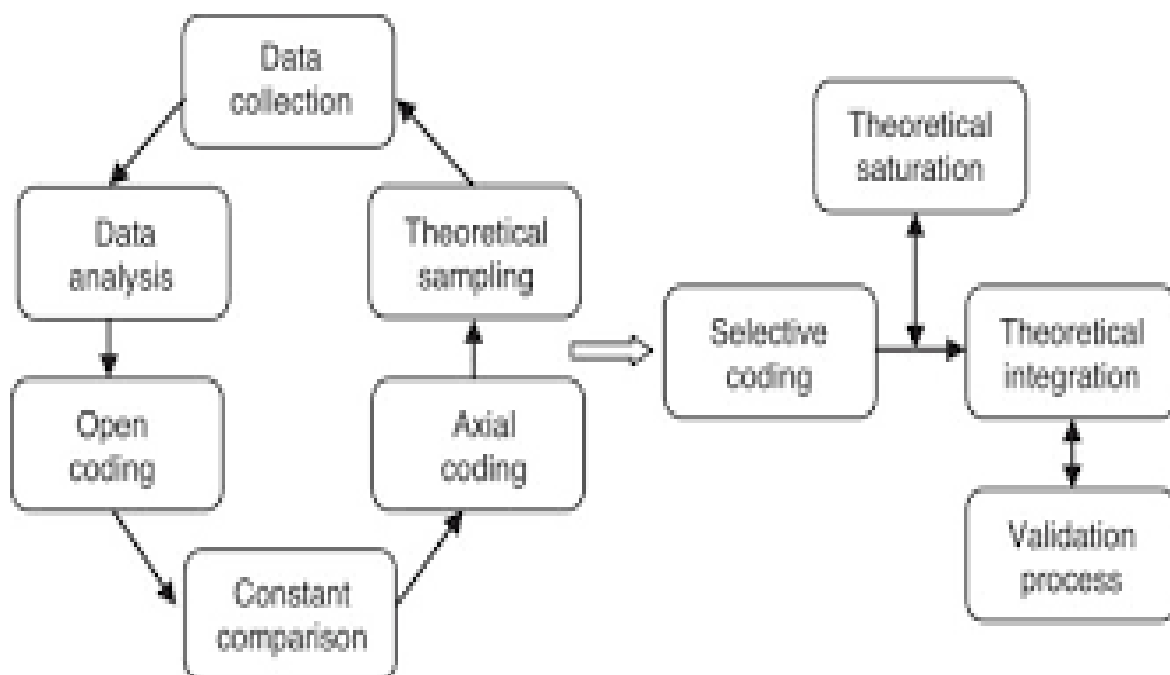


Figure 9: Seven steps of grounded theory based on Strauss⁽¹⁴¹⁾

3.5.1.1 Types of grounded theory

Over the years, grounded theory has expanded through three main approaches.⁽¹⁴²⁾ Founders Barney Glaser and Anselm Strauss introduced GT in 1967.^(142, 143) In their

development of GT, the founders discouraged conducting a literature review before data collection and analysis.⁽¹⁴⁴⁾ They argued that conducting a literature review prior to data collection and analysis restricts the research rather than guiding it, which may introduce biases.^(142, 143) They opined that a researcher should not read on the phenomenon to be investigated as a means of ensuring that the emerging categories are not “contaminated”.⁽¹⁴³⁾ Later, the two founders differed in their opinions on doing a literature review prior fieldwork and procedures for data analysis. Strauss saw some shortcomings while Glaser maintained that this method was sufficient for grounded theory. This approach is known as the Glaserian GT.⁽¹⁴⁴⁾

Strauss then worked with Julia Corbin to develop the second approach of GT called the Straussian GT (1990). This updated method’s posture is that a researcher will inevitably bring into the research not only a personal or professional perspective but also some prior knowledge on the subject. They encouraged prior engagement with the literature and opined that this prior knowledge is useful in developing a theory. However, they warn the researcher to “maintain an attitude of scepticism” and to be careful not to allow the reviewed literature to impose itself on the emerging theory.^(143, 144) Later, in 1995, Kathy Charmaz developed the third approach, called constructivist GT. Her argument was that it is impossible to purge the researcher’s influence on the research process and product. Instead, the emerging theory “depends on the researcher’s view; it does not and cannot stand outside of it”.⁽¹⁴⁵⁾ Therefore, constructivist GT welcomes the voice of the researcher, and a literature review of the phenomenon of interest can be conducted prior to data collection and analysis.⁽¹⁴³⁾

This study employed Straussian GT. It was an appropriate approach because it allows for prior literature review, has subjectivity underpinnings and is influenced by the pragmatist philosophy.⁽¹⁴⁶⁾ The researcher had to read the literature prior to the fieldwork in order to write a proposal and get ethical approval, as required by the University of Pretoria, so, the Glaserian GT approach was not appropriate. Constructivist GT did not resonate with the intentions of the researcher in terms of allowing the researcher’s view and voice to be part of the research. The researcher intended to report findings from the data and to keep the voice and views of the researcher away from the reporting as far as possible.

3.5.1.2 Rationale for using grounded theory methods

Grounded theory methods were chosen because of their unique and appealing attributes. Firstly, in well-researched study fields, hypothesis-based deductive research is acceptable, as there are usually sufficient theories that have been developed on the phenomenon, meaning a hypothesis already exists.⁽¹⁴⁴⁾ Meanwhile, grounded theory research does not start with an existing hypothesis or theory; instead, its aim is to develop one. It starts with data collection (with concurrent analysis) and interrogates the data until a substantive hypothesis or theory has been developed. The study methods expose the data to rigorous testing so that a theoretical analysis can be developed. In emerging research areas, where little is known on the phenomenon and only a few or no theories exist, inductive research is more appropriate.^(144, 146)

Currently, there are no comprehensive theories on HPS implementation and evaluation in the local context. The phenomenon that is the implementation of HPS in South Africa is under-researched, as can be seen in the literature review above. Researching it requires an inductive research methodology that looks into the social factors that affect specific people and generates a theory or hypothesis of the social phenomenon in the particular context.

In school research, there is a need for data-based theory that will help explain the daily world of educators, students, administrators and school bureaucracy in local contexts.^(147, 148) Hussein⁽¹⁴⁹⁾ explained that there is often a passive acceptance in academia that all the wonderful or worthwhile theories have already been discovered and all that future researchers need to do is to prove them. On the contrary, relevant frameworks will not come from existing theories but from inductive studies conducted in naturalistic school settings.⁽¹⁴⁷⁾ The success of the HPS programme is largely dependent on lower-level adoption of the approach, which necessitates local theories and frameworks.

Secondly, GT was more appropriate to this study because of its potential to conceptualise the data through the development of concepts.^(146, 149, 150) This study's original contribution was to conceptualise the concepts involved in HPS implementation in COT and develop a framework to give clear understanding of implementation processes.

Thirdly, GT study is usually a product of questions that researchers ask themselves about people in a specific context, generating theories that are used to understand contextual social behaviour.⁽¹⁴⁸⁾ The impetus for the researcher to embark on this study was the raw question, “what is happening in the health promoting schools in Tshwane?” Qualitative inquiry has numerous methods for data analysis such as content analysis, conceptual analysis, thematic analysis, and others. These methods are well suited to studies that seek to give a description of a phenomenon but are not suited to generating theorisation as they lack strong theoretical basis. This is different from GT analysis, which is used for theorising on the phenomenon of interest. This study used multidisciplinary text (health, education and social sciences) to develop a programme framework with explanatory power regarding the phenomenon.⁽¹⁵¹⁾ Hence, an explanatory study utilising GT methods was appropriate to answer the research question.

For the aforementioned reasons, GT was sufficient and appropriate for building a conceptual framework. Straussian grounded theory was employed in this study, a widely used version in education research. It comprises three systematic stages of data analysis, called coding: (1) open coding, (2) axial coding, and (3) selective coding. In open coding the data is broken up into small parts in order to describe the data, then in axial coding connections are made from the broken up data; and the central category is developed in selective coding, which connects all the data and captures the essence of the study.⁽¹³⁹⁾ At the end of the analysis, a theory is developed on the phenomenon of interest.^(152, 153)

3.5.2 Recruitment

Phase 2 recruited health promoters and school staff from COT health promoting schools. **Table 6** presents the recruitment of participants.

Table 6: Summary of recruitment and participants for Phase 2

Participants	Data collection method	Number recruited	Number participated
Health promoters	Focus group discussion	n-7	n-7
School staff	Individual interviews	n-39	n-20
	Educators	n-13	n-10

	Principals	n-13	n-6
	School Governing Body	n-13	n-4

The district Health Promotion Directorate manager was approached about the study and was requested to participate in the FGD with health promoters working with health promoting schools. Seven (n=7) senior health promoters were selected by the manager, and they consented to participate (see **Appendix 7** for the consent form). The manager reported that the seven were the most experienced in the HPS programme and would give valuable information compared to the other health promoters in his directorate who had little or no experience with health promoting schools.

In each school, the researcher requested from the principal to have an interview with the school principal, a LS educator and one member of the school governing body (SGB). The principals needed to approve interviews before the researcher could approach the selected participant. Only (n=20) participated, instead of the proposed 39 participants. There were various reasons for the lower than proposed numbers. Participants were asked to read and sign a consent form (see **Appendix 8**).

- Some schools refused to be part of the study (n=2). In the schools that participated, some of the key implementers responded that they were unavailable for the interview due to school commitments or illness or personal reasons.
- The study was conducted during the time of COVID-19, and educators were not in schools for months. When they returned to schools, they complained that they had too much work and had no time to participate in the research. They mentioned that they had to cover for colleagues who had passed on due to COVID-19 or were sick.
- Principals were the most uninterested in participating in the study, citing being busy with school duties due to COVID-19. They often referred the researcher to an educator for any assistance needed.
- At the time of study, the schools had changed their SGB members, as is done on a three-year cycle. The newly appointed SGB were not eligible for the study and principals were reluctant to give the researcher permission to speak to the

old SGB as some felt they would speak ill of them since they had finished their term in the school.

- The researcher was restricted by COVID-19 regulations and could not visit schools as planned. This led to telephonic appointments for interviews. However, participants did not honour the appointments.

3.5.3 Sampling

Sampling in Phase 2 was done in two stages, as described below.

3.5.2.1 Focus group discussion sampling

A good FGD informant is knowledgeable of the topic being investigated (an expert because of their involvement), able to provide detailed information based on their experience with the phenomenon, and should be willing to talk.⁽¹⁵⁴⁾ Sample selection for FGD was purposive; participants were selected because they were suitable and available to be part of the study.⁽¹⁵⁵⁾ This FGD included participants with the highest level of experience in health promoting schools in COT. The (n=7) health promoters that participated currently work with the health promoting schools. Currently, the Health Promotion Directorate in the district appoints health promoters to work with the schools in the different sub-districts. The idea behind including only health promoters in the FGD was an attempt at increasing rapport within the participants (intragroup homogeneity) and minimising differences in participant opinions and views, which may have derailed the aim of the discussion.⁽¹⁵⁵⁾ The FGD was conducted using a guide (see **Appendix 9**).

Health promoters' views are valued for the following reasons:

- They are tasked with recruiting schools to be health promoting schools—health promoters identify schools and approach the school principals about the HPS programme.
- Once the school principals agree to implement the programme in the schools, they help the schools to prepare for accreditation.
- They continue to support the school after accreditation to sustain their accreditation status.

Inclusion criteria for health promoters

- Experience with health promoting schools in COT for a minimum of two years

3.5.2.2 Individual interview sampling

In the (n=11) schools that participated in Phase 1, key implementers were selected in accordance with the HPS framework.⁽¹⁷⁾ They were interviewed using semi-structured interview (SSI) guides—one for the principals, one for the SGBs, and another for the educators (see **Appendices 10, 11 and 12** respectively). Sampling in SSIs is purposive; participants are selected for their expertise, experience and perspectives.⁽¹⁵⁶⁾ The selected participants had different experiences in HPS, but each participant provided rich data for the study. The participants were chosen because they are in charge of HPS implementation in the schools. **Table 7** below provides a detailed description and criteria of participants.

Table 7: Selected key stakeholders

Selected key stakeholder within HPS framework
<p>School principals:</p> <p>They have the privilege of accepting or denying the implementation of HPS in their schools. If they accept, they need to provide leadership and support for the HPS programme implementation in their schools. They also communicate with support systems outside the school, such as the district office and funders.</p> <p><i>Inclusion criteria:</i></p> <p>A principal working at the health promoting school in COT for a minimum of 2 years</p>
<p>Life Skills educators:</p> <p>Health education is taught as part of the LS module; the educators teaching this module are an integral part of HPS implementation.</p> <p><i>Inclusion criteria:</i></p> <p>Teaching LS for a minimum of a year at the participating HPS school</p>
<p>School governing body (SGB) members:</p> <p>In South African public schools, SGBs are elected as part of the school governance and management structure in the school. The SGB plays a leadership role at the schools by holding the schools accountable for activities at the schools. They account for monitoring of activities and help raise standards for the schools. The SGB also represents the parents and the community at large.⁽¹⁵⁷⁾</p> <p><i>Inclusion criteria:</i></p> <ul style="list-style-type: none"> • A member of the SGB for a minimum of a year at the participating HPS

3.5.2.3 Theoretical sampling

In grounded theory, it is anticipated that when the researcher analyses the initial data, “it will raise questions, suggest relationships, highlight gaps in existing data and reveal what the researcher does not yet know”.⁽¹⁵⁸⁾ Concepts and categories may emerge and will direct the next phase of sampling.⁽¹⁴⁴⁾ The researcher takes the new information and uses it to meticulously select participants and adjust questions in the next round of data collection to fill the existing gaps, clarify any uncertainty and develop an emerging theory.⁽¹⁵⁸⁾ This process of theoretical sampling will continue iteratively until theoretical saturation has been achieved. The onus is on the researcher to decide when it is time to move from purposive sampling to theoretical sampling.⁽¹⁴⁶⁾

Grounded theory normally starts with purposive sampling, and after the initial data collection and analysis, the researcher is able to use theoretical sampling to choose specific participants to answer the research questions that may have emerged.^(146, 158) Theoretical sampling is another variation of purposive sampling, albeit more complex and guided by the data and the emerging theory, and can only be applied once data have been collected and analysed; it cannot be applied in the first phase of the research.^(153, 158)

It is the nature of GT that, during data analysis, information may come up on which the researcher may need to discuss with the participant or get more details or clarity.⁽¹⁴⁰⁾ To facilitate this process, during data collection, the participants were made aware that the researcher may contact them again in the event that clarification is needed.⁽¹⁵⁹⁾ During the FGD analysis, theoretical sampling and saturation were applied as concepts that required further exploration emerged. Relevant participants were contacted, and online interviews were conducted to further explore the concepts until saturation was reached. The participants could not be called for another FGD because of COVID-19 regulations, and they had been assigned to COVID-19 screening sites and were not available. Health promoters that were excluded were initially included, as it emerged that their inputs would be valuable in Phase 3, during the refinement of the framework. These included the district health promotion manager (n=1) and the health promotion liaison officers (n=2).

3.5.4 Data collection

A focus group discussion and semi-structured interviews were conducted to fully explore the research question.

3.5.4.1 Focus group discussion

A focus group discussion is a methodology commonly used in qualitative research, including in GT.⁽¹⁴⁰⁾ They are increasing in popularity amongst GT researchers, used as a standalone data collection method or as an extension of individual interviews.^(140, 160) In this study, it preceded the SSIs and assisted to broaden the scope of the evaluation. They were especially valuable to this GT study as they allowed for different viewpoints and a wide range of experiences to be expressed, which facilitated category development. They are also useful in gathering rich understanding of participants' experiences and beliefs and allow for analysis to be done at group level as opposed to individual views and perceptions.⁽¹⁶¹⁾ Through participant perceptions, views and experience of HPS, the FGD provided information not yet available in the literature.⁽¹⁵⁵⁾

FGDs are directed, monitored, and recorded by a facilitator who is also the main researcher. The location where the focus groups take place is essential and has a direct influence on the participants' responses, and it is important that there is enough privacy for the participants to feel free to express themselves.⁽¹⁶¹⁾ A neutral venue outside the school premises was organised. The FGD was held at a conference centre at the sub-district 3 health offices. This venue is in a private wing of a hospital; it was quiet with minimal interruptions. Focus group discussions typically recruit between six and ten people and are well-organised. This study had seven senior health promoters in the FGD. Only one FGD was conducted because there was only a small number of health promoters working with health promoting schools and a second FGD would not have been possible. The main researcher moderated the two-hour FGD, while the research assistant was responsible for audiotaping.

3.5.4.2 Focus group discussion script

A focus group guide developed for this study was used to guide the FGD. In accordance with GT, the researcher allotted enough time to each question on the FGD schedule to allow for saturation, hence keeping the number of questions on the FGD guide to a minimum. There were only seven questions on the guide, with most

requiring a substantial amount of time for probing by the researcher to exhaust the question as much as it was possible. The questions were open-ended but specific to HPS implementation. The development of the questions was informed by the literature review and preliminary informal interviews with health promoters during recruitment.

The discussion script included:

- Demographic profile/details
- Six HPS-related questions
- A sheet for noting nonverbal communication at each question
 - During the FGD, both the researcher and assistant noted participants' nonverbal communication. After the FGD, the main researcher and the research assistant debriefed, discussing the notes taken during the FGD. Gaps and questions that emerged from the notes were noted as part of the questions that needed further clarity. Relevant participants were later contacted to clarify the questions.

3.5.4.3 Semi-structured interviews

SSIs are the most commonly used form of interview in qualitative inquiries⁽¹⁶²⁾ and the most common form of data generation in GT research and in mixed methods study designs. Whiting⁽¹⁵⁴⁾ defines an interview as “A method of data collection in which one person (an interviewer) asks questions of another person (a respondent): interviews are conducted either face-to-face or by telephone”.

Semi-structured, in-depth interviews should be intimate and personal, and they should prompt detailed narratives from respondents by the use of open, direct and verbal questions.⁽¹⁵⁴⁾ The interviews in this study were semi-structured because of theoretical sampling. The researcher had specific predetermined questions that needed to be answered by the particular participants. These questions were informed by the literature review and the findings from Phase 1 and the FGD.⁽¹⁶²⁾ Semi-structured interviews are flexible in nature, allowing the interviewer to ask for clarity whenever necessary in order to explore new emerging ideas. This was valuable in GT research as the researcher sought to reach theoretical saturation. This would not have been possible using unstructured interviews, where the participants are allowed to tell their own story before the researcher can ask questions.

3.5.4.4 Developing an interview guide

The interview guide was developed to assist the researcher in collecting the same information from all participants and to maintain order during the process.⁽¹⁶²⁾ It also allowed the researcher to ask the same questions to implementers in the different schools, which assisted in conducting a fair comparison of implementation processes in the different school settings across COT. The first interview guide was informed by the literature review and preliminary interviews with implementers. It was then altered after analysing data from the FGD. The new information from the FGD analysis informed the development of a more relevant guide.

The guide was structured into seven sections, namely: general experience; curriculum; health promotion activities; the social, physical, and environmental factors; families, community, and interdepartmental engagement; health services and evaluation; and sustainability. Questions included general, open-ended, and specific questions, with probes included where the researcher felt the participants needed probing. Though three guides were developed, most of the questions were similar for all participants, but were different in some areas such as “teaching of health education in the classroom”, which was not relevant for the SGB. Another example is “leadership roles in the schools”; such questions were only relevant to the school principal and SGB but not the educators. The guide was piloted on two educators who were not part of the study, and one minor change was made to it.

3.5.4.5 Telephonic interviews

The researcher had initially planned on conducting only face-to-face interviews; however, due to COVID-19 regulations in the country, the researcher had to adjust the study plans and conduct telephonic interviews where face-to-face was not possible. The FGD was still conducted face to face as they were conducted outside the school premises and the COVID-19 regulations allowed for small-group meetings in specific settings where precautionary measures were observed.

Face-to-face FGD and interviews were chosen for this study because they allowed for richer participant responses compared to other forms, such as telephone interviews. When a person is interviewed face-to-face, both verbal and non-verbal communication is possible, which enhances communication, and prompts that were not predetermined can be used for more clarity.⁽¹⁵⁶⁾ During the FGD and interviews, the researcher noted

important nonverbal communication and different emotions attached to questions. These notes were used in the analysis process to describe participant behaviours and comments (see **Figure 10** below for an example of nonverbal communication notes).

	1- Very strong	2- strong	3- weak	4- Very weak
Question: 4 What are the challenges and strengths of HPS implementation?	1	2	3	4
Consensus	√ very strong			
Interest in the question		√ good		
Difficulty in answering		√ a good degree of difficulty		
Other comments	The participants were only interested in one part of the question, the challenges and were not interested in discussing the strengths and found it somewhat hard to answer that part. The researcher had to probe to get answers. There was a lot of irritation associated with discussing the challenges. They were not interested in discussing support from District office because they said they got nothing from them. HP 5 was especially irritated over the lack of resources.			

Figure 10: Example of nonverbal communication notes

The face-to-face interviews were scheduled to be held in March 2020 but had to be postponed due to the COVID-19 outbreak, which resulted in schools closing down indefinitely. Schools reopened five months later, with very strict regulations for visitors. The researcher attempted to conduct some telephonic interviews with the participants at their convenience. Consent was sought from the participants to audio-record the interviews. Audio-recording using good-quality equipment is recommended.⁽¹⁶³⁾ After each interview, the audio recording was used to transcribe the data verbatim into Microsoft Word.

3.5.4.6 Building rapport and active listening

Building rapport between the researcher and the research participants is important as it helps dispel any power dynamics that may emanate; it helps develop a non-

hierarchical relationship.⁽¹⁶⁴⁾ To build trust and reduce distress, the researcher assured respondents that any information they would divulge would not be used against them and would be kept confidential. The participants were told that they were given identification codes and their real names would not be on any of the research work. They were also reassured of the fact that the researcher was from the University and conducted the study with the aim of improving their HPS outcomes. It was explained that this was not an audit to penalise the schools or individuals. Participants saw an outsider (someone from outside the GDOE) as one who could perhaps bring something new to health promotion work. This eased tensions and scepticism to some extent. Tensions were also eased by the researcher telling the participants that they were specifically chosen to be part of the study because they had valuable knowledge on HPS, which was needed in order to improve HPS outcomes, and not because they were being targeted because of any wrongdoing.

To improve rapport, the researcher opted to use the term “boMme” to address the FGD participants, even though the discussion was conducted in English. This is a Setswana term meaning “mothers”, which is a culturally appropriate and endearing term when addressing older women. In all the interactions with participants, the researcher listened attentively, reassured participants when they spoke and often summarised what the participant had said to reassure them that they were listened to and heard. Words such as “ok”, “mmmm”, “neh”, and “yoo” were used to encourage the participants as they spoke. “Neh” and “yoo” are part of the South African lexicon used to express interest in what is being said. Principals and educators were addressed as Sir and Ma’am, as these are the terms they are addressed by in schools.

To test whether the researcher had accurately understood what the participants had said, the researcher asked questions such as, “So what you are saying is that...”, and to determine consensus during the FGD, questions such as “Are you all in agreement with HP6 that....?” were asked.

3.5.5 Grounded theory data analysis

Analysis using grounded theory methods involved three iterative stages: (1) description, (2) coding and (3) theory development and testing. Unique to GT was the iterative nature of analysis, which involved going back and forth between the three

stages, which ran concurrently with data collection. The new emerging information guided subsequent data collection.⁽¹⁶⁵⁾

The first step in the analysis process was to write notes describing important observations of the FGD and each SSI. The audio recordings were transcribed verbatim into a word document. The FGD analysis was done first, but the process only proceeded up to axial coding so that categories would be developed together with SSI data. Two hours of FGD produced huge amounts of data that needed to be coded;⁽¹⁶⁶⁾ the FGD resulted in 25 pages of transcribed notes on MS Word (Microsoft USA Version 2016). The SSIs were also transcribed onto an MS Word document, and analysis started after each interview.

3.5.5.1 Codes and memos

Microscopic analysis or line-by-line labelling of the data was the first step in developing codes. Codes were used as a shorthand to identify incidents in the participants' experiences. "Incidents" is an umbrella term meaning reoccurring experiences, characteristics, phrases, actions and explanations.⁽⁵⁰⁾ Early in the analyses, only exact labels spoken by the participants were used (in-vivo codes). The use of in vivo codes helped to conceptualise the experiences of the participants using their own language, which is important when attempting to understand the experiences of the participants. Later in the analysis, theoretical ideas were also used to code data. The purpose of using theoretical ideas was to better describe the raw data, increase theoretical sensitivity and ensure that the developing codes were not merely descriptive but were analytical.⁽⁵⁰⁾

In developing the theory, the researcher then reverted to the words used by the participants, so the theory captured the feelings and expressions of the participants. In some cases, this could not be done as the categories could only be explained using analytical terms. For instance, instead of using academic terms such as contextual factors, the researcher used "local situation", as expressed by the participants. According to Charmaz⁽¹³⁸⁾ and Corbin,^(145, 167) whether exact labels are used or new ones are created is not important; what is important is that the codes chosen should contain meaning and actions and should accurately describe the data. The non-verbal communication notes that were noted during the FGD and interviews helped to explain some of the concepts from the raw data.

3.5.5.2 Constant comparative analysis

Constant comparison is a unique feature of GT. Various types of comparisons were performed at each stage of the analysis to achieve theoretical saturation, theoretical sampling and increase theoretical sensitivity. In open coding, systematic comparison was applied to compare concepts with concepts and codes with codes.⁽⁵⁰⁾ Another technique called theoretical comparison was also used at each stage, where emerging concepts (raw data) were compared with the literature. Emerging concepts were also compared with findings of Phase 1.

Another technique of constant comparison used was the “flip-flopping” technique. This method was used to compare opposite codes or experiences. For instance, an educator reported that they had no challenges with teaching LS, and some reported numerous challenges. These different experiences of the same concept had to be compared to determine the reasons for the different experiences. Going back to the participant, the reason the educator reported no challenges was because they did not understand the full scope of LS classes. The constant comparison process was reiterative, as it was applied at each stage of the analysis, as future incidents were compared with already existing incidents, and incidents from the data were compared to the literature and Phase 1 findings. The new information from the analysis assisted with theoretical sampling.

3.5.5.3 Theoretical sampling

After the initial educator interviews were analysed, it was discovered that there were questions on the guide that educators did not understand, so these were changed for the subsequent interviews. Changes were also made to the principal interview guide. At subsequent interviews, questions were included in the form of probing, to get data that were not obtained in the previous interviews. Participants themselves often drove the process, as some would give information that had not been asked but was important. For instance, the researcher did not know that vendors paid a fee to the schools. This was an unexpected piece of data brought up by a participant, and the question was then incorporated into subsequent interviews. This detail was important for questions around vendors and dealing with them. No two interview were exactly the same, though they were all guided by the interview guide.

3.5.5.4 Theoretical sensitivity

In the process of coding the data, Corbin and Strauss⁽¹⁵³⁾ advised that GT researchers should be theoretically sensitive by practising a high level of insight into the participants' words, actions and experiences. Sensitivity to the data was achieved by the constant questioning of the data at each stage: "who, what, why, where, how much, how?"

3.5.5.5 Theoretical saturation

When information from the grounded data stopped adding variation to the codes, theoretical saturation was said to be achieved.⁽¹⁵⁸⁾ After analysing the interviews of the first two principals, the findings were similar in many aspects. At the end of interviewing all principals, there was no variation in their data. This could be because principals seemed to respond with textbook knowledge of HPS and not because their lived experiences were the same. Regarding the educators, there was little variation on some questions. For instance, educators had similar feelings towards teaching LS and had similar knowledge on the HPS programme. However, there was a lot of data coming in regarding contextual factors affecting the schools. After analysing about 70% of the educator interviews, the variations had ended and data were similar, even with the researcher probing to get some new information. Educators provided more details because they spoke from their experiences of teaching LS. During the FGD, the researcher also probed each question where clarity was needed.

Seminal grounded theorists use different terminology to describe the stages of coding. This study employed the language used by Strauss and Corbin.⁽¹⁵³⁾

3.5.5.6 Open coding

Open coding is the first step of theoretical analysis.⁽¹⁶⁵⁾ Coding started with adding another margin to the transcript in Microsoft Word and labelling each line with meaningful labels. Data were analytically fractured to give insight into the phenomenon.^(114,130) This process initially looked like a summary of the raw data.

As the data started to open up, incidents were compared with each other for similarities and differences and given conceptual labels. In essence, this initial stage involved coding for processes in the daily experiences of implementing the HPS programme (see **Figure 11**).

Q5: As an LO teacher were your roles and responsibilities explained with regards to health promotion or health promoting schools?	Open coding
Participant 11: No, I do not think so, I just fell into it because of shortages. I did not get training in physical education and part of the creative acts.	<ul style="list-style-type: none"> • No training was given • Teaching the subject because of shortage of educators • No training in physical education and creative arts which are components of the subject • Educator was not trained at university nor trained by the department to teach the subject. They were just teaching because they were appointed to due to staff shortage, they indicated that they had no training in two of the 3 components of the LO subject • Lacking in confidence in teaching, feelings of incompetence, poor support and consultation with educators and poor planning by management. Teaching for the sake of teaching

Figure 11: Extracted example of open coding

3.5.5.7 Axial coding

The second step of coding, or intermediate coding, involved connecting data that were fragmented in open coding.⁽¹³⁹⁾ It is a process of exploring relationships between codes. To start off axial coding, a new margin was added to the open coding Word document labelled as “axial coding”. Codes were then grouped into categories,^(139, 144, 165) and their properties (characteristics that give the category meaning) and dimensions (the range of variations in that property) were discovered from the data.⁽¹⁶⁸⁾ Categories were named using participant and theoretical language; participant language was used as much as possible. This intermediate coding involved testing and hypothesising on relationships between categories. Categories are higher in level and more theoretical (abstract) than concepts and led to an integrated theory later in the analysis. Categories were named in such a way that they were multidimensional and had subcategories that explained the concepts.⁽¹⁴⁰⁾ See **Figure 12** below.

Q5: As an LO teacher were your roles and responsibilities explained with regards to health promotion or health promoting schools?	Axial coding/categories
Participant 11: No, I do not think so, I just fell into it because of shortages. I did not get training in physical education and part of the creative arts.	Teaching the LO subject <ul style="list-style-type: none"> • Lack of training <ul style="list-style-type: none"> ○ Incompetence ○ Lack of confidence • Staff shortages <ul style="list-style-type: none"> ○ Poor educational outcomes ○ Poor planning and consultation by management • Subject challenges <ul style="list-style-type: none"> ○ Physical and creative arts

Figure 12: Extracted example of axial coding

3.5.5.4 Selective coding

The Straussian coding method involves the following: “fracture in open coding, relate and integrate in axial coding, and then select and integrate in selective coding”.⁽¹⁶⁹⁾ Selective coding involved exploring relationships between the categories to identify connections and develop core categories.^(153, 158)

3.5.5.7 Core category

This is also referred to as the central category. It is the base of the theory developed as it integrates all the categories in the theory.⁽¹⁵³⁾ During selective coding, the core category was identified from the data, as it had the central role within all the categories and explained the findings to a higher level than the other identified categories.^(153, 158)

3.5.5.8 Abductive reasoning

Abductive reasoning was used to develop and explain the theory of HPS implementation in COT. Inductive and deductive reasoning use existing data or theories to predict and do not necessarily develop new information,^(170, 171) Abductive reasoning, however, is a process of theory development and evaluation that explains the underlying patterns of a phenomenon. It makes creative inference through integrating and justifying the emerging concepts or ideas to generate new information.^(170, 171)

3.5.5.9 Reflexivity strategies

In GT, the theory that emerges should be based on the collected data. There are many different ways available to support researchers in preventing other influencers/inputs to trump the collected data.⁽¹⁴²⁾ Reflexivity is a means for researchers to assess critically their positionality within the research: the researcher's biases, preferences, preconceived ideas and relationship to the participants, as well as how the relationship affects the participants' answers to questions.⁽¹⁷²⁾ The researcher implemented the following strategies during the research process to ensure transparency and quality of the study findings.⁽¹⁴²⁾

Constant comparative analysis promotes reflexivity.⁽¹⁴²⁾ This process involves comparing data, codes, categories and memos. This comparative process was also used to compare the literature to the data, codes, categories and memos to validate or reject the literature and ensure that the data are favoured over the literature.⁽¹⁴³⁾ Memo writing was used to promote reflexivity. The researcher wrote down thoughts, feelings or questions that arose during the research process.⁽¹⁴⁰⁾ Memo writing started as early as possible in the research process, so the research could have a comprehensive trail of decisions made along the research process and the justifications for them. The researcher started taking notes in the preliminary informal recruitment meetings with the health promoters and education staff. These notes helped to inform the researcher on the attitude of the implementers and how far the program had come. Memos were treated as data to be analysed; they were important in the analytic process and were kept informal.⁽¹⁴⁵⁾ These included informal talks during the recruitment process with participants and others involved in the programme.⁽¹⁵⁸⁾ According to Sbaraini,⁽¹⁵⁸⁾ notes are used to keep a record of the thinking process of the researcher throughout the study.

The theory developed in this study was informed by the grounded theory; however, the researcher had to conceptualise and make reductions of the data. This resulted in an inevitable interaction between grounded data and the researcher's interpretation of the data. The researcher started the collection of the data with some preconceived ideas, as a result of the literature review conducted prior to data collection and personal feelings and assumptions of the programme. This is, however, within the scope of Straussian GT, which allows for literature review prior to fieldwork. As advised

by Corbin and Strauss,⁽¹⁵³⁾ the researcher attempted at all times to be led by the data and not prior knowledge of the phenomenon.

3.6 Phase 3

The Delphi technique is often used in health sciences to reach consensus through structured group communication with participating experts.^(173, 174) The technique seeks to find consensus on an issue under investigation. It can be used for a number of purposes, such as forecasting or identification of an issue or framework development.⁽¹⁷³⁾ It gains expert judgement via an iterative process of questions and controlled feedback.^(173, 174) The Delphi technique was chosen for this study for pragmatic reasons—it allowed for various expert locally and internationally to partake in the refinement of the framework, which allowed for a diversity of opinions.⁽¹⁷⁴⁾

3.6.1 Recruitment and sampling

The experts (n=9) recruited for this phase were purposively selected to ensure that they met the inclusion criteria for the study.⁽¹⁷⁵⁾ They included experts from the DOH, GDOE, academia and non-governmental organisations (NGOs). The number of participants in a Delphi technique can vary between four and 171 participants. However, Delphi techniques that attempt to generate and aggregate different ideas and solutions to a problem tend to have a smaller sample size of interdisciplinary experts compared to other variants of the technique.⁽¹⁷⁴⁾ Vogel et al⁽¹⁷⁵⁾ argued that larger sample sizes have the tendency to reduce the validity of the findings. They found that the size of the group is dependent on the group dynamics in reaching consensus, rather than statistical power. This also applies in health sciences education research, as stated by de Villiers et al.⁽¹⁷⁶⁾

Participants were recruited through research publications, ResearchGate, LinkedIn, DOH and GDOE websites, referrals, and university websites. The selected experts were invited via email or ResearchGate messenger. The invitation letter contained a brief description of the study and an explanation of the Delphi technique (see **Appendix 13**). The definition of an expert is based on one of two things, the person's individual scientific or professional expertise or life experience.

Inclusion criteria

Experts who met the criteria for inclusion were recruited from industry and academia.

- (1) Industry, have a leadership position in work related to health promotion or health promoting schools or monitoring and evaluation for more than three years
- (2) Academia, have been involved in research on health promotion or health promoting schools or monitoring and evaluation for a minimum of three years and publications on the topic

3.6.2 Gaining consent

The experts who agreed to participate in the study were subsequently sent a consent form and demographic questionnaire (see **Appendix 14** and **Appendix 15**), the draft framework, and the Likert scale. The experts were assured anonymity; the names of the experts were not divulged at any point of the study.

3.6.3 Data collection

Each of the participating experts were provided with a validation form for data collection. The validation tool was developed after findings from Phase 1 and Phase 2. The tool is presented in Chapter

3.6.2.3 Gaining consensus through questionnaires

The process of gaining consensus is iterative. The first set of questionnaires was sent to the experts who answered the questionnaire and sent it back to the researcher. After collation of feedback from experts, a new questionnaire was sent back to them, and they were able to see the feedback and make changes to their initial responses.⁽¹⁷⁴⁾ A systematic review by Niederberger and Spranger⁽¹⁷⁴⁾ found that experts often undermined the work involved in answering the questionnaires, so they recommend two rounds.

This Delphi method consisted of two rounds of data collection. In the first round, the draft framework was sent to the experts via email. After the first round, the ratings and comments from experts were used to adjust the framework. It was then sent back to the experts for rating on a Likert scale and comments. These results were used to produce the final framework.

3.6.4 Data analysis

Descriptive statistics were used to present the demographic details and group responses to each statement in the two rounds. Consensus was considered as >70% of experts agreeing/strongly agreeing or disagreeing/strongly disagreeing with a

statement in the two rounds. This level of agreement is considered acceptable in Delphi studies.⁽¹⁷⁵⁾ The neutral “neither agree nor disagree” responses were excluded from the statement responses, so that the findings would be based on responses from participants who felt that they knew the answer.⁽¹⁷⁵⁾

3.6.5 Summary of methodology

Figure 13 shows the summary of the study methodology, adapted from Gallotta et al.⁽¹⁷³⁾ and Vogel et al.⁽¹⁷⁵⁾

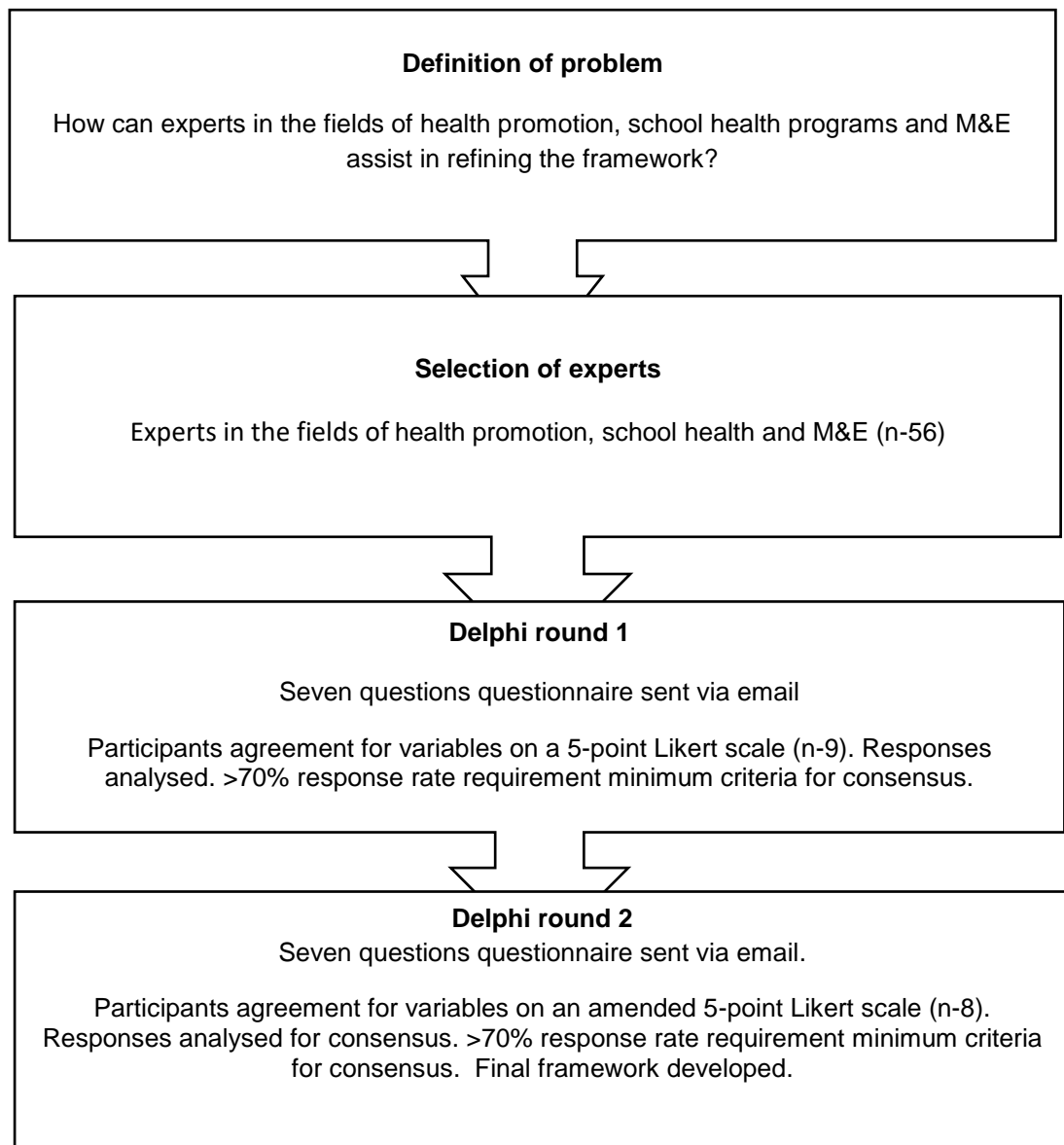


Figure 13: Summary of Delphi study methodology

3.7 Trustworthiness of qualitative data

The quality of qualitative research centres on how the data are collected and analysed. In qualitative research, this is termed “trustworthiness”, which would be the equivalent of “validity” in positivist studies. Trustworthiness refers to the credibility, transferability, dependability and objectivity of the study.⁽¹³³⁾ Grounded theory guidelines and the systematic approach to data analysis allow the developed theory to be firmly based on data and provides GT with rigor and trustworthiness that cannot be found in other qualitative methods.⁽¹³³⁾

3.7.1 Credibility (internal validity)

This is the extent to which the findings are trustworthy and believable to others. This will be done through data triangulation and method triangulation, as outlined above.⁽¹⁷²⁾ A thick description of the responses by the participants during the FGD and SSIs are included in the study discussion, and there was a lengthy interaction with the data and findings to increase credibility. This PhD thesis was assessed by critical readers, co-supervisor and a biostatistician to validate findings. The SSI guide used to interview respondents included open-ended questions, which increased the depth and vigour of the participant responses, and this in turn allowed for rich data to be collected, increasing the study’s validity.⁽¹⁶²⁾ The constant comparative methods of GT increased credibility.⁽¹⁴⁷⁾

3.7.2 Transferability (external validity)

Transferability refers to the extent to which the findings can be applied in other settings with other populations or respondents.⁽¹³⁷⁾ The researcher cannot prove that the study findings are applicable, but the responsibility of the researcher is to provide the evidence that the study could be applicable somewhere else.⁽¹⁷⁷⁾ The study context, findings, and sampling method need to be clearly and broadly described, including a thick description of the data collection process.⁽¹⁷²⁾ Throughout the thesis and in the discussion session of the study, there is an elaborate discussion of the data collection methods and data analysis; study findings and a memo detailing the research process has been included.

3.7.3 Dependability (reliability)

Dependability is the extent to which the research findings are reliable and consistent over time.⁽¹³⁷⁾ Participants are also allowed to evaluate the findings and contribute to

the study by making recommendations so that the findings are grounded in the data.⁽¹⁷²⁾ Researchers should document the research design and implementation, including the methodology and methods, as well as the details of data collection such as field notes, memos, and the researcher's reflexivity journal.⁽¹⁷⁸⁾ In this study, the researcher has increased reliability by using the same interview structure and interview questions on all the participants and collecting data through three different methods (triangulation). The researcher kept an audit trail by journaling the research journey and explained the decisions taken during the research as a reflexivity exercise.

3.7.4 Confirmability (objectivity)

This is the extent to which the findings of an inquiry are due to only the participants' responses and conditions of the inquiry and not as a result of biases, motivations, interests, perspectives and other influencers.⁽¹⁷⁸⁾ The researcher kept a dairy (memo) of the whole process, describing the steps taken.⁽¹⁷⁹⁾

3.8 Ethical considerations

"Ethics is not just a means, but rather constitute a universal end goal of qualitative quality itself."⁽¹⁵⁹⁾ Recently, research ethics have become the main point of concern in education research. This means that no educational research can be conducted without paying careful attention to ethics. Hence, the data collection process can only start once ethical clearance has been sought, approved and a certificate of ethical clearance issued.⁽¹⁸⁰⁾ For this study, approval was sought from and granted by the Faculty of Health Sciences Research Ethics Committee of the University of Pretoria. The GDOE granted the researcher permission to conduct the research at the schools and interview participants. The COT Health Promotion Directorate also granted the researcher permission to hold a focus group discussion and interviews with health promoters.

Upholding confidentiality during the study process is essential to protect the privacy of all persons, to build rapport with the participants, and to maintain ethical standards and the integrity of the research process. Consequently, health and social researchers are often caught between protecting the identities of the study participants and providing a detailed and accurate report of the phenomenon.^(181, 182) Especially challenging to upholding confidentiality is deductive disclosure.⁽¹⁸³⁾

Qualitative reporting, by its nature, provides a thick and rich description of the study participants and setting. Deductive disclosure is a matter of concern in this study because of the nature of the study sample. In each school, only three members are part of the study, and they are known: the principal, the SGB member and the LO teacher. The school communities around COT may know each other, especially the health promoting schools, as there are only 13 in the district. Health promoters, especially those working with health promoting schools, are few in the district. This meant that the researcher had to be extra vigilant to protect the identity of the schools and ensure that the confidentiality of the participants is not breached in anyway.⁽¹⁸²⁾ To mitigate this risk, the researcher followed the suggestions of Damianakis and Woodford,⁽¹⁸²⁾ which are: (1) collect no identifying information on demographic forms, (2) identify participants only by codes, (3) give participants the right not to answer questions and withdraw at any time, (4) inform participants of limitation of confidentiality, (5) remove identifying information, (6) anonymise transcripts, (7) avoid divulging information that will identify the community, and (8) engage in ongoing reflexivity. This study was also guided by legal guidelines for conducting ethical research. These included the CSE's White Paper on Promoting Integrity in Scientific Journal Publications⁽¹⁸⁴⁾, World Medical Association Declaration of Helsinki: ethical principles for medical research involving human subjects⁽¹⁸⁵⁾, International Ethical Guidelines for Biomedical Research Involving Human Subjects⁽¹⁸⁶⁾ and the HSRC Code of Research Ethics.⁽¹⁸⁷⁾ Below is a further discussion of the process of ethical consideration during data collection, data cleaning and dissemination of results.

3.8.1 Data collection and ethics

The first step is to build rapport between the researcher and all the participants, called relational ethics. Building rapport at this stage is important as it will help dispel any power dynamics that may emanate and develop a non-hierarchical relationship.⁽¹⁸⁸⁾ The fact that the researcher in this study is from a University may have created undesirable power dynamics. The researcher was conscious of this possible power dynamic and aimed to dispel it. It was not used to the researchers advantage, especially to harm or deceive the participants.⁽¹⁸⁰⁾ This meant that the researcher had to be constantly aware of their character, actions and consequences on others during the study. This "recognizes and values mutual respect, dignity, and connectedness between

researcher and researched, and between researchers and communities in which they live and work.”⁽¹⁵⁹⁾

3.8.2 Procedural ethics

Procedural ethics start with informed consent. At the start of data collection, the researcher confidentiality discussed issues with all chosen participants. All the selected schools were visited, health promoters and experts contacted; confidentiality explained, and consent forms were given to the participants.⁽¹⁸¹⁾ The aim of this exercise was for participants to clearly understand what the research is about, what is required from them, how the findings will be reported, the potential harm and benefits of participating, and their right to withdraw when they want to, without any explanation.⁽¹⁸⁰⁾ The explanation of the study was done verbally and written on the consent forms. Participants who consented to take part in the study signed the consent form. This is an important step, as it enabled the researcher to get informed consent and to build rapport and trust with the participants. Procedural ethics facilitates accuracy and avoids fabrication, fraud, omission, and contrivance. This, in turn, increases the credibility of the data.⁽¹⁵⁹⁾

When the forms were collected, the participants were made aware that the researcher may contact them again in the future, in case there is a need to clarify some issues regarding confidentiality issues that may come up during data analysis⁽¹⁸¹⁾ or for theoretical sampling and verifying concepts that may emerge during grounded theory analysis in Phase 2.⁽¹⁵⁸⁾

3.8.3 Data cleaning

During this stage, the data were collected and cleaned. As part of procedural ethics, the researcher ensured that there was no harm done to any persons as a consequence of this study. This included data management—personal information that was collected was kept safe and is locked away.⁽¹⁵⁹⁾ Additionally, identifiers were removed and codes given where necessary. In the quantitative Phase 1, school names were not included in the report but given codes such as “School 1” to “School 11”. In the qualitative phase, the names of the teachers, principals and health promoters were not included, but codes were given such as “Participant 1” to “Participant 20”, and health promoters were identified as “HP1” to “HP7”.

It may be simple to remove some identifiers such as names, but it becomes more challenging when dealing with unique life events that may be identified by others who have a relationship with the participant.

3.8.4 Dissemination of results

The results were reported in the following ways:

- Published as a PhD thesis submitted to the University of Pretoria
- Submitted to the GDOE
- Submitted report to the COT Health Promotion Directorate

The discussion on confidentiality and data dissemination did not end at the data collection stage but continued throughout the study.

3.5.5 Exit ethics

It is at this last stage where the researcher practises exit ethics. The researcher is not in total control of what happens to the report, in terms of how it will be read, understood, and utilised by the audience. However, the responsibility of making sure that the findings are reported in the best way possible, to avoid any undesirable outcomes, still lies with the researcher.⁽¹⁸⁰⁾

3.9 Chapter summary

This chapter gave the justification for the study's research design. The study was more concerned with the best means of evaluating the implementation of HPS, leading to the practical option of mixed methods and pragmatism as its philosophical approach. The aim of the study was to develop a framework grounded in the data. This required the use of grounded theory methods for conceptualisation and theory development. It was important that the study obtain all the necessary permission and ethical approval. Ethical consideration is essential to any study conducted in any field, and when properly implemented, it adds to the credibility of a study.

CHAPTER 4

FINDINGS OF AUDIT TOOL

4.1 Introduction

This chapter presents the findings derived from the analysis of the data obtained using the GDOE audit tool to evaluate health promoting schools in COT. The results indicated that health promoting schools in COT did not comply to the HPS programme; implementation fidelity was generally disappointing. Section 1 details the schools' response rate. Section 2 describes the schools' demographic details. In Section 3, the schools' level of implementation of the HPS programme is described. Section 4 outlines the audit tool validity and reliability results, and Section 5 outlines the relevance of the results to the subsequent phase.

4.2 Response rate

The target population for the study was the total population of health promoting schools in COT (n=13). However, only (n=11) schools were included in the final analysis, representing 85% of the total population. One school that did not participate refused visitors due to COVID-19 safety measures, and the other school principal did not respond to requests for school to participate.

4.3 Demographic details

The schools participating in this study were located in various townships and districts across COT.

4.3.1 Description of schools and the school community

The schools that participated in the study were located in three school sub-districts across Tshwane (see **Figure 14**). Most of the schools (64%, n=7) were located in the Tshwane North sub-district, 27% (n=3) were in the Tshwane West sub-district, with only 9% (n=1) of schools in the Tshwane South sub-district.

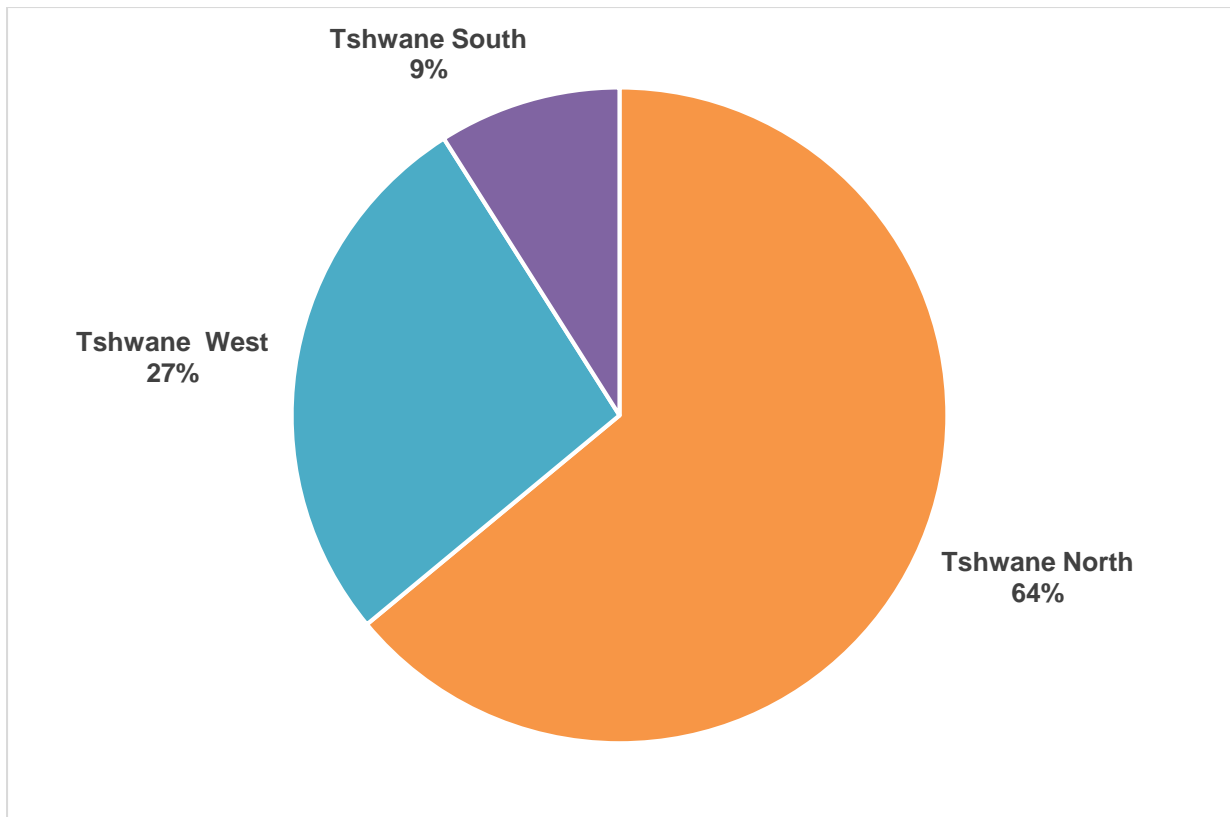


Figure 14: Pie chart showing location of health promoting schools across the City of Tshwane subdistricts

All schools participating in the study were public schools, classified as quintile 1 to 4 schools. Forty-six per cent ($n=5$) of the schools were classified as quintile 3 schools, 27% ($n=3$) were quintile 4, 18% ($n=2$) were quintile 1, and only one ($n=1$) was a quintile 2 school (see **Figure 15** below). All the schools were part of the NSFS, serving breakfast and lunch to learners, Mondays to Fridays during the school term.

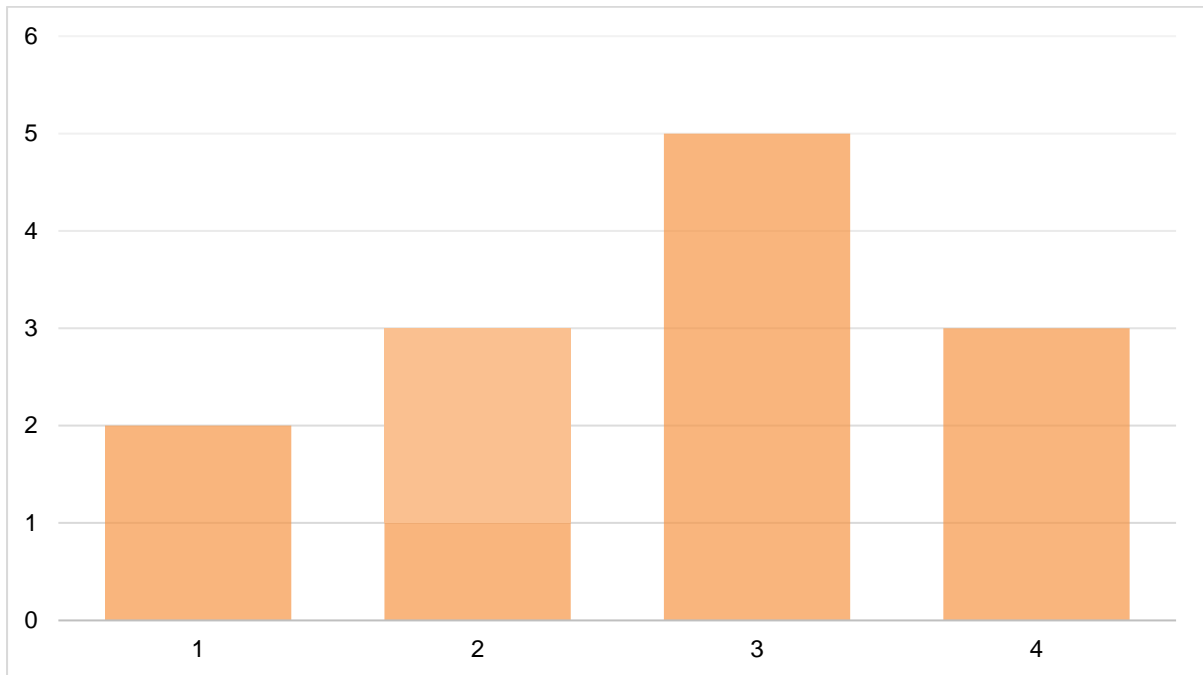


Figure 15: Bar chart showing quintile distribution of health promoting schools. The quantile ranking ranges from 1-4, with 1-3 being the most resource poor communities and 4-5 the more affluent communities. The vertical axis shows the quantiles (1-4), the horizontal axis shows the number of schools per quantile. The majority of participating schools (n=5) were declared as quantile 3 schools.

Most schools (n=10) were situated in semi-urban areas or townships; only one was in a rural setting. Learners in the schools walked to school or used common private transport, which dropped them at the gate; no school used the GDOE school transport. Roads around the schools were in satisfactory condition; however, two schools had pavements filled with dirt and leaking sewerage. Ten (n=10) of the schools were located within residential areas; one (n=1) was located next to a dilapidated and unkempt hostel on the outskirts of the township.

4.3.2 School staffing and learner numbers

The schools varied in regard to the number of educators, learners, and general assistants (GAs). **Table 8** below depicts the staff and learner statistics in the schools. The maximum number of educators in the schools was 42, with the minimum found to be seven and the average being 20. Each school had a principal and one or two deputy principals. Learner headcount ranged from a minimum of 53 in one school to a maximum of 1 558 in another, and the average number of learners was 667. The school with 53 learners was the one located in the rural setting. All the schools had a

limited number of GAs, with a minimum of one, a maximum of 11, and an average of five. The mean ratio of learners to educators was 32:1.

Table 8: Number of school staff and learners in participating schools

Statistics	Number educators	Number GAs*	Number learners	Ratio of educators to GAs*	Ratio of learners to educators
Mean	20.00	5.00	667.00	5.00	32.00
Standard deviation=	10.92	3.157	424.957	3.56	9.74
Minimum	7.00	1.00	53.0	0.00	8.00
Maximum	42.00	11.00	1558.00	15.00	40.00

*GA-General assistants

4.4 Assessment of schools' performance

The nine elements of the audit tool will be referred to as Likert scales/variables, and the 67 individual variables will be referred to as Likert items. "Water supply and safety" was not treated as a scale as it contained only one Likert item. Data analysis is reported in two steps. Step 1 is the results for overall performance of the schools across the nine Likert scales of the audit tool, and step 2 is the results of schools' performance on each Likert item.

Step 1

4.4.1 Differences in school performance

Null hypothesis: There is no difference in school performance in COT health promoting schools.

The difference in school performance was assessed using the Kruskal-Wallis ranking test, a significant difference was considered $p < 0.05$. The results indicated that $p = 0.44$ for the overall scale. Therefore, the null hypothesis was accepted; there is no difference in school performance in COT health promoting schools.

4.4.2 Ranking of variables

Likert scales were assessed to determine the level of implementation of each scale. **Table 9** and **Figure 16** show the ranking of the scales. "Not Yet Achieved" and "Partially Achieved" were grouped together to get the scales that were not implemented as intended by HPS implementation guidelines. "Hygiene and Sanitation" was the least implemented scale with 78% of its items not implemented as

intended; it was followed by “Skills Development”, which had 76% of its items not implemented as intended.

To determine scales that were implemented as intended, “Satisfactory” and “Outstanding” were grouped together. “Policy” had the highest level of implementation, with 88% of its items implemented as intended. “Environment and Safety” was the second-best implemented variable, with 74% of its items implemented as intended.

Table 9: Ranking the extent of implementation of variables as percentages¹

Likert Score	1	2	Not Implemented as intended	3	4	Implemented as intended
Hygiene and Sanitation	27	51	78	10	12	22
Skills Development	23	53	76	24	0	24
Community/Parental Involvement	18	44	62	19	19	38
Services	36	24	60	12	28	40
General Safety and Security	28	26	54	23	23	46
Nutrition	27	25	52	31	17	48
General	22	27	49	27	24	51
Environment and Safety	7	19	26	68	6	74
Policy Availability	6	6	12	15	73	88

¹ Table 10 ranks the variables from the least implemented to the most implemented

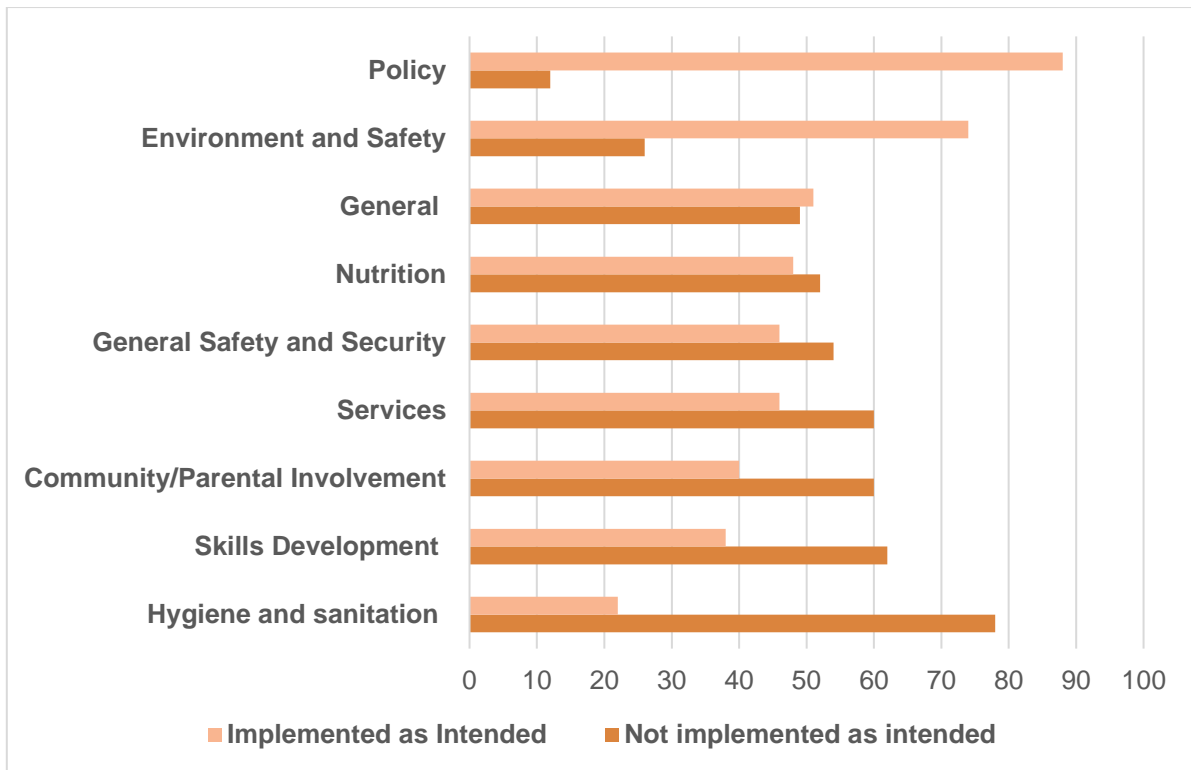


Figure 16: Bar chart showing the extent of implementation of variables

4.4.3 Ranking of school performance

Water supply was not included in the calculation since it only had one item on which all (100%) of the schools achieved an outstanding score. **Table 10** shows the best and worst performing schools per variable.

Table 10: Ranking of schools' performance across the nine variables

Variables	Best school/s	Worst school/s
Environment and safety	3	2
Hygiene and sanitation	9	3,5,6*
Nutrition	8	3
General safety and security	9	2
Policy Availability	6	2
General	4,9*	2,7*
Skills development	8,9*	2,6,10*
Community/parental involvement	9	2,3,8*
Services	9	3,7*

*Schools received the same scores in some of the variables

School 9 was adjudged to be the best overall on the items assessed, followed by School 8. School 9 performed the best in 6 variables, followed by School 8 with 2 best performances, see **Figure 17**.

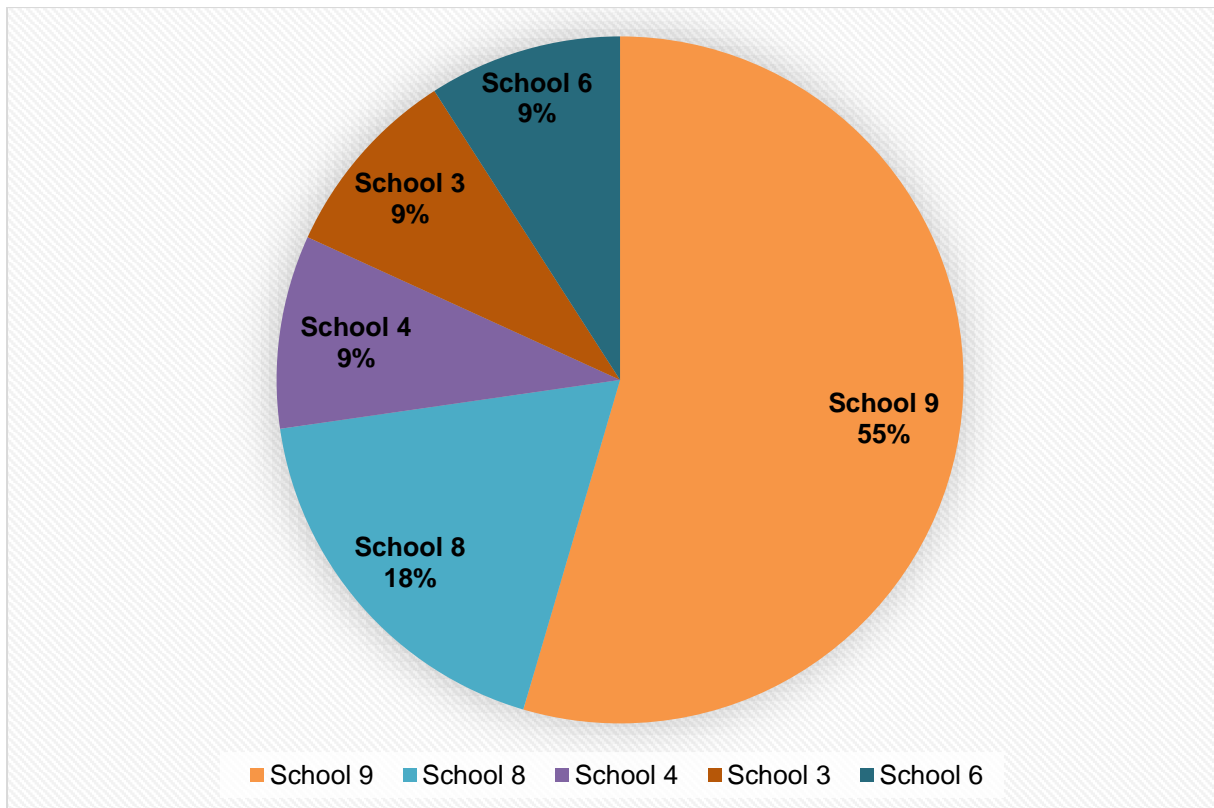


Figure 17: Pie chart showing the best performing schools across the nine variables

The worst performing schools were School 2, with six least implemented variables, and School 3, with four least implemented variables (see **Figure 18**).

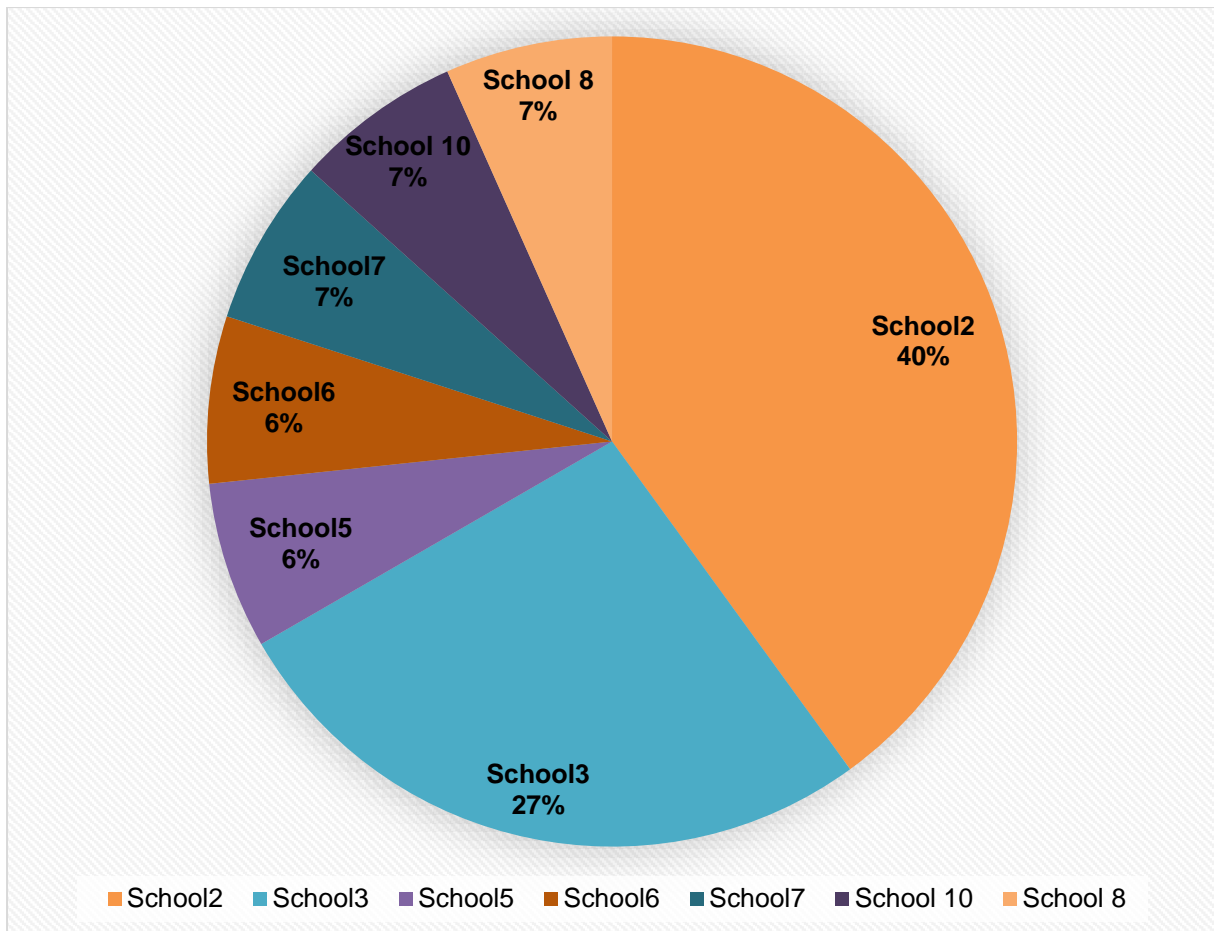


Figure 18: Pie chart showing the worst performing schools across the nine variables

Step 2

4.5 Assessment of Likert items

4.5.1 Environment and safety

The environment in the schools was found to be generally conducive to learning and teaching. The schools implemented 74% of the items on the scale. Results indicated that there was no significant difference in compliance between the schools. Only one school’s environment was found not to be conducive to learning and teaching; the school had no classroom doors and had broken windows. The item that did poorly was “IEC posters on the classroom walls”; only one school had satisfactorily implemented this item. With regard to infusing HPS into the curriculum, most respondents, who were LS educators, did not understand what was meant by HPS skills within the curriculum. This concept had to be explained to them (see **Table 11** and **Figure 19** for Likert scale scores).

Table 11: Schools performance on Environment and Safety variable²

Variable	Performance of schools (%)			
	1	2	3	4
Environment and safety				
Is the environment clean, safe, and supportive?	9.0	9.0	73.0	9.0
Are the classrooms conducive to learning and teaching?	9.0	9.0	82.0	0.0
Is there adequate space in the classroom for learners to move freely?	0.0	0.0	91.0	9.0
Is there adequate furniture?	0.0	0.0	100.0	0.0
Is there sufficient ventilation?	0.0	0.0	91.0	9.0
Is there enough lighting?	9.0	0.0	82.0	9.0
Cleanliness of classrooms.	0.0	23.0	68.0	9.0
Windows, floors, doors status, exposed wiring.	0.0	45.0	46.0	9.0
Are HPS skills infused in the curriculum?	0.0	36.0	55.0	9.0
Are IEC materials (e.g., posters) displayed in the classrooms?	36.0	55.0	9.0	0.0

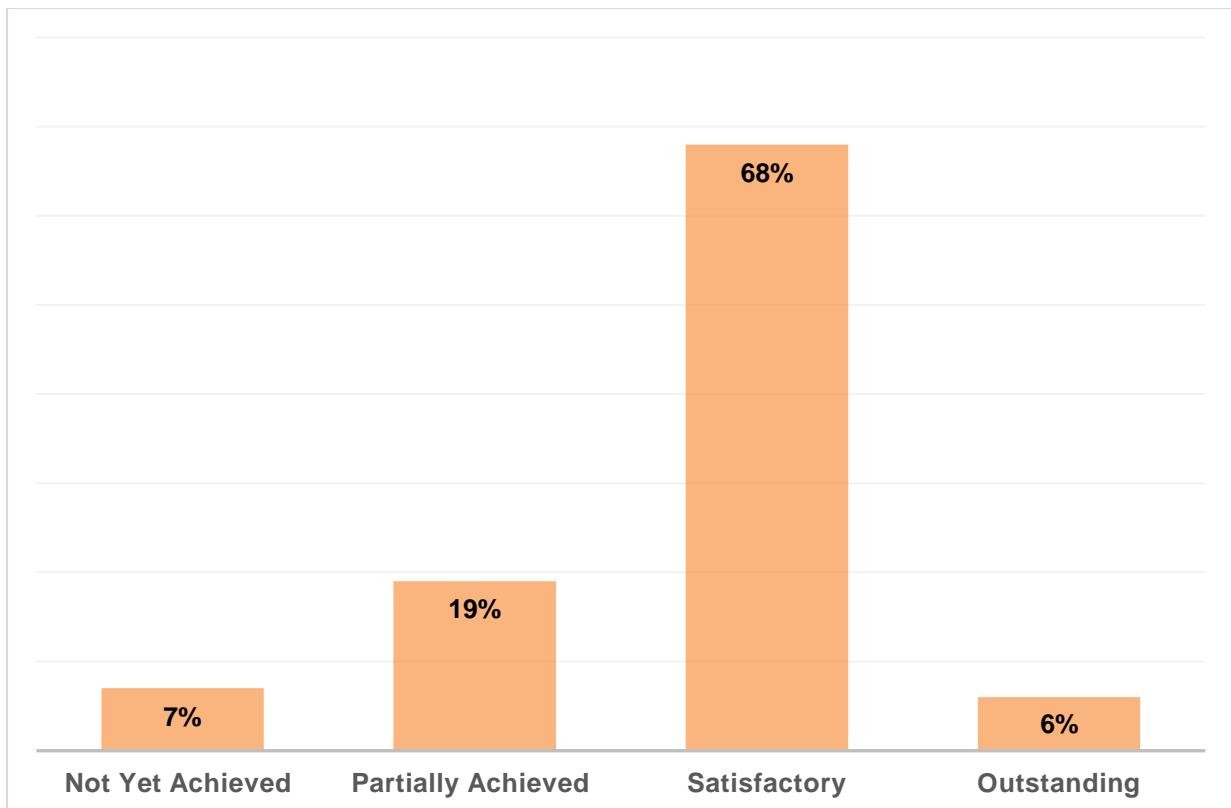


Figure 19: Bar chart showing performance of schools on Environment and Safety variable

² 1- Not Yet Achieved 2-Partially Achieved 3- Satisfactory 4- Outstanding

4.5.2 Hygiene and Sanitation

Compliance to the provision of acceptable hygiene and sanitation services was poor for 100% of the schools, with no significant difference in the performance of the schools ($p=0.39$). This element had nine items, which were all poorly implemented except for “refuse disposal”. This was the least implemented variable on the audit tool, achieving an overall score of “partially achieved”; 78% of the items were not implemented as expected, as depicted in **Figure 20** below.

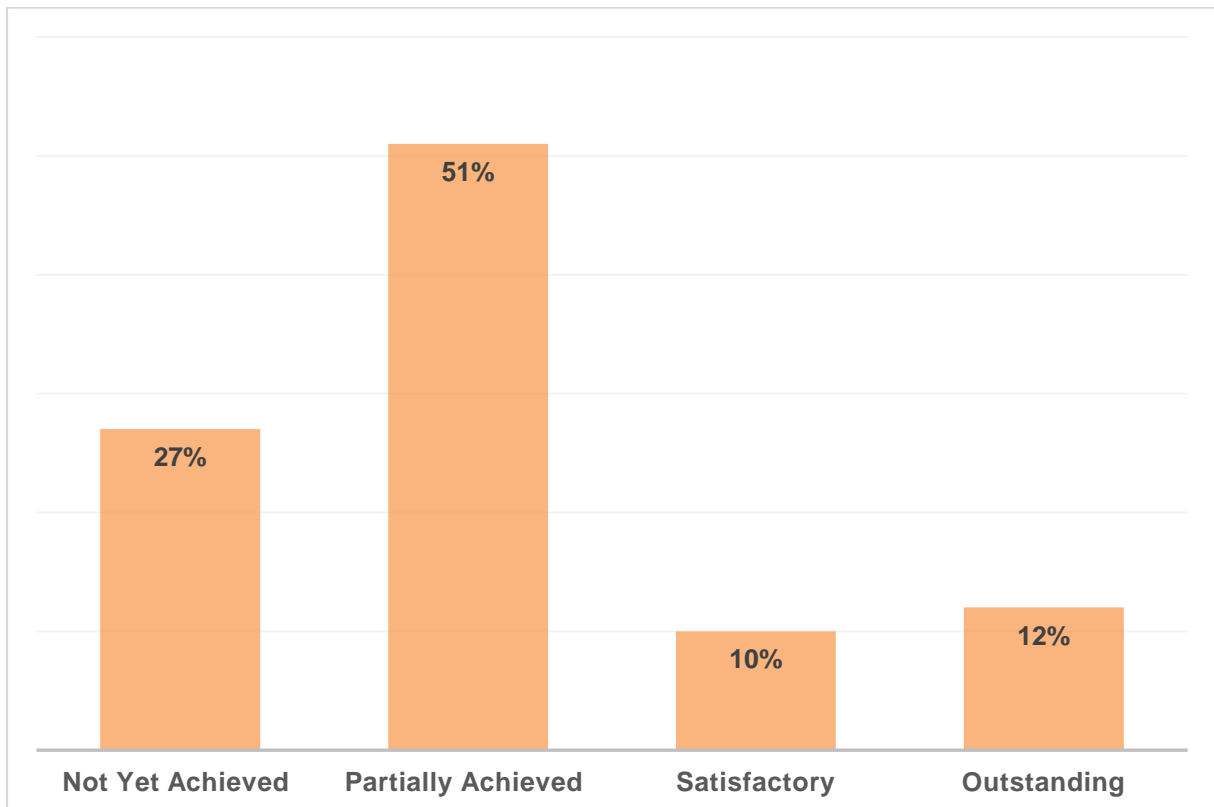


Figure 20: Bar chart showing schools performance on Hygiene and Sanitation variable

Table 12 shows the scoring on the items on the scale. None of the participating schools had an adequate number of ablution facilities in the schools. Additionally, 91% ($n=10$) of the available ablution was leaking or out of order, with some having no doors. There were not enough wash basins in ten ($n=10$) of the bathrooms, and most schools ($n=10$) had basins that were found to be leaking or out of order. There was no handwashing soap or toilet paper in ten ($n=10$) of the toilets; learners had to ask the teachers in the classroom for a ration of toilet paper. Only one school had toilet paper available in the bathrooms. For washing of hands, water dispensers with liquid

handwashing soap were placed outside the classrooms in all schools; one school used bar soaps.

Regarding refuse disposal, all schools had a good refuse removal system for the general refuse; however, none of the schools had sanitary towel dispensers. The recycling programme was also poorly implemented; 64% (n=7) of the schools did not have a recycling programme, and only 36% (n=4) of schools had implemented a recycling programme. Schools reported that theft affected the recycling programme negatively, as collected materials were often stolen.

Schools are required to provide sick bays as part of promoting health and hygiene. However, 27% (n=3) of schools did not have sick bays. The schools that did (27%) either had one sick bay, designated for both girl and boy learners, or the sick bay had no bed or mattress (only a chair), or it was used for other purposes as well. In one school, it was also used as the social worker's office during her visits to the school, and in another, it was also the storage room for old computers. Most sick bays were on the outskirts of the schools, without security. Only two schools had implemented this item as required; they had two properly furnished sick bays, one for boys and another for girls, in a secure administration block. Sick bays in most schools were far from the classrooms with no security, as were the toilets in the schools. This was seen as a potential danger to the learners.

Table 12: Performance of schools on Hygiene and Sanitation variable³

Hygiene and sanitation variable	Performance of schools (%)			
	1	2	3	4
Items				
Is there adequate ablution?	55	45	0.0	0.0
Is it functional?	0.0	91.0	9.0	0.0
Does the school have handwashing facilities?	18.0	73.0	9.0	0.0
Is the sewage system intact, no leaks or spillages (pit, flush etc.)?	9.0	82.0	9.0	0.0
How does the school promote personal hygiene?				
Is there toilet paper?	45	45	9.0	0.0
Does the school have adequate handwashing facilities?	37	27.	18	18
Refuse disposal	0.0	27	64	9.0
Recycling programme in place?	30	30	30	10
Is there a sick bay for boys and for girls?	30	60	0.0	10

³ 1- Not Yet Achieved 2-Partially Achieved 3- Satisfactory 4- Outstanding

4.5.3 Water supply and safety

This element had only one item under it. The results showed that schools achieved 100% compliance to the provision of safe drinking water. This was the only element that achieved an “Outstanding” score (4). There were functional taps around the school supplying clean water.

4.5.4 Nutrition

The results indicated that there was no significant difference in the performance of the schools. Respondents did exceptionally well on four of the ten items of the scale but failed to implement six of the ten items as intended (see **Figure 21** and **Table 13** below).

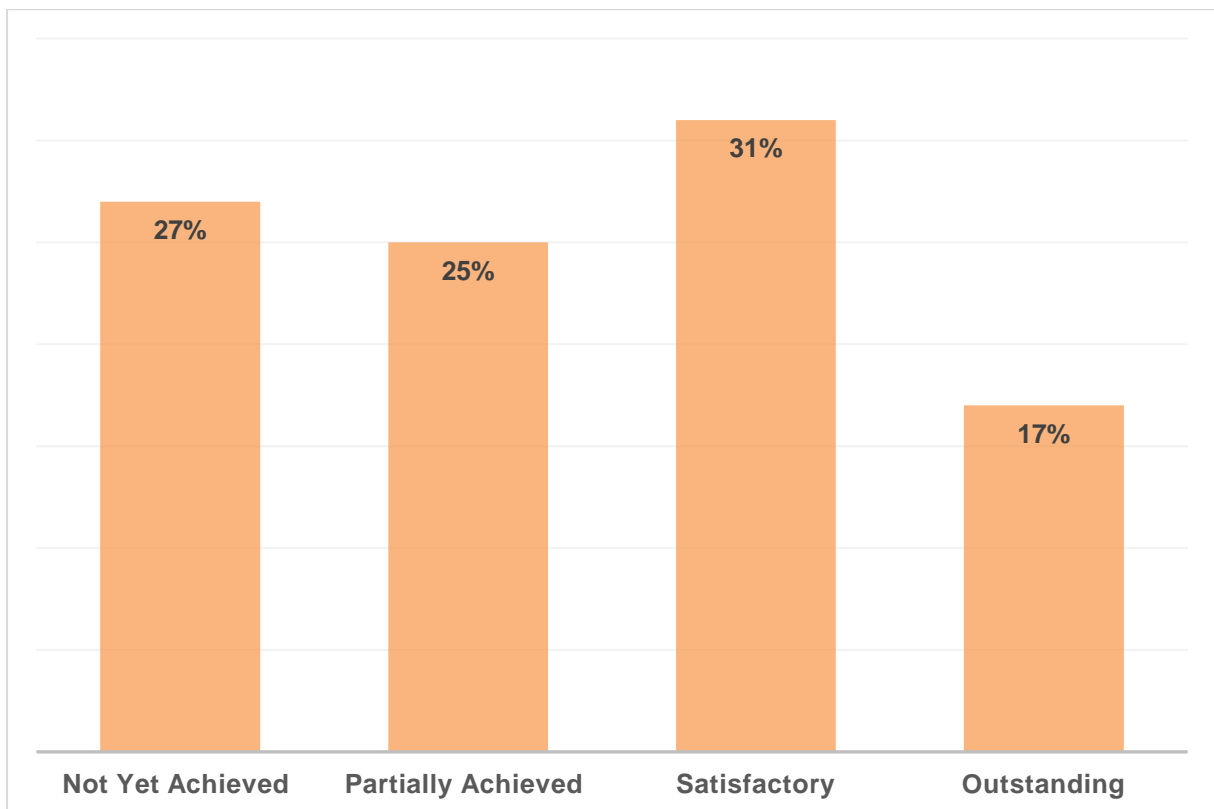


Figure 21: Bar chart showing performance of schools on Nutrition variable

Table 13: Performance of schools on Nutrition variable ⁴

Nutrition variable	Performance of schools(%)			
	1	2	3	4
Items				
Cleanliness of the kitchen.	0.0	36	55	9.0
Food storage	0.0	0.0	18	82
Menu displayed	0.0	0.0	46	56
Menu nutritious and supplemented by food garden/donations	0.0	82	18	10
Did vendors undergo any training?	55	9.0	0.0	0.0
Sales of vendors approved/monitored	0.0	18	46	0.0
Type of food sold (tuckshop/vendors)	64	0.0	0.0	0.0
Is there space/room reserved for learners to sit and eat lunch?	82	9.0	9.0	0.0
Safety precautions, e.g., Fire extinguisher; Posters	9.0	64	27	0.0

Schools did well in relation to kitchen cleanliness, food storage, displaying the menu and serving nutritious meals. There was, however, variation in the level of cleanliness of the kitchens, with 55% (n=6) of the schools achieving a satisfactory level of cleanliness, 36% (n=4) having partially achieved cleanliness and only 9% (n=1) having kitchens that were outstandingly clean. All the schools supplied learners with nutritious meals which were provided by the GDOE. Food storage in all schools was satisfactory and safe. All the schools had the standard GDOE menu displayed in the kitchen. The only variation in the schools was that some menus had been enlarged and others were small and in poor condition. The GDOE is responsible for the NSFS in the participating schools, which included providing the food supplies and the weekly menu. The schools' only responsibility is to cook and serve the meals in a hygienic environment.

At lunchtime, learners dished up in the kitchen area and sat in the classrooms to eat. In other schools, they sat on the grass outside, with no chairs or tables. One school had a designated eating area, with chairs but no tables, and another had both chairs and tables—in both cases, the facilities were donated by private partners.

The nutrition element in the HPS framework includes the promotion of food gardens in schools to help supplement learners' meals. In COT, schools either had a poorly kept food garden or did not have a food garden at all; therefore, there were no food garden donations used to supplement the kitchen meals. Only one school had a well-kept garden, supported by a private partner, and manned by community members and

⁴ 1- Not Yet Achieved 2-Partially Achieved 3- Satisfactory 4- Outstanding

parents. The garden produce was sold to staff members, parents and the community at a low cost and used to feed orphaned learners at the school.

Sixty-six per cent (n=7) of schools that reported having vendors on their grounds; the rest were not assessed on this item as they did not have vendors. The monitoring of food vendors for cleanliness and type/quality of food sold is a requirement for health promoting schools. During the research period, food vendors were not available due to COVID-19 regulations in South Africa, meaning that they could not be assessed on cleanliness. Therefore, it was removed from the scale during data analysis. However, the other items related to vendors were assessed through the assistance of the school representative. All schools with vendors reported that vendors got permission to operate from the principal and were monitored on the types of items sold. The food items sold were similar in all seven schools using vendors; the list included mostly high-fat, high-sugar, and high-carbohydrate items such as lollipops, cookies, sephathlo (white bread stuffed with fried chips, polony, atchaar and sauces), and crisps. One school had vendors that offered a polony and butter sandwich. Only one school had an operating tuckshop that belonged to the school (a building on the school premises), which was operational during the research period. The tuckshop sold polony sandwiches, cookies, sweets, and chips. All the schools reported that vendors received no training from the schools.

4.5.5 General safety and security

The Safety and security element of the HPS framework aims to ensure that learners and school staff are safe within the schools. Schools failed in providing playgrounds that were safe for learners (see **Figure 22**).

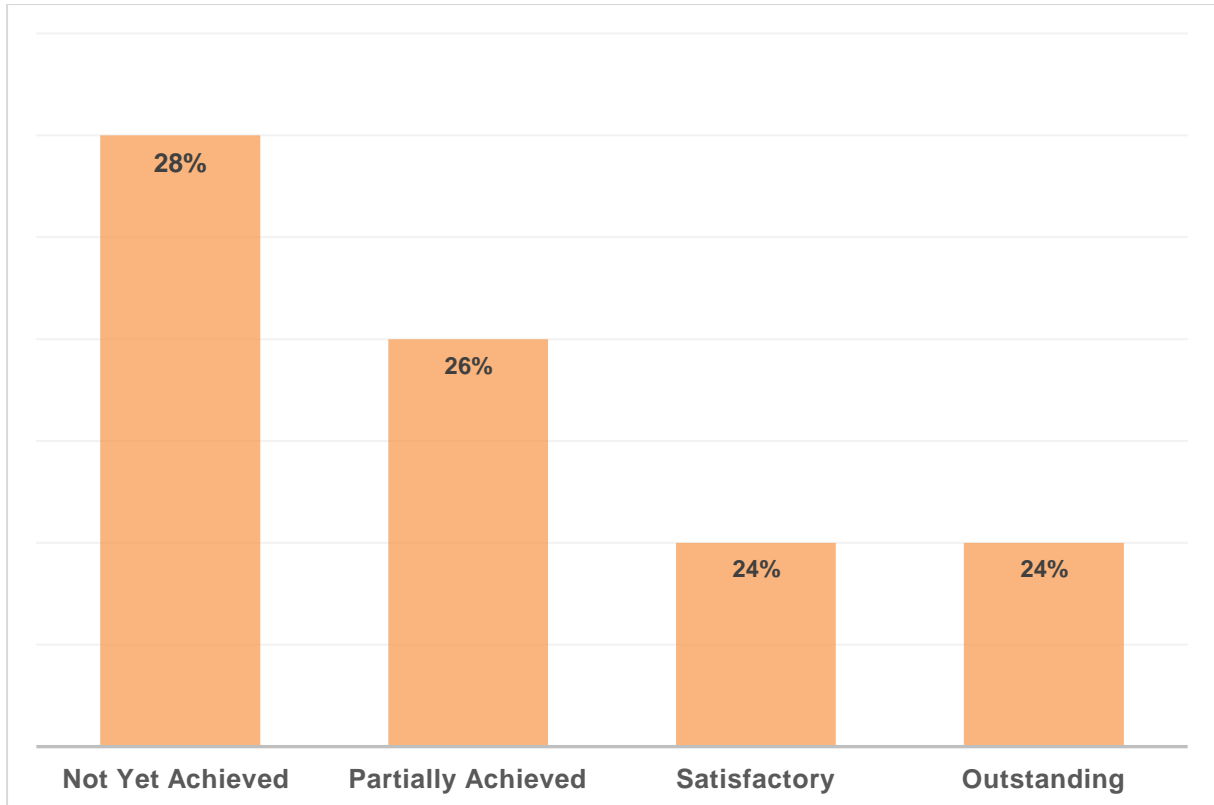


Figure 22: Bar chart showing schools performance on General Safety and Security variable

Schools performed well in the following items: “intact fence around its perimeters” and “having a security operating the gate”. Only one school had a broken fence, and one school had no security staff manning the gate. Although there was proper security at the gate in 82% (n=9) of the schools, schools did not request proof of appointment with the school principal or visitor identification. Only one school had a remote-operated gate and an electric fence around its grounds, which had been donated by a private partner. See **Table 14** for the results.

Table 14: Schools performance on General Safety and Security variable

General safety and security variable	Performance of schools (%)			
	1	2	3	4
Items				
Is access to the school controlled? (e.g., gates always locked, access register)	9.0	9.0	82	0.0
School perimeter fenced and fencing intact.	18	9.0	18	55
Playground's condition.	27	55	9.0	9.0
Greening of the environment	27	46	18	9.0
Evacuation Plan in place?	36	9.0	9.0	46
Fire extinguisher accessible and in good working order?	27	27	36	9.0
Signage displayed e.g., toilets, admin block	18	46	9.0	27
Road safety practiced?	55	0.0	9.0	36

Only 18% (n=2) of the schools had a playground conducive to learners' use. There was no sporting equipment in the schools, and some of the playgrounds were locked off from the learners because they were in an unsafe condition. The most compliant school had sporting equipment and well-fenced sports grounds; the facilities were donated by a private partner. Schools hardly had any greening around them; only two had a well-kept greening environment.

There was an evacuation plan available in the administration buildings of most of the schools; however, 36% (n=4) did not have the plans in other parts of the schools, as required by the policy. Twenty-seven per cent (n=3) of schools failed to have fire extinguishers in the schools; another 27% only had them only in the administration area. Theft of fire extinguishers was reported as a challenge in some schools. Signage was also meant to be placed around the school building; however, results showed that 64% (n=7) of schools failed to comply and had signage placed mostly in the administration area and only occasionally in the toilets. Road safety is mandatory for health promoting schools. In this study, 55% (n=6) of the schools did not practise any form of road safety.

4.5.6 Policy

There was 100% compliance to policies being in place, meaning schools had all the required policies available in the office and were willing to share them with any stakeholder requesting to peruse the documents. It is, however, important to note that this section was mainly assessing the availability of the policies in the schools; only one question was related to their implementation. There were three items in this

element where some schools failed to comply completely. Seventy-three per cent of the items were implemented as intended. See **Figure 23** for the results of implementation of items.

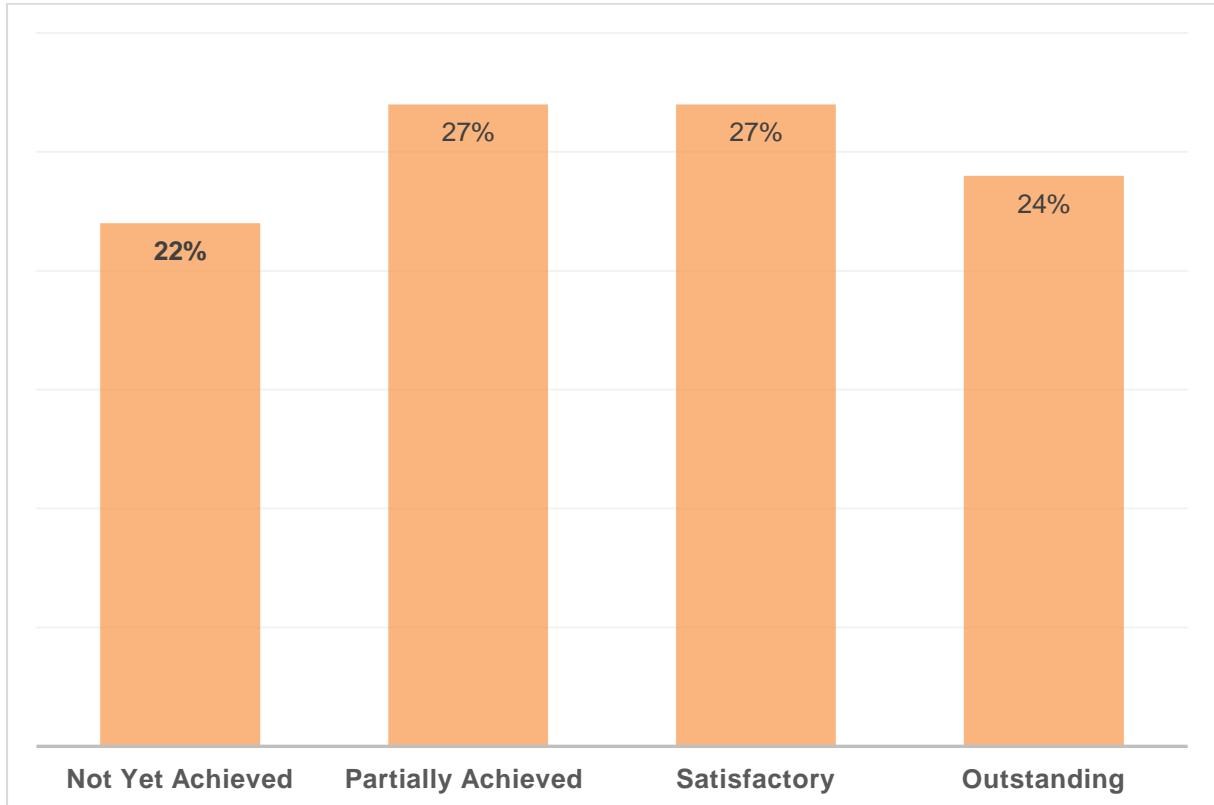


Figure 23: Bar chart showing schools performance on Policy variable

Health promoting schools are required to have a vision and mission statement that includes HPS activities in it. The results showed that 18% (n=2) of respondents did not achieve this, and in 46% (n=5) of the schools, it was not clearly stated. When schools were assessed on “HPS activities incorporated in the school improvement plans”, 64% (n=7) of the schools were found to be non-complaint. When schools were asked to report on how they had implemented the policies, one reported to have partly implemented the polices, the others reported that they had implemented the polices as expected. This was a challenging item to assess as there was only one question related to the implementation of all policies. See **Table 15** below for the element scores.

Table 15: Performance of schools on Policy variable⁵

Policy variable	Performance of schools (%)			
	1	2	3	4
Items				
Does the school have a Health and Safety Policy?	0.0	0.0	0.0	100
The vision and mission of the school; does it incorporate HPS activities?	0.0	18	27	55
Are HPS activities in cooperated in the School Improvement Plan	18	46	27	9
Policies in place				
HIV & AIDS	0.0	0.0	0.0	100
Drug and Substance Abuse	0.0	0.0	0.0	100
Tobacco	0.0	0.0	0.0	100
Code of Conduct (Learners & Staff)	0.0	0.0	0.0	100
Communicable Diseases	0.0	0.0	0.0	100
First Aid	0.0	0.0	0.0	100
Are policies accessible to all stakeholders?	0.0	0.0	0.0	100
Are policies mediated and implemented?	0.0	9.0	18.2	73

4.5.7 General

This section was comprised of three items and was related to the availability and functionality of the school health committees. Results indicated that 46% (n=5) of schools had functional HPS committees. Of the schools that reported having functional committees, about 64% had proof of meeting minutes. This element was rather challenging to get accurate answers for as most respondents confused SBST with SGB meetings or other committee meetings in the schools. Minutes brought forward were minutes of staff meetings and SGB meetings, which were not related to HPS. Due to COVID-19 regulations in schools, the researcher could not go into the administration office and peruse the files and minutes. In some schools, the principals and educators seemed not to be aware of the HPS policy. Around 70% reported having school health calendars as required of health promoting schools; however, 64% (n=7) had no HPS activities on the calendar. The calendar was largely similar across all schools, as it included national, provincial and district health awareness dates and events. See **Figure 24** and **Table 16** for the results.

⁵ 1- Not Yet Achieved 2-Partially Achieved 3- Satisfactory 4- Outstanding

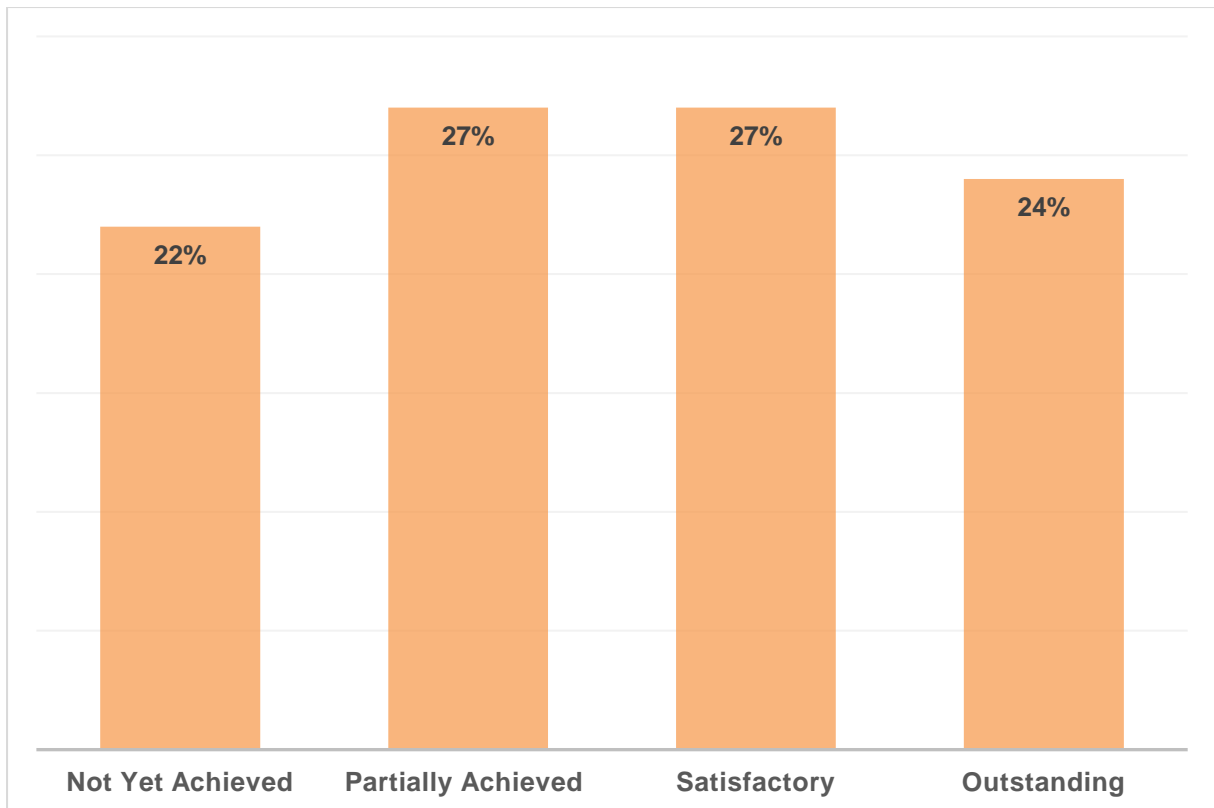


Figure 24: Bar chart showing performance of schools on General variable

Table 16: Schools performance on General variable⁶

General	1	2	3	4
Is there a functional School Health sub-committee within SBST or within any available structure in the school?	27	27	0.0	46
Is there evidence of minutes?	27	36	36	0.0
Does school have a school health calendar/HPS activities plan	27	36	36	0.0

4.5.8 Skills development

Schools were non-compliant in implementing skills development in the schools; they performed poorly on most of the ten items.

Staff: There were no structured health-related development programmes for staff and learners. Fifty-five per cent (n=6) of schools reported that there were no proper skills development plans related to health, except for the LS teachers who gained minimal health-related training from subject courses. Schools reported that they were not monitored or supported in any way related to health promotion activities.

⁶ 1- Not Yet Achieved 2-Partially Achieved 3- Satisfactory 4- Outstanding

Learners: Respondents reported that schools ensured that the food choices amongst the learners were improved; they monitored what was sold by vendors and ensured that the school kitchen served one piece of fruit daily. The majority of schools (64%) did not have any structured school health activities for learners. Incidents of poor behaviour were recorded, and learners were disciplined accordingly; however, none of the schools had any other strategy to deal with and improve learner behaviour. More than 50% of schools had no peer programmes; only 46% were found to have learner programmes. Communities around the schools were reported to have no initiatives, especially those that involved learners, in 54% of the schools. Schools did not have safe sports grounds or adequate sports equipment for learners to participate in much physical activity. See **Figure 25** and **Table 17** below for the skills development scale.

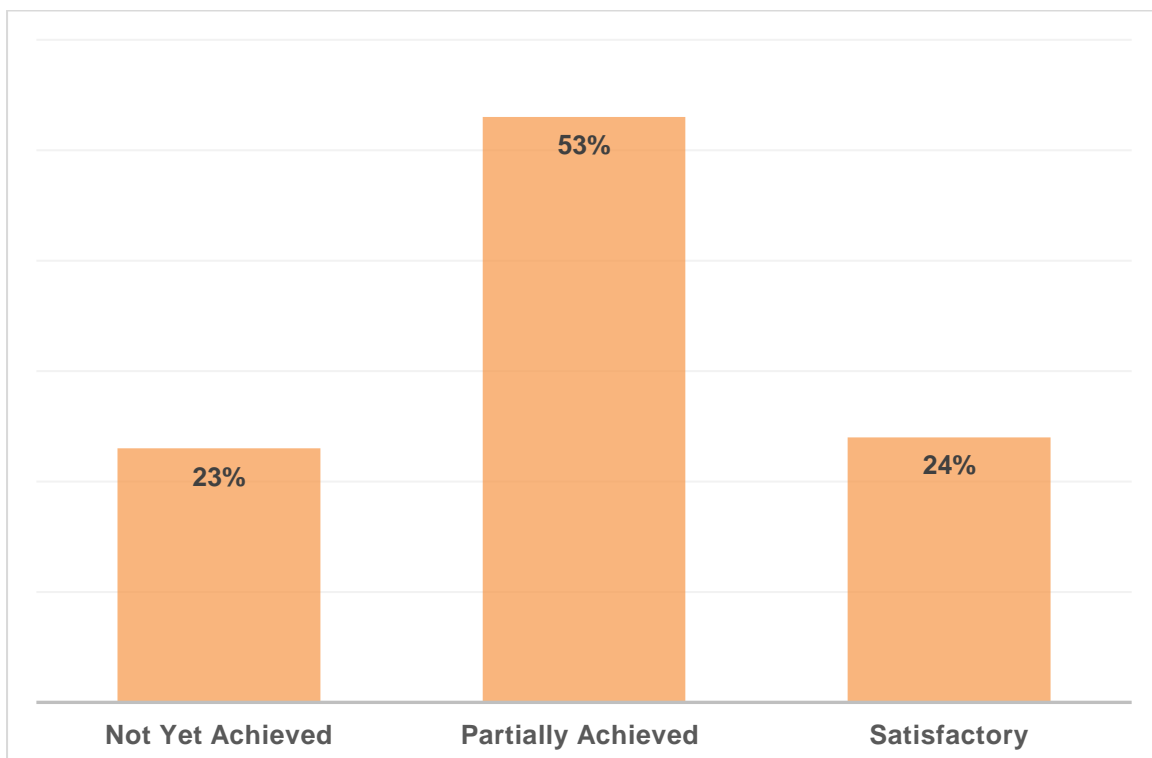


Figure 25: Bar chart showing performance of schools on the Skills Development variable

Table 17: Performance of schools on Skills Development variable⁷

Skills Development variable	Performance of schools			
	1	2	3	4
Items				
Staff Development Plans include health related matters.	27	27	46	0.0
Evidence of implementation as indicated in the Staff Development Plan	27	73	0.0	0.0
Evidence of monitoring and support within the school.	45	45	9.0	0.0
Learner development				
Learner performance in the school	0.0	100	0.0	0.0
Healthier choices	0.0	91	9.0	0.0
Learner participation in school health programmes	0.0	100	0.0	0.0
Learner behaviour (recorded incidents)	0.0	30	30	40
Are there any Peer Programmes in place?	46	9.0	46	0.0
Is there a community skills development programme?	54	0.0	46	0.0
Are learners actively engaged in physical activity e.g., mass-based activities, indigenous games, inter schools' competition.	18	18	64	0.0

4.5.9 Community/parental involvement

The scale had only three items to be assessed. Schools that implemented this scale did so extremely well, and those that did not fully comply did very poorly, resulting in an overall score of “not achieved” for the element. In 36% (n=4) of the schools, there seemed to be no connection between the SGB and HPS; 27% (n=3) reported that SGB meetings sometimes included HPS issues and health promotion; in 36% (n=4) of schools, there was an expected level of involvement of SGB in health promotion matters. Only 36% reported getting support for health activities from the school community, especially parents and businesses. In most schools (82%, n=9), the community leaders were reported to have no interest in school matters. These included political figures in the area. **Figure 26** and **Table 18** below depict the results of the general element of implementation.

⁷ 1- Not Yet Achieved 2-Partially Achieved 3- Satisfactory 4- Outstanding

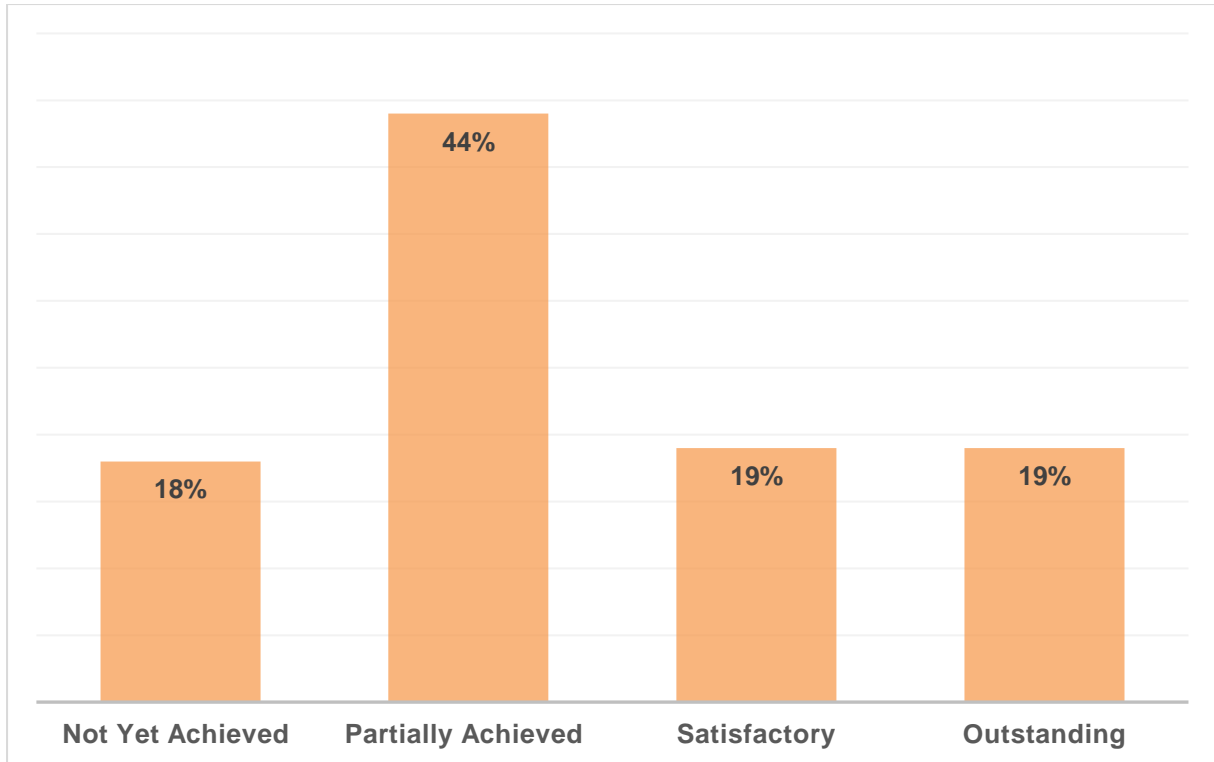


Figure 26: Bar chart showing performance of schools on Community/Parental Involvement variable

Table 18: Schools performance on Community/Parental Involvement variable⁸

Skills Development variable	Performance of schools			
	1	2	3	4
Items				
Is the SGB committed to health promoting activities in the school?	36	27	9.0	27
Does the rest of the school community support health activities/programmes in the school?	36	27	36	0.0
Are community leaders involved in health promoting activities? (Ward councillors youth leaders etc.)	54	27	9.0	9.0

4.5.10 Services

Most of the schools had good relationships with some of the services. There were certain services that all schools had a relationship with; those were the South African Police Service (SAPS) and DOH. Schools reported having no direct relationship with Sports, Arts and Recreation, Department of Transport, and the Municipality (Local government). Only 36% (n=4) had no relationship with the Department of Agriculture & Rural Development. A few schools (36%) had a good relationship the Department

⁸ 1- Not Yet Achieved 2-Partially Achieved 3- Satisfactory 4- Outstanding

of Water Affairs and Forestry. Some schools (55%, n=6) had good relationships with local and international NGOs and companies. It was only 18% (n=2) of schools that had good referral systems, e.g., to SANCA. Almost all the schools (91%, n=10) did not have a good relationship with the Department of Transport, and 36% reported a good relationship with the Municipality (local government). See **Figure 27** and **Table 19** for services results. Some respondents understood a good relationship as one where there was no animosity between the school and the other party; they didn't understand it as a working relationship.

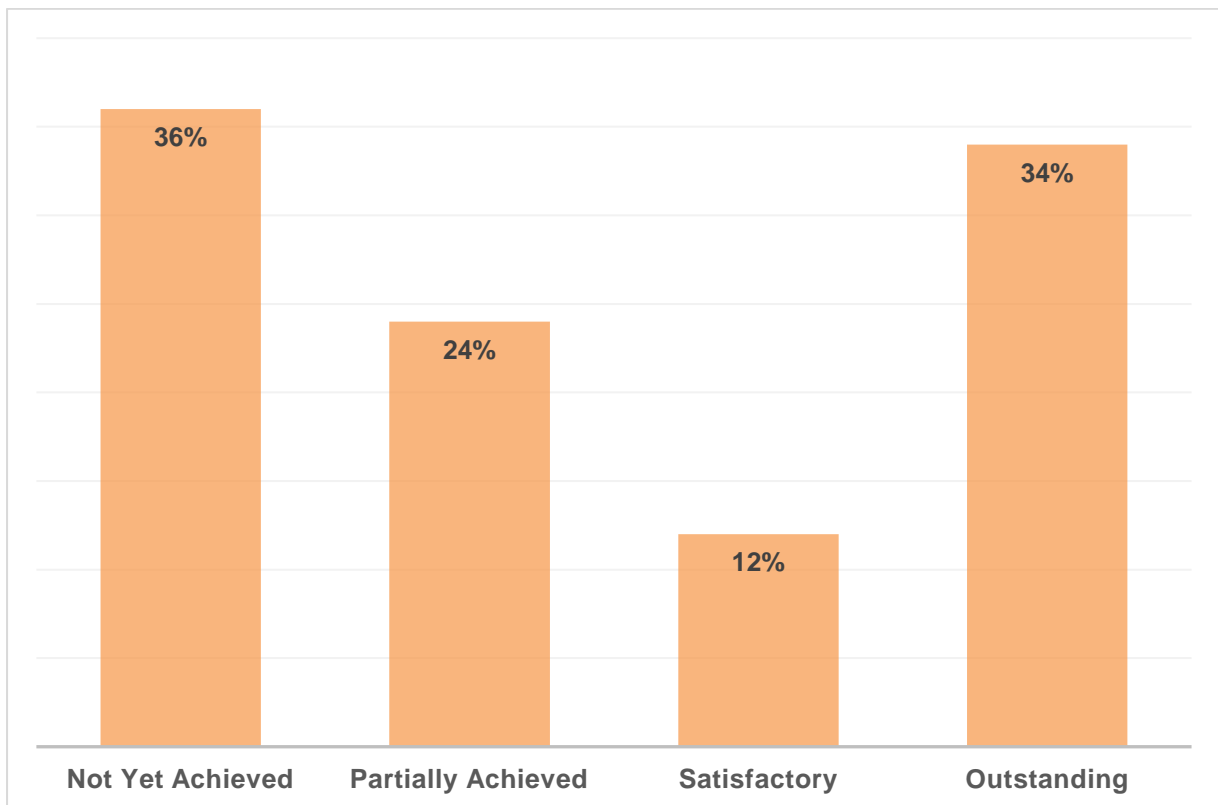


Figure 27: Bar chart showing schools performance on Services variable

Table 19: Schools performance on Services variable⁹

Skills Development variable	Performance of schools (%)			
	1	2	3	4
Does the schoolwork in partnership with the following?				
Department of Health and Social Development	0.0	0.0	27	73
Department of Agriculture & Rural Development	9.0	27	27	36
Department of Water Affairs and Forestry	36	27	9.0	27
Department of Safety and Security (SAPS)	0.0	0.0	18	82
NGOs and FBOs	18	36	0.0	46
Referral Systems e.g., SANCA	64	36	9.0	18
Sports, Arts and Recreation	36	50	0.0	27
Department of Transport	77	18	0.0	9.0
Municipality (Local government)	18	46	9.0	27

4.6 Appropriateness of the audit tool

One of the objectives for this study was to identify challenges with the GDOE audit tool.

4.6.1 Internal consistency

The audit tool was assessed for internal consistency using the Cronbach's alpha test for reliability, and the alpha coefficient for the scale was 0.805 (Water supply and safety was removed). The alpha value was above 0.70, meaning it was acceptable and indicated high internal consistency and reliability of the scale.⁽¹³²⁾ Removing any of the items of the scale would not have improved the alpha value, and so none were removed.

4.6.2 Validity

4.6.2.1 Content validity

The tool was found to be missing some crucial indicators for HPS implementation. It did not include indicators on (1) leadership, management, and communication and (2) curriculum delivery and resources for implementation.

4.6.2.2 Construct validity

The Kaiser–Meyer–Olkin (KMO) and Bartlett's test of sphericity were used to assess the possibility of performing factor analysis to determine construct validity. The KMO

⁹ 1- Not Yet Achieved 2-Partially Achieved 3- Satisfactory 4- Outstanding

value was 0.592, which is a miserable score according to the values of KMO (Kaiser 1974). The Bartlett's test results were $p=0.101$ and a chi-square of 47.174. These results indicated that the scale was not suitable for factor analysis due to the minimal variance in the item scores.

4.6.3 Researcher's personal reflection: Using the audit tool in the field

Schools are not yet competent in HPS implementation and evaluation. It is therefore important that the questions asked during evaluation are as clear and direct as possible, so that the implementers understand what is being asked by the evaluators. The tool was assessed according to nine questions adapted from Struthers et al⁽⁹⁸⁾ study on the reliability and face validity of a health promoting school questionnaire. These findings are based on the experience of the researcher using the tool to audit at the schools during the study.

- 1) *Good measure of health promoting school framework:* The tool covered seven of the nine HPS key performance areas. The missing elements were leadership, management, communication, and resources, which reduced its content validity.
- 2) *Provided a good depiction of the current status of the schools:* Though the tool managed to show the areas where schools were lacking and where they were strong, the questions were rather general. Specific questions could have given more insight into the status of schools. For instance, the tool asked if schools had a good relationship with services such as the DOH, the Department of Social Development (DSD), etc. Schools reported a good relationship with the DOH; however, the only healthcare workers who visited the schools were nurses. Such general questions fell short of providing insight into the type of healthcare workers, the frequency of visits and the services rendered, which are all important to HPS implementation.

The tool questions also failed to show the state of leadership and communication amongst implementers as it relates to HPS implementation. It lacked insight into schools' resources and the maintenance thereof. The findings above showed the significant impact that leadership and resources had on the programme's success.

Physical activity is an important component of the HPS framework. There were no questions on the provision of physical activity during school hours or after hours, including availability of physical educators and equipment. The tool only assessed the state of the playgrounds.

Health promoting schools are facilitated by health promoters. There was no question related specifically to the involvement of a school health promoter. Lastly, the health and wellbeing of educators was neglected by the tool.

- 3) *Made sense and went together*: For the most part, it achieved this; however, there were some items that were not appropriate. For example, some concluding questions that should have been asked at the end of the scale were put at the, e.g., Environment and safety, Question 1.1 “Is the environment clean, safe and supportive?” and Question 2 “Are the classrooms conducive to learning and teaching?” These questions would be more appropriate at the end of the scale, as they conclude what has been measured in the scale.

“Water supply and safety” was put as a Likert item, which complicated the statistical analysis of the scores as all the other questions were grouped in Likert scales. “Water supply and safety” could not be calculated with the rest of the scales and had to be removed and treated as an item. To improve the data analysis process and achieve consistency across the tool, “Water supply and safety” can be placed under the “Hygiene and sanitation” element.

- 4) *Clear and appropriate for the topic*: All the questions were appropriate for the topic.
- 5) *Listed in an appropriate and useful order*: The numbering of the tool was not always appropriate. There were instances where the numbering was confusing, especially during analyses to determine whether it was an item or part of a scale. “Environment and safety”, “Community and parental involvement” and “Services” numbering were done differently from the rest of the tool.
- 6) *Reflected theory behind HPS*: Yes, it achieved this.
- 7) *Of equal importance*: Yes, it achieved this

- 8) *Asked in the right way to get true answers:* This may have been a main challenge with using the tool. The tool did not ask questions in the form of specific indicators, which would have given better clarity of what was expected. For example, the “Services” scale asked if the school had a relationship with the services. “Good relationship” can have various meanings for different respondents. The question on services should rather ask on achievement of set indicators. An indicator-based question that is clear would be “Did schools involve parents in meetings regarding healthy eating at the schools?” instead of general questions such as “parental/community involvement”, which could mean several things.

Some questions could have been split into several questions for them to be answered more accurately, e.g., Question 5.4 “Is the menu nutritious and supplemented by food gardens/donations?” The menu and the food gardens are mutually exclusive. The menu is from the GDOE; it was nutritious without being supplemented by the food gardens, which most schools didn’t have. Suggested questions: “Is the menu nutritious?”, “Does the school have a food garden?”, and “Is the food garden produce used to supplement the menu?” Using this method of questioning, the audit would show how many schools had a nutritious menu, how many had food gardens, and how many used the food gardens for their intended purpose. All three answers are important in assessing HPS implementation.

Another example was Question 5.7 “Is the sales of vendors approved/monitored?” These are two separate questions, and both are very important. Health promoting schools need to approve vendors to sell at schools and then continuously monitor their sales.

The tool used a four-point Likert scale, “Not Yet Achieved”, “Partially Achieved”, “Satisfactory” and “Outstanding”. Determining the difference between satisfactory and outstanding posed as a challenge. Using a three-point Likert scale including “Not Yet Achieved”, “Partially Achieved” and “Satisfactory” would increase the accuracy and reliability of the tool.

- 9) *Made it possible to distinguish health promoting schools from one that was not:*
Yes, it achieved this.

4.7 Relevance of results for Phase 2

The results of Phase 1 have brought up questions which will guide the interviews and FGD in Phase 2. Below are the questions that will be incorporated in the interviews.

- What caused the barriers to implementation (context and school dynamics)?
- In what areas of HPS implementation do implementers feel that they need more training?
- How are the lines of communication amongst implementers?
- Do schools have good leadership and management to facilitate the implementation of the program?
- Are there enough resources to support implementation?
- What are the experiences, views, feelings, and opinions of the implementers regarding the accreditation process?

4.8 Chapter summary

The results of the school audits showed that schools in COT achieved low implementation levels. Most respondents in schools declared as health promoting schools did not fully understand the programme and the ISHP. Schools performed differently on some of the elements, which might have been caused by school context and dynamics; however, that difference was not statistically significant. There were some challenges with the audit tool experienced during fieldwork. Improving the tool would improve the accreditation process.

CHAPTER 5

DISCUSSION

5.1 Introduction

This audit-type evaluation adds to the gap in knowledge on the HPS programme implementation in COT health promoting schools. The results showed that HPS implementation was very low in COT. Although some schools performed better than others on some items, implementation levels were generally disappointing. Schools lacked policy knowledge, leadership, and competence to implement the concept successfully. The discussion below is related to the results on the extent of implementation and the differences in performance between the schools.

5.2 Formal curriculum

The WHO defines a school health programme as a combination of services ensuring the physical, mental, and social wellbeing of learners so as to maximise their learning capabilities. Health promoting schools' education is skills-based, with an aim of improving the life skills of learners to enable them to have awareness, knowledge, values, and qualities that empower them and improve their quality of life.⁽²⁷⁾

All the schools in COT infused HPS skills in the curriculum, delivered as part of the LS subject. Life Skills educators were responsible for teaching learners on health topics in the classroom; however, the LS educators were not conversant with the HPS programme. Life Skills topics were not seen as part of a wider school culture in COT schools, but rather as a standalone subject within the school curriculum. Educators who did not teach LS were not involved or knowledgeable of health topics. This finding is in line with study findings by Adamowitsch et al,⁽⁴³⁾ who found that health promoting schools continued with the traditional teaching methods, where each educator was only responsible for their particular subject matter. The schools failed to adopt the integrated whole school approach; educators were found not to work together to collaborate and coordinate activities within and outside the classroom. Sweden has seen positive outcomes with the HPS. In Sweden, school managers are mandated by the school act to work with health promotion through the curriculum. School managers were found to be competent in health promotion and supported the whole school community to implement the school health policy.⁽¹⁸⁹⁾

Staff development in schools did not include training on health topics. As a means of improving organisational capacity, there needs to be increased educator development and training aimed at improving the educators' knowledge of health promotion topics, to increase their confidence to implement/teach health topics.⁽¹¹²⁾ Educators are the backbone of the intervention. When they were not competent in teaching health education, it weakened the success of HPS.⁽³²⁾ Conversely, educators with good knowledge of the programme increased the level of implementation.⁽⁴³⁾ In Peu et al⁽¹⁰¹⁾ and Kupolati⁽¹⁹⁰⁾ educators were trained and supported to teach health topics, this increased their skills and support for programme implementation.

5.3 Supportive school and classroom environments

The environment of COT schools was generally not supportive to improving the health of learners and the school community. Schools lacked the ethos of health and wellbeing, and health policies were not infused into the daily school activities, even in the schools that achieved high implementation levels. Ethos relates to the culture, attitude, and beliefs of the school; it comes through in every aspect of the school activities.⁽²⁷⁾

5.3.1 School health policy

South Africa, like many other countries, is mandated and guided by its health policies to provide healthy school settings for learners.^(29, 191) Health policies are clearly defined and widely disseminated instructions that guide actions and resource allocation in health promotion.⁽²⁴⁾ The results of this evaluation indicated that schools had the necessary policies related to health promotion, enclosed in the Health and Safety Policy. However, most schools were not conversant with the contents of the policies. Schools had no clear guidelines and indicators related to HPS implementation, and there was no clear understanding on HPS health activities. This revealed that, though national government policies exist, provinces and district offices need to develop indicators, which include direction on how schools should implement the activities and the conditions required for effective implementation in the local context.⁽³²⁾ The lack of guidelines and indicators and poorly informed implementers were barriers to HPS implementation.

Another policy guideline that was not implemented by schools, leading to poor compliance, was the creation of HPS committees. The committee the researcher was

referred to during the audits were ones who were involved with activities unrelated to HPS. This finding is in accordance with a study by Adamowitsch et al,⁽⁴³⁾ who found that HPS committees did not exist in schools. What were reported to be the HPS committees were actually committees that coordinated other school activities not involving HPS. In COT, even the best-performing schools failed to have a committee that was mainly involved with HPS coordination.

5.3.2 Physical environment

A large proportion of schools in developing nations lack proper water–sanitation–hygiene (WASH), which has led to diseases.⁽¹⁹²⁾ Provision of sustainable water and sanitation is Goal 6 in the Sustainable Development Goals 2030 agenda, which SA has committed to.⁽¹⁹³⁾ This commitment means that the country is obliged to ensure that learners are provided with adequate drinking water and sanitation. Provision of clean water had the highest level of implementation in the schools, in terms of clean water being available. However, sanitation had the lowest level of implementation of all the elements; compliance was dismal at all schools. Although the HPS concept aims to improve the educational outcomes of learners,⁽³²⁾ inadequate WASH may reduce the number of learners completing their primary education.⁽¹⁹²⁾ Pubertal girls may be particularly affected by poor implementation of WASH. Lack of privacy, unavailability of handwashing soap and lack of sanitary dustbins in the toilets affect girls negatively during their menstrual periods. As seen in this study, some toilets had no doors, did not flush and had no sanitary towel dispensers. Such conditions and the lack of support for girls (amounting to inequality in schools) puts them in a shameful and confused position regarding their menses and development, which may result in absenteeism and poor academic outcomes, reducing potential earning power in the future.⁽¹⁹⁴⁾ Lack of infrastructure and facilities weakened implementation efforts.⁽⁶⁹⁾ The Constitution of South Africa is founded on the human rights of every citizen; therefore, every child should be free from indignity. The ISHP aims to uphold the rights of children and learners.⁽²⁹⁾ This failing by the Department of Basic Education (DOBE) to provide functional and adequate WASH services is an infringement of these rights.

Late in 2021, a six-year-old grade 1 learner from one of the schools audited in this study was raped at the school toilet by a GA. Ngqakamba⁽¹⁹⁵⁾ wrote the story for NEWS 24 on 12 August titled “Tight security at Soshanguve school due to threats following

rape of girl, 6, in toilet.” It was mentioned in the audit findings that most of the schools had toilets far from the classrooms and there was no security around the toilets. It’s not surprising to hear that a learner could be raped without any staff noticing or hearing anything. This was of particular concern during COVID-19, as schools had other outsiders such as educator assistants brought to assist at the schools.

Theft seemed to be a hindrance to creating supportive environments in COT. Classroom doors, recycling program material and fire extinguishers were stolen at some schools. The DOBE did not provide enough 24-hour security in the schools, and most of the available security, which included parents/community members, were not professional. In his 2020 online article published in the *Mail & Guardian*, Mbusi⁽¹⁹⁶⁾ argued that the increase in information technology material (such as laptops) donated to the schools by private partners had increased schools’ vulnerability to theft. He continued, stating that parents/community cannot be expected to guard schools against gangs. Quintile 5 schools employed 24-hour professional security; the government should find other ways of securing schools in poor areas and not rely on parents/community.⁽¹⁹⁶⁾ As part of contextual planning, schools have to discuss strategies to deal with theft, and any strategy would require partnership with the DOBE, parents/community and other services including SAPS, local NGOs and businesses. As a result of good relationships with private partners, School 9 was assigned a professional security guard by a private security firm to address the theft issue.

5.3.3 Nutrition environment

Primary schools seem to be an ideal setting for increasing nutrition and physical knowledge of learners.⁽¹⁹⁷⁾ Poor eating habits adopted in childhood last into adulthood.⁽¹⁹⁸⁾ In the early phases of life, children should be placed in environments that promote good food choices.⁽³²⁾ A good school nutrition environment involves improved nutrition knowledge, increased physical activity, an improved foodservice component and involved parents/community in nutrition health.⁽¹⁹⁷⁾ Health education educators need to provide quality nutrition education and become role models to learners.⁽²²⁾ Therefore, they should receive comprehensive nutrition education and be provided with necessary creative nutrition material to teach nutrition education and improve the school nutrition environment⁽¹⁹⁹⁾. Life Skills educators in COT had not

received any specific nutrition education and DOH had not supplied the schools with the IEC materials, which is their responsibility according to the HPPS.⁽²⁸⁾

The nutrition knowledge received in the LS class is not enough to significantly influence eating behaviour, the environment outside the classroom should therefore support what is taught in the classroom⁽³²⁾ The schools in this study failed to provide a school environment that supported classroom learning, such as vendors being allowed to sell unhealthy snacks to learners and playgrounds that were not conducive for play.

5.3.3.1 School menu and vendors

The menu provided by the GDOE was nutritious and balanced, which promoted healthy eating. However, vendors and the school tuckshop were found to be the primary challenge to healthy eating in schools. Food items sold were unhealthy, as found in other studies.^(97, 199, 200) Vendors were identified as a barrier to creating healthy nutrition environments in COT schools, the foods sold were reported to be unhealthy and harmful for the learners. Oral hygienist in Molete et al⁽²⁰⁰⁾ reported that foods sold by vendors compromised the creation of healthy school environments. South African public schools have been challenged with the issue of vendors for years, even after the NSFS was introduced in 2004 in low-income community schools. The challenge has been as a result of lack of mandatory regulations on food and beverages that can be sold in school surroundings.⁽¹⁹⁹⁾ The issue of vendors largely affects low socioeconomic schools, as learners from these communities do not bring lunch boxes but rely heavily on vendors compared to learners from quintile 4 and 5 schools. Learners from poor communities are less likely to bring lunch or a snack because there may be no food at home.⁽¹⁹⁹⁾ Snacks sold by vendors were cheap and affordable even to learners from poor families, with snacks costing as little as ten cents.

School 2 reported that, as a means to create healthy environments, they did not allow learners to consume unhealthy snacks before break time. This strategy could be adopted and implemented in all schools and expanded, to make it mandatory that learners do not consume unhealthy snacks within the school premises and during school hours. This would mean that it is included in the GDOE guidelines and included in the policy documents. This suggestion is in line with findings by Faber et al,⁽⁹⁷⁾ who suggested that there should be regulations for what learners consume during school

hours; for real behavioural change, there should be practical policies that guide what can be sold to the schools. Parents were the vendors who sold unhealthy food items to the learners in COT, as in the study by de Villiers et al,⁽¹⁹⁷⁾ which may have further complicated the setting of strict regulations.

5.3.3.2 Food gardens

Poor relationships between schools and the Department of Agriculture meant that schools could not access seeds and other support they needed to start food gardens. Schools were also challenged with limited amount of GAs who would work the gardens. School 5 used community workers to work the gardens; for other schools, this was not viable as poor relationships with parents/community hindered community involvement.

Nortje et al's⁽¹⁹⁹⁾ findings showed that both educators and learners had an interest in food gardening. Given support and resources, schools can establish productive food gardens which could be used to supplement the school diet, generate income for the school and strengthen relations with the school community.⁽¹⁹⁸⁾ As it did in school 5, the garden produce was used to feed orphaned learners and sold to the community at low prices. School 5 also excelled in their gardening efforts because of support and training they received from a private partner. School gardens can also be used for educational purposes and to improve healthy eating habits amongst the learners; however, this requires that schools involve learners in food gardening projects for it to be educational.⁽¹⁹⁹⁾ As productive as School 5's gardening project was, it was not used for educational purposes amongst learners, as they were not involved in the project.

Evidence from literature has shown that using the HPS concept to implement nutrition promotion programmes could effectively reduce consumption of fatty and sweet foods, increase the intake of high-fibre foods and healthier snacks, and reduce meal skipping, as shown by a systematic review by Wang et al.⁽²²⁾ However, the nutrition element was poorly implemented in COT; schools did not appear to have any standard guidelines that they employed to improve the nutrition environment of the schools as it relates to vendors, regulating unhealthy snacks, improving physical activity and engaging parents in nutrition matters. The HPS guidelines were not implemented, even in the best-performing schools. According to De Villiers et al,⁽¹⁹⁷⁾ the low intensity of the intervention, lack of changes in the school's physical environment and poor

involvement of parents were the likely causes for the lack of behavioural changes in schools. An added benefit of the HPS programme is that it could improve food hygiene and storage techniques.⁽²²⁾ This was found to be the case in COT health promoting schools, where food hygiene and storage were well-implemented.

5.3.4 Physical activity

The study was conducted during COVID-19. Regulations prohibited any physical activity amongst learners. However, inquiry on the normal activity schedule of the schools indicated that they had no activity plans. Playgrounds in most of the schools were not conducive to learners playing in them, and there were no sports equipment or coaches. Only School 9 had well-maintained sports grounds, donated by a private partner.

5.3.5 School health services

The ISHP states that schools should establish partnerships with several health services to provide healthcare services to learners and staff in the schools.⁽²⁹⁾ School health services were introduced as a means of addressing health barriers to learning to optimise the health of learners and improve learning outcomes.⁽³⁵⁾ Schools are responsible for facilitating the process of learners and staff accessing these services.⁽²⁴⁾ This is accomplished through partnerships; DOH delivers health services to GDOE schools, and the DSD gets involved to render social services to schools.⁽³⁵⁾ In COT, schools managed to have good partnerships with the DOH, but this relationship was limited to school health nurses. There was no relationship with other healthcare professionals that are part of the ISHP and HPS framework, which include nutritionists, speech therapists, oral hygienists, and optometrists. Schools also had a relationship with the DSD, though to a lesser degree than to the DOH. These limited services meant that other health needs of the schools were unattended.

South African schools also present an ideal opportunity to address oral issues in children of school-going age. Health policies include the provision of oral health services to public school learners, guided by the South African Oral Health Strategy (2010) and the School Health Policy and Implementation Guidelines (2011).⁽²⁹⁾ Moleté et al ⁽²⁰⁰⁾ found that the implementation of the policies varied in all the ten COT schools investigated, revealing the gaps between policy and implementation actions. Oral hygienists reported that they could not follow up with the schools as required because

of the high workloads and small numbers of oral hygeinists.⁽²⁰⁰⁾ These shortages of healthcare professionals, also seen with school nurses, meant that the few available healthcare workers could not provide quality services and could only manage to assist a few learners, excluding the other school community members. They also would not be able to follow up on cases and be an integral part of HPS in the schools. The study suggested that the DOH and GDOE should align service requirements with available resources.⁽²⁰⁰⁾ A truly multidisciplinary team of healthcare profesionals involved with schools would increase the level of policy implementation and improve health outcomes.⁽¹⁹¹⁾

5.3.6 Schools' social environment

The focus of the social environment is to motivate learners and give them a sense of commitment and connectedness with learning and the school.⁽²⁷⁾ This is the extent to which learners have confidence that educators and peers care about them as learners and as individuals.⁽¹⁰⁷⁾ The social environment includes improvement of school community attitudes, feelings and values.

Staff wellbeing

Lee et al⁽³²⁾ found that schools that had structures to identify and assist educators and learners with emotional and traumatic issues had better mental health outcomes. In the schools evaluated, the health policy was treated as if it only related to the health and wellbeing of the learners, and excluded the school staff. However, the WHO has encouraged the adoption of the HPS concept as an effective intervention to be used by schools globally to improve the health of both learners and staff.⁽²⁰¹⁾ Educators are at the forefront of schools, and their wellbeing affects all aspects of the school. When educators are emotionally and physically unwell and harbour feelings of being unappreciated, they will not have the motivation to improve the emotional and social wellbeing of others.⁽²⁷⁾ Educators are under strain from competing educational activities and workload, which negatively influences the implementation levels of HPS.⁽⁷⁰⁾ It is suggested that schools should have programmes that allow educators the platform to adress their emotional and physical wellbeing.⁽²⁷⁾ Schools in COT did not have such programmes, which are of even greater need during COVID-19, when educators are under enormous pressure.

Early learner intervention

With regard to curtailing problematic learner behaviour, the study found that schools did not have any interventions outside of conflict resolution, meting out acceptable punishment or calling in the parents. Interventions for dealing with problematic behaviour should reduce incidents, disruptions, fights, bullying, crime, impulsiveness, uncontrolled anger, violence, early sexual debut, substance abuse, exclusions and absenteeism.⁽²⁷⁾ The interventions should be developed for schools, and the implementers (educators) should be trained to effectively implement them.⁽³²⁾

Educators have the opportunity to detect early signs of changes in learners' behaviours that may indicate mental conditions or other issues the learners may be experiencing. When such issues are identified early and addressed appropriately, it avoids greater problems later ⁽²⁷⁾ This would require that schools work closely with the DSD for early identification of problems and establish an effective referral system. This partnership would also require that the DSD designate social workers to work increased hours with the schools. Environments that foster connectedness and engagement develop learners' life skills and self-esteem and promote learning, success, wellbeing, and mental health in the school years and beyond.⁽²⁷⁾ They also reduce the prevalence of risky behaviour and improve learning outcomes.^(70, 107)

5.3.7 Engage whole school community

The premise of a successful school health programme is one that involves a whole school community in efforts to improve health.

5.3.7.1 Learner voice and peer learning

More than 50% of schools in this study did not have any type of learner programme or peer programme. Learners did not have the opportunity to get actively involved in health promotion activities except to learn in the LS class. Rasesemola et al⁽²⁰²⁾ also found in their study that COT schools were not compliant to integration and collaboration with learners. Young people should be given an opportunity to get involved in the identification of their health issues and the subsequent development of solutions to these issues. Educators should be willing to listen to the voices of the learners and use their opinions to inform health promotion actions in the schools. This type of engagement will increase the relevance of preventative programmes and increase the visibility of young people to the school community^(70, 203); it also improves

learners' sense of belonging, connectedness and confidence in their academic success.⁽²⁰²⁾

5.3.7.2 Parents/community

Parents are the learners' primary socialising agent and a trusted source of information.⁽¹⁰¹⁾ For the HPS programme to be effective, schools must take steps to build good working relationships with the whole school community to improve learner wellbeing.⁽²⁰²⁾ Parental involvement has multiple benefits for schools and learners. Learners who receive parental support are less likely to be suicidal, engage in risky behaviour and disengage from schoolwork.⁽¹⁰¹⁾ Parental/community involvement in this study was low. Schools also had poor relationships with other school community members, which included the local businesses, NGOs, and political figures. These weak relationships negatively affected implementation levels in schools, especially relationships with parents. The schools that did well in HPS implementation (School 9 and School 8) had the strongest parent/community relationships. They found ways to involve parents in school activities and benefited as parents volunteered as cleaners, cooks, and gardeners at the schools. Parents are a resource for HPS; therefore, efforts need to be increased to facilitate good relationships between schools and parents/community as a means of establishing a health-conscious ethos in the learners and community,⁽²⁰¹⁾ which could lead to long-term health of learners.^(70, 202)

5.3.8 Collaborations and networks

The HPS framework is an interdisciplinary school health programme with various elements that need multiple stakeholders within and outside the school to be implemented.⁽²⁾ The ISHP states that policy implementation should be conducted with collaboration from stakeholders at national, provincial and district levels of government in various disciplines (health, education, academia, social development) and sectors (government, NGOs, health agencies). Multisector collaboration was found to be weak in COT, and most schools seemed to have no relationships with other sectors, even the district office, as far as HPS was concerned.⁽¹⁰¹⁾

Establishing networks not only improves the implementation outcomes, but also improves programme sustainability. These networks have been developed globally and had a positive influence on the HPS members and HPS outcomes, as they

empowered members.⁽²⁾ However, in COT, these networks have been weak and consequently have had no influence on HPS implementation.

In 2005 the Taiwan Health Promoting School Supporting Network was formed with the objective of improving implementation efforts. It links the central government, local government, and schools. The network comprises academics, healthcare workers and senior educators who consult with schools and give necessary support. They also assist the local government to develop and implement HPS policies.⁽²⁾ This model could be adopted in COT, using academics from local universities, senior educators from health promoting schools, members from the health directorate, and healthcare workers such as school health nurses and social workers. This partnership would offer support and encouragement and improve HPS implementation efforts.⁽²⁾

Expert advice from outside the school was found to improve implementation levels in a study by Adamowitsch et al.⁽⁴³⁾ In the Chang et al's⁽²⁰⁴⁾ study, the authors found that exposing teachers to a network of support from University experts facilitated teachers' skills and improved HPS implementation. Action research done in the schools by experts working with teachers improved teacher understanding of HPS, which had a direct correlation with improved HPS implementation. The universities of Pretoria and the Western Cape have done some research on HPS and have worked with government departments involved with HPS implementation. These collaborations should be supported by the DOBE and expanded to all health promoting schools in COT.

The implementation of HPS can only succeed if other partners outside the DOBE and DOH get involved and assist the school efforts.⁽³²⁾ Private partnership had a positive influence on HPS implementation as NGOs and businesses donated infrastructure and facilities to schools, including classrooms, computers, food items, training, food gardens, sports facilities, and lunchtime facilities, as well as supporting events at the schools.

5.4 Feasibility within the local context

The GDOE audit tool had 69 items that schools needed to implement. Schools failed on the majority of the items. Besides the individual schools' capacities, the GDOE had not managed to provide them with all the resources needed to fully implement HPS.

For instance, schools had not been provided with adequate sanitation, implementer training, infrastructure and resources to fully implement HPS. These structural factors were found across the schools, which hindered implementation. This study's results suggested that policy makers need to consider developing a few essential indicators for implementation, as schools seemed to be overwhelmed with having to implement HPS fully. This suggestion is in line with Lee et al,⁽³²⁾ who advocated for core indicators for developing countries, which may not have what it takes to implement HPS fully. The benefit of using HPS is its adaptability to different settings. In Canada, where the HPS implementation has been much more effective, HPS is implemented based on the needs and assets of the individual school community and funded accordingly.⁽¹⁹⁷⁾ Weare⁽²⁷⁾ also suggested that programme implementation should start with small, attainable goals and progress strategically. Implementation success is dependent on regarding context prior to policy release.⁽³⁵⁾

The implementation of health policies is largely dependent on the unique characteristics of the individual schools. The study results showed that the extent of implementation of HPS varied across the schools in the same district. The best performing schools (School 9 and School 8) had a number of characteristics in common: high priority for policy implementation, highly involved principals and deputies, school visions that included HPS activities, functional SGBs, LS teachers knowledgeable on health promotion, good parental/community involvement, good relationships with private partners, and some degree of learner programmes in the school. The schools were innovative in that they found ways of increasing staff capacity, such as getting parents involved with the schools' responsibilities and hiring staff through the SGB budget. In these schools, the research team had the least amount of distress getting answers from the respondents. Principals could answer all the questions or had a relevant person who could assist.

Conversely, the schools that implemented HPS activities the least had the following characteristics in common: respondents did not comprehend HPS, there was no designated person for HPS or other health promotion activities, principals opted to delegate the responsibility of being a respondent to another educator, schools had poor relationships with parents and community, there were no relationships with

private partners, no learner programmes were in place, and the schools gave low priority to matters that were not curriculum-related.

These results suggested that a supportive school culture had the potential to improve HPS implementation. School processes such as leadership by the principal, support from staff, parents/community and the SGB, high priority for policy implementation, and clear and structured team responsibilities were more important to HPS implementation than educator numbers. The ratio of learners to educators was high in COT, with an average of one educator to 32 learners. However, the study findings also showed that the ratio of educators to learners did not predict implementation extent. Some of the worst performing schools had the lowest ratio of educators to learners. These results were supported by a study by Mclsaac et al,⁽¹¹²⁾ who reported similar findings. They explained that negative impacts of school characteristics such as physical and human resources on HPS implementation could be mitigated through the building of strong relationships and a supportive culture within the school. Leadership is the essential factor for HPS implementation success, and the lack of leadership weakens implementation efforts.⁽⁷⁰⁾

The study also showed that school settings may impact on HPS implementation. The two worst performing schools in the study were in similar settings. Basch⁽¹⁰⁷⁾ stated that distribution of health programme services and resources is unlikely to be equal between schools in different socioeconomic communities. Quality and quantity are likely to be less favourable to the community of lower socioeconomic schools. Schools that were in rural areas or on the outskirts of a township did not perform well in this study, largely due to a lack of resources and support.

5.4.1 Organisational capacity

Schools did not understand the different aspects of HPS and only saw schools in the realm of curriculum. They had little community involvement and few benefits of partnerships with outside services. This is largely due to lack of training on HPS.⁽³²⁾ Staff development and training should not be exclusive to educators but should trickle down to GAs, SGBs, parents and community. These stakeholders are an integral part of HPS implementation, and they formed part of a support system that positively influenced HPS implementation in the COT schools that achieved high implementation levels. Schools also need to be provided with adequate and appropriate staff to

improve organisational capacity.⁽¹¹²⁾ Lack of assistant staff (GAs and parents assisting in the schools) seemed to have a negative influence on school performance. The lowest-performing schools in the study had fewest GAs and the lowest level of assistance from parents. This highlights that investing in educators alone is not sufficient for effective HPS implementation.

5.5 Monitoring and evaluation

The aim of monitoring and evaluating health promotion actions in schools is to track progress on schools' efforts and identify resources needed and gaps for future planning to improve the health–education link. Schools need to monitor changes that are occurring in them⁽⁹⁸⁾ to identify gaps and barriers to implementation.⁽²⁹⁾ Effective evaluation will depend on proper documentation of what is done at the schools.⁽²⁹⁾ Schools in COT had not clearly and fully documented HPS activities, which posed a challenge in evaluating the schools' efforts.

5.6 Chapter summary

Schools in COT failed to achieve a holistic approach to health promotion, where schools promoted health in the traditional classroom through health education, improved the physical and social environment; implemented health policies and developed relationships with schools, communities and other relevant partners. The research has shown that with proper planning, prioritisation of HPS, support and will, schools can effectively implement HPS activities. Ownership, leadership, collaboration and integration are necessary components of effective HPS implementation in schools. Governments that have adopted the programme need to find means of supporting and encouraging schools to implement the programme, such as providing resources and expert advice and giving incentives to schools.⁽²⁰¹⁾

CHAPTER 6

GROUNDING THEORY FINDINGS

6.1 Introduction

Chapter 3 presented the sampling, data collection, method of analysis and trustworthiness of the findings. This chapter presents findings of the GT data analysis. The two data collection methods were analysed separately; however, the emergent categories were combined to develop one comprehensive theory for HPS implementation in COT. Section 1 presents the demographic details of the FGD and interview participants. The findings of the FGD and the individual interviews are outlined in Section 2, and Section 3 is the summary of the chapter.

6.2 Participant demographic details

The FGD was conducted first, followed by the individual interviews.

6.2.1 Focus group discussion

The FGD was conducted with senior health promoters (n=7) working with health promoting schools in COT. See summary of demographic profiles in **Table 7**. The study held one FGD, as it was able to accommodate all the health promoters with sufficient experience in HPS. Participants were ascribed an identification code, ranging from HP1 (health promoter 1) to HP7 (health promoter 7). All respondents were female, though the invitation for the focus group was not gender specific. The ages of the participants ranged from 41 to 62 years. All the participants had ten years or more work experience in health promotion. The duration of HPS experience was less, with the minimum being two years and maximum being ten years. Three of the participants were responsible for one school each, two participants were responsible for two schools each, and two were responsible for three schools each. The maximum number of schools per health promoter was three, with all seven health promoters distributed across the sub-districts in COT (see **Table 20**).

Table 20: Summary of demographic details of the focus group discussion

Variable	Category	Frequency
Gender	Female	7
Age (years)	41–50	2
	51–60	3
	61–70	2
Health promotion experience (years)	≥10	5
	≥30	2
Health promoting school experience (years)	2–5	3
	5–10	3
	>10	1
Number of schools serviced per health promoter	1	3
	2	2
	3	2
District	1	2
	2	2
	3	1
	6	2

6.2.2 Individual interviews

The study had proposed to interview 39 key stakeholders, three participants from each school (one principal, one educator and one SGB). The study ended up with 20 interviews, telephonic (n=10) and face-to-face (n=10), which was 50% of the proposed interviews (see **Table 21**).

Participants were given identification codes, which were “Participant 1” to “Participant 20”. Principals (n=6), educators (n=10) and SGB representatives (n=4) were interviewed. Two SGB members were interviewed together, as per their request, as Participants 15 and 16. There was at least one participant each from of nine of the 11 schools who had been part of the audit in Phase 1; some schools had more than one participant.

Table 21: Summary of demographic details of the individual interviews

	Interview method	Designation	Participant an HPS committee member	Additional notes
Participant 1	Telephonic	Educator	Yes	
Participant 2	Telephonic	Educator	No committee	
Participant 3	Telephonic	Principal	No committee	
Participant 4	Telephonic	Educator	No committee	Worked as a deputy principal and LS educator Won water tanks for school in a handwashing competition
Participant 5	Telephonic	Principal	No	
Participant 6	Telephonic	Educator	Yes	
Participant 7	Face to face	Principal	No	
Participant 8	Face to face	Educator	No	
Participant 9	Face to face	SGB	No	Worked as an educator and an SGB member
Participant 10	Face to face	Principal	Yes	
Participant 11	Face to face	Educator	No	Previously also served in the SGB as chairperson
Participant 12	Face to face	Principal	No	
Participant 13	Telephonic	Educator	No	
Participant 14	Face to face	Principal	No	Worked as an LO educator and HOD for LS and LO subjects
Participant 15	Face to face	SGB	Yes	A parent and SGB member
Participant 16	Face to face	SGB	Yes	Serving as chairperson of SGB of current and previous
Participant 17	Face to face	Educator	Yes	Worked as an LO educator and HOD for LS and LO subjects
Participant 18	Telephonic	Educator	Yes	
Participant 19	Telephonic	SGB	No	
Participant 20	Telephonic	Educator	No	

6.3 Development of the categories

Categories that emerged from the grounded data were used to answer the research question, “What is happening at health promoting schools with regard to the

implementation of the health promoting schools programme?” There were five categories developed from the data, with each category having its subcategories. The five categories were chosen as they best described the events, views, perceptions, and feelings of the key stakeholders and gave insight into how the programme could be improved for effective implementation. There was continuous revisiting of categories and a significant amount of overlap in their subcategories, where one issue impacted on current and subsequent processes and events. The categories and their subcategories, as far as possible, used the language of the participants, except in cases where it was not appropriate or possible. The categories and their subcategories were arranged and illustrated as a diagram (see **Figure 28**). The categories were (1) preparation is key, (2) continuous training of implementers, (3) importance of teamwork, (4) addressing barriers to implementation and (5) evaluate progress and give feedback.

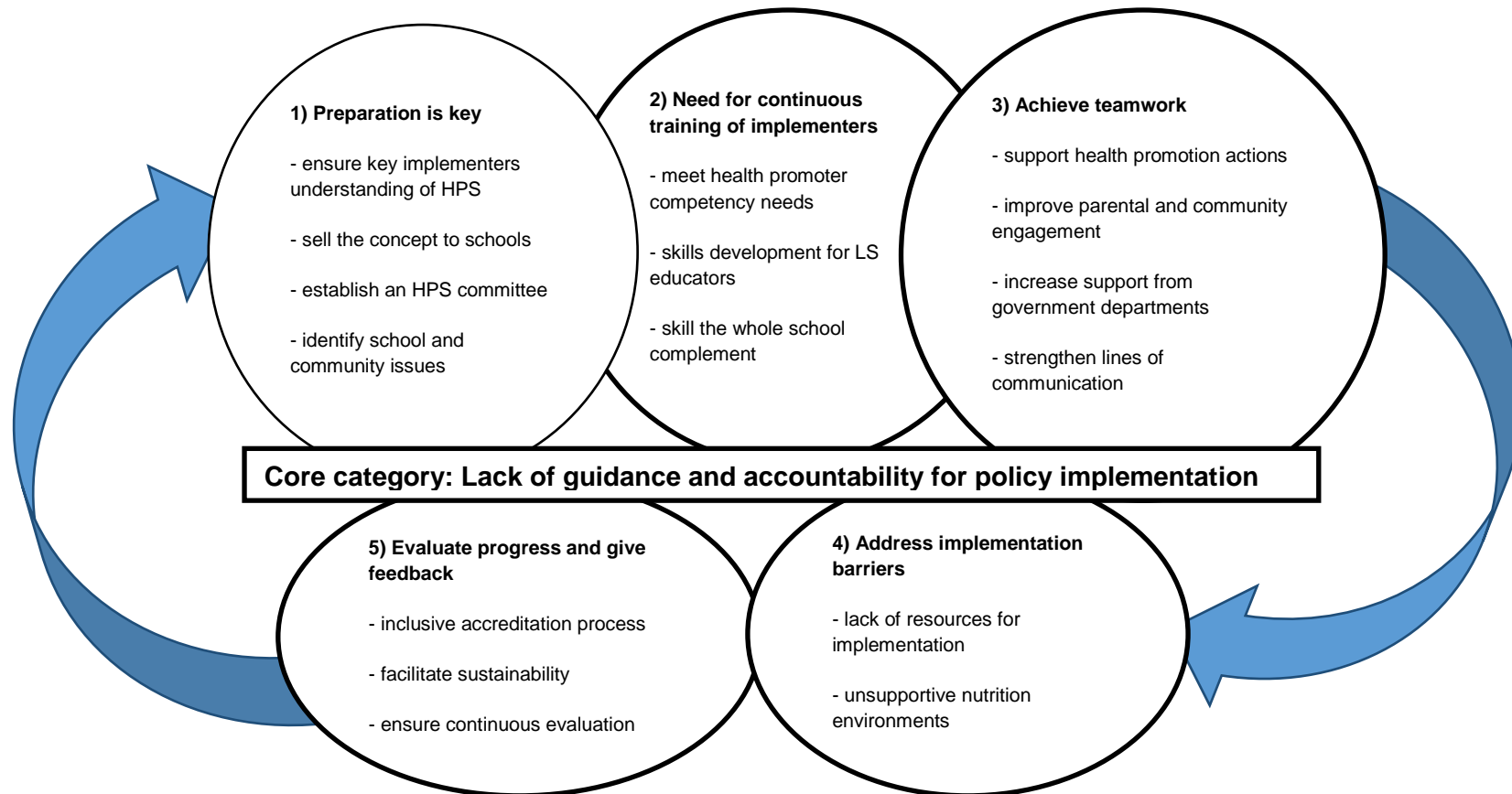


Figure 28: Five categories for HPS implementation in COT

6.3.1 Notation

Educators, principals and the SGB members are referred to as “school participants” to differentiate them from health promoters in the FGD. When referring to all, including educators, principals, the SGB members and health promoters, they are called “participants”. At the end of each quotation, there is an indication on which type of interview was conducted, [T] for telephonic and [F] for face-to-face interviews. Quotation marks (“ and ”) are used within each category to indicate a participant’s opinion or view related to the category or subcategory. Ellipsis (...) indicates that the conversation was truncated, either at the beginning or end, or the participant was thinking or did not finish their thoughts. There were times when health promoters spoke in unison; this is indicated by “health promoters” when quoting what they said. There are instances where the researcher’s questions are included in the results; this is denoted by “researcher” next to the question.

6.4 Category 1: Preparation is key

This is the preparation phase, conducted before implementation of the programme in the schools. Proper planning at the preparation stage ensures that the implementation is effective, and schools get the desired outcomes from the programme. The subcategories under this were (1) ensure implementers’ understanding of HPS, (2) sell the concept to schools, (3) establish an HPS committee, (4) identify school and community issues, and (5) make policy applicable to local situation.

This category illustrated that this is the most important stage of the HPS programme implementation. Health promoters repeatedly emphasised the importance of this stage, which was not the case with school participants. Health promoters seemed to understand the details of what a health promoting school is and how it is established more than the school participants. School participants, especially educators, had very limited to no knowledge of HPS and its guiding school health policy. They were, however, very useful in detailing the contextual factors that affected learning in the schools, which was part of the preparation phase.

6.4.1 Key implementers’ understanding of HPS

HP4: *“Because with HPS we did not focus only on illnesses and disease. We do holistic approach; we don’t leave anything behind. We start from head to toe, health, environment, safety, hygiene, personal hygiene everything. So, it’s important for our*

school. It's more needed than what we can say. Maybe we have to force it at schools, because we are going to improve the status of our schools.” [F]

The quotation above represents how health promoters understood what the HPS programme was and what it aimed to achieve in schools. Another health promoter described a health promoting school as a school where the learners got all their services from the various stakeholders within the school, to improve health and learning.

HP3: *“Everything must be inside there so learners don't lose the time and they get the help inside the school from the different programmes”*

Health promoters understood the nature of HPS as a programme that included multiple stakeholders, a “holistic” approach to health promotion. They described health promotion work as “holistic”, “collaborative” and a “settings approach”. These are the same terms used widely in HPS literature, which indicated the depth of understanding of the fundamentals of the HPS programme by health promoters.

HP3: *“We work in different settings; we are doing settings approach in clinics, schools, community. We don't work in isolation; we do collaboration with different stakeholders.” [F]*

When health promoters were asked...

Researcher: *“.... so, who is the most important in HPS”? [F]*

They shouted in unison,
Health Promoters: *“Everyone.” [F]*

HP1: *“Even the neighbours around the schools, they are the ones who guard the schools.”*

Their conceptualisation of HPS was that it would only succeed if every stakeholder was involved, they perceived that there was no small or insignificant stakeholder. This subcategory showed the lack of understanding by the educators on the fundamentals of HPS, as they could not articulate the programme as health promoters.

6.4.2 Sell the concept to schools

Health promoters saw themselves as the “drivers” of the HPS establishment process, as they were responsible for identifying schools and recruiting them for the programme. In the process of planning to establish a health promoting school, it was essential to ensure support of four stakeholders: health promoters needed to garner

the support of the principal, the educators, the SGB, and the community. They viewed this process as trying to “sell” or “market” the concept to the schools. They perceived their role as being the mediators between the different stakeholders involved.

HP6: *“It’s just that it depends on you when you go and do your...how to sell the concept, because they already know about the programme. It’s just that how do you sell the programme to them, how will they benefit from this thing.” [F]*

The use of the verbs “sell”, “market”, “identify” and “rope in” were used by health promoters and illustrated how they conceptualised their roles and responsibilities in ensuring the establishment of the programme through persuasion. According to health promoters, implementation of the programme would not be impossible without the inclusion of a health promoter with the necessary skills and knowledge to convince the school principals of the benefits of the programme, so they would accept the programme.

Despite taking full responsibility for establishing health promoting schools, health promoters did admit that the ultimate power to authorise the schools to adopt the programme lay with the principals. School principals who did not find the programme acceptable for their schools rejected it. Health promoters estimated that about half of the schools they “marketed” the programme to rejected it. When asked about what the response was like from the principals they responded:

HP7: *“Others respond, others don’t.” [F]*

Health promoters: *“It’s 50/50.” [F]*

6.4.3 Establish an HPS committee

The literature review indicated that establishing an HPS committee was regarded as an important step.⁽⁷⁰⁾ Health promoters did mention that the committee was needed. However, the school participants did not have any contribution in this regard. When asked if their schools had an HPS committee or a committee that organised school health activities, most school participants responded that they did not (n=13), nor did they understand what the function of such a committee would be. One school participant responded:

P9: *“No, I just know about the condolences and school trip committees, not health.”*

[F]

The preparation phase involves the engagement of key stakeholders (health promoters, principal, SGB and parents) in making plans for the implementation of the programme and establishing an HPS committee. This subcategory indicated the weakness in the school participants' preparation for HPS, especially the educators who were tasked with implementing the programme, who had limited to no knowledge of the programme activities. Principals and the SGB, who had a leadership role in HPS, were not conversant with HPS and its activities either.

6.4.4 Identify school and community issues

According to health promoters, schools were not homogeneous in their strengths and weaknesses but had some similar traits. These different contextual factors were important to consider when planning for HPS activities at the different schools across the district. The audit in Phase 1 also found that the levels of contextual factors varied across the schools.

HP4: *“Ya...the challenges that we have, but because our challenges won't be the same, but somewhere they are the same.” [F]*

Crime and poverty were the most prevalent communal issues mentioned by participants, and they often coexisted. Schools varied in regard to which they considered as the major problem in their communities—some schools reported crime as the main issue, while for others it was poverty.

P1: *“Our challenge is children from child headed homes and poverty, children come to school on empty stomachs.” [T]*

P13: *“Crime is very high, burglaries are normal. Poverty is not that bad, only a few learners come to school hungry.” [T]*

Poverty in the communities was reported to be due to unemployed parents, child-headed homes, and orphans. The rates of poverty were not similar across all schools, some schools had very high rates and reported hindrances to learning because of this; however, some reported insignificant challenges. Those schools challenged by poverty in the community reported that learners came to school hungry and struggled to concentrate in class, and some learners did not have proper uniforms, which increased bullying. All these challenges affected learning outcomes for the learners affected.

Participants were observed to be sympathetic to learners who suffered from poverty. Poverty did not only affect learning but seemed to also affect the school participants emotionally. This was judged by the deflated tone in which they described challenges with learners from poor homes. Participants also tried to do what that they could to help these learners.

P11: *“We also have a problem of poverty, some children have nothing, to a point we go an extra mile, maybe to buy one shoes. This poverty can lead to bullying where other children laugh at them” [F]*

P15: *“For me poverty is very high. I just came in from delivering a food parcel from one of the learners homes. You can just see that the child is struggling, you can see it from the child’s face. The food I delivered I asked from the school feeding scheme.” [F]*

Participants also cited drugs in the communities as another major cause for poor HPS implementation in COT schools. They linked drugs to increased crime, which increased the incidence of school vandalism, absenteeism, and school dropouts.

HP4: *“I would say it affects, if there are drugs around the community that you are working, that’s the cause of vandalising in the school. Meaning that at the corner of the school is a hotspot for drugs; they are looking at every movement.”*

Vulnerable or poor communities were also seen a barrier to HPS implementation, as communities planned or collaborated in the burglary of schools for money. Schools often had their recycling materials, donated laptops, sports equipment and NSFS food stolen. This study was conducted during the height of the COVID-19 pandemic, which was reported by the school participants to have increased the number of burglaries in the schools, as also reported by the media.

P15: *“We have netball” [F]*

P16: *“There are no netball poles at the school” [F]*

P15: *“Don’t we have netball poles? [F]*

P16: *“They stole them ...” [F]*

P15: *“I wasn’t aware we didn’t have them anymore.” [F]*

Another educator also commented,

P14: *“...theft, every 6 months there is a burglary.” [F]*

Crime was not only a financial inconvenience for the schools but affected health activities and learning.

P2: *“Theft, they steal the school resources, the school always instil burglars.” [T]*

P12: *“During covid school experienced burglaries, currently some of the classrooms do not have electricity because of these acts.” [F]*

P15: *“It affects learning. Like burglary if they take things from school what will children use to learn. You see, it affects learning. They come in and destroy the place, tomorrow children have to come to school, you see it’s a challenge?” [F]*

In the audit in Phase 1, a school was found to have no doors in the classrooms and no fence, as the doors were stolen, and the fence destroyed by the criminals. Some schools had stopped the recycling programme because the material had been stolen repeatedly. Sports equipment, including board games, soccer balls and goal posts had been stolen.

Participant 16 spoke at length about the demoralising state of the communities they lived in, the degenerating sense of “ubuntu” as communities did not care about the future of the young people.

P16: *“.... I ask myself how someone breaks into a school. The community we live in is sick. We are a sick society”. [F]*

Bullying was also reported as a challenge amongst learners, which included the learners stealing pens and lunch boxes from each other and using foul language. It was reported to be a disturbing growing trend in the schools and was listed as one of the more important topics that need to be taught in schools.

P16: *“Well, with abuse we never had those serious cases in schools. What I see mostly is children cursing each other.”*

P15: *Their language is too much. Bullying is very important*

To a lesser degree, abuse at home was also reported to be an issue at some of the schools.

P11: *“Abuse also at home, currently we have a grade 6 who was raped at home. We called a social worker who will see her next week because the learner is not in because of the COVID-19 rotation.” [F]*

6.4.4.1 Learner health problems

School participants reported similar common health problems amongst learners. Influenza was the most common health problem, followed by vomiting, stomach cramps, diarrhoea, and eye problems. Participants did not view these as a serious concern; they only became concerning during COVID-19, because the participants were not sure whether it was the normal flu or COVID-19. However, some schools raised the issue of learners who were frequently sick at school. They mentioned that they would appreciate the assistance of the school nurse to deal with such cases.

6.4.4.2 Strengths across schools

Health promoters reported different strengths across the schools. These included acknowledgement of the important role of a health promoter, collaboration with various stakeholders, maintaining productive food gardens and having a school health calendar. These factors were also observed in Phase 1 of the study. The results indicated that they predicated the performance of the schools in implementing the programme. Schools that had implemented these factors performed better in the audits.

6.4.4.3 School dynamics

The implementation of HPS was also affected by the dynamics within the schools—the relationships between school staff—as expressed by HP1 below.

HP1: “... but the challenge is that in the school if you find that there is no unity amongst educators, you know they try to sabotage one another. If there is unity, other educators pitch in if you. If an educator responsible for the programme is not available, another educator will tell you that the other educator has briefed them, and they will help you.”

What was noted in the answering of this question was that the most experienced health promoter in the group related how this challenge was not easy for new health promoters to notice and spoke to the group on how it needed experience to identify and deal with it. Health promoter 1 further explained that even if the correct protocols were followed in implementing HPS, educator relations still had the power to hinder HPS. Other health promoters agreed with her, using phrases such as “yes” or “yebo” and “it’s true”. They named animosity amongst educators as an important hindrance to HPS implementation. They suggested that every health promoter should identify staff relations at the schools during the initial stages of HPS establishment.

6.4.5 Make policy applicable to local situation

As mentioned above, schools did not have the exact same challenges, though they were very similar. The audit results in Phase 1 showed that policy adaptation and prioritisation of programmes was an essential step in HPS implementation, as it ensured that policy activities were appropriate and feasible in the particular school context.

6.4.5.1 Policy knowledge amongst implementers

In COT schools, participants did not comprehend the school health policy. Most educators were not even aware of the school health policy. The interviewer noted that the question on school health policy required much probing with educators as most did not understand what the school health policy was. After probing, only 60% of the school participants reported that they were aware of the school health policy. Principals and the SGB were aware of the school health policy but were not familiar with the inclusion of the HPS in the policy. The SGB at schools was responsible for adapting the DOBE policies for their own schools and prioritising the school programmes.

P16: *“We as the SGB we draft our own...ehh health and safety regulations and policies which the school must use. But then basically, is derived from, we take from the department’s policy. It must align with it and not be too different.” [F]*

When asked why they thought it necessary to adapt the policy, this is how one SGB member responded:

P16: *“It must be applicable to us, that’s the main focus.” [F]*

Lee et al⁽³²⁾ recommended that schools prioritise HPS activities as they may not have the capacity to implement all of them at once. This study showed that not all SGBs adapted the policies for their own context. Schools not being fully conversant with the school health policy and not being involved in adaptation and prioritisation of programmes may hinder effective implementation.

6.4.5.2 Relevant health topics for teaching

When the school participants were asked about the kind of topics, they taught in the LS subject and their opinions on the relevancy of the topics, the topics they listed included handwashing before and after using the toilet, oral hygiene, exercises, behaviour, emotions, bullying, self-care, COVID-19 protocols, personal hygiene, and drug abuse. In the higher grades, they included use of sanitary towels, sexuality, and puberty. They

expressed that, in their opinion, these topics were very relevant, important, and practical for their learners.

P1: *“We teach them on personal hygiene, safety rules, COVID-19 precautions, protecting oneself from strangers.”*

P11: *“The topics we talked about are the ones that are practical.”*

In the preparation stage of HPS, topics that are most relevant to the school can be prioritised so that schools develop strategies to promote these topics amongst learners, even outside the classroom. For example, school participants complained of the increasing rate of bullying; schools can plan more activities to engage learners and parents regarding this issue, in and outside the classroom.

6.4.6 Summary

This category outlined the activities that schools needed to conduct at the initial stages of becoming a health promoting school for the programme to have any success. The schools needed to be recruited by health promoters, and a multi-stakeholder team comprised of all key implementers needed to sit down and plan for the activities. Health promoters saw themselves as an essential component of establishing schools and had good understanding of what a health promoting school is and its functioning. However, school participants were found to be lacking knowledge on HPS. Those who had some form of knowledge, such as the principals and SGB, did not understand implementation of HPS activities within the school health policy. Another surprising finding was that each school principal had the authority to accept or reject the programme at their personal discretion. There was no responsibility placed on them to accept and implement the programme, though it is in the ISHP.⁽²⁹⁾

6.5 Category 2: Need for continuous training of implementers

The second category was related to training the whole school community in HPS to ensure effective implementation. This category illustrated the deep need for training of the implementers. Schools were expected to implement the programme; however, they were never trained on what was expected and how to achieve it. There was a sense of incompetency and lack of confidence amongst participants, because implementers could assess their performance as suboptimal owing to a lack of skills. The subcategories were (1) meet health promoter competency needs, (2) skills development for LS educators, and (3) skill the whole school complement.

6.5.1 Meeting health promoter competency needs

In order to convince the schools to become health promoting schools, health promoters needed to be competent to “sell” the programme to the schools. They needed to be trained and knowledgeable on HPS, especially the WHO steps and guidelines involved in becoming a health promoting school. In the recruitment and establishment stage, health promoters performed a needs analysis of the schools and community. This is a low-scale form of formative evaluation, and they would perform better in this evaluation if they received proper training.

HP6: *“You need to have more information on the HPS and how are you going to initiate it. You need to know all the steps, when you go and meet with the principal, you must know all your story....”*

HP1: *“We have a tool, know your tool.”*

Health promoters criticised the training they had received as being unstandardized, as it was informal training done in the field by older health promoters. This was viewed as a hindrance to effective establishment and implementation of HPS. Health promoters also highlighted the fact that there was constant change in health promotion and for them to improve implementation, they needed new knowledge on HPS.

HP4: *“The training was done, but it was only once off. No support or in-service to remind each other, to check, to follow-up what is the progress, what is your challenge.” [F]*

HP5: *“But it was train the trainee, not the real training, we need real training for HPS.” [F]*

Continuous training was seen as a means of improving implementation outcomes, as stated by this health promoter:

HP1: *“If they can do continuous refresher courses, this programme is gonna look like something else.” [F]*

What was noted by the interviewer regarding the health promoters’ responses was their anger and frustration at the lack of training by the district office. Health promoters felt that they could do much better in school health but were getting substandard outcomes because of lack of training. They also mentioned that the district used to send them for training but had stopped. This was frustrating to them, as they had experienced the benefits of proper training in health promotion.

HP1: *“In the past there were continuous refresher courses and we loved it because after the refresher course, we were eager to come and share the new information that we got, to come and empower others. I don’t know where they lost track.” [F]*

Academic institutions had an important role in the training of health promoters. Health promoter 6 had received short training from a local university and praised the course for its usefulness and the sense of pride it had given her.

HP6: *“I got training from the University of Pretoria. It was good; because we even did the practical part of it. We even wrote the exam, and I got a distinction.” [F]*

Training not only skilled the health promoters, but it gave them a sense of pride, confidence in their work, and encouraged them.

6.5.2 Skills development for LS educators

Life Skills educators reported that they did not receive training specific to the LS subject. Educators did not understand their roles or responsibilities beyond teaching what was in the curriculum, such as handwashing; hence, their health promotion responsibilities did not go beyond the classroom. In the HPS framework, health promotion activities are promoted both within and outside the classroom.

When LO educators were asked if their roles and responsibilities were explained with regard to health promotion or health promoting schools, most educators answered “No” and some reported that they were teaching the subject because there were staff shortages; they had not chosen LS or specialised in it as part of their teaching education or even received any training by the DOBE.

P11: *“No, I do not think so, I just fell into it because of shortages. I did not get training in physical education and part of the creative acts.” [F]*

The LS subject has three components within it: there is the PSW, creative arts and physical education (PE). The PSW component teaches learners how to behave and about their emotions; it also includes reproductive health. When asked about challenges with teaching LS, educators reported lack of training as a common challenge across schools. They found PSW not to be a challenge and enjoyed teaching it, except for the reproductive health section. They had not received any training in reproductive health, creative arts or physical education. These areas were more of a challenge because they needed training and could not be taught by just following the curriculum guidelines.

P17: *“There are 3 legs of LO. PSW is not a challenge. In creative arts, teachers are not trained on creative arts, drawing, reading music notes. Physical education, teachers are not trained. In creative arts we don’t even know how to draw or read music notes and teach drama. We need training and props.” [F]*

P11: *“...we just end up teaching just to push the syllabus, not for those kids to know, it becomes unfair because you tell them to run while you are sitting down. We need training big time.”*

When educators related their experiences regarding PSW, they spoke with pride and joy and at length of how the topics were relevant to the learners.

P11: *“The topics we talked about are the ones that are practical, especially the PSW, things like emotions and bullying, those are the ones I enjoy.”*

Male teachers felt incompetent and uncomfortable teaching reproductive health. Female educators also expressed their lack of confidence in teaching some topics on reproductive health as they did not understand them fully. They suggested that the school health nurse should conduct workshops with them on these topics or even sometimes come in as a guest educator in the class, as a way of assisting in teaching health topics. They also requested that the DOBE conduct workshops on how they can implement topics as expected.

P1: *“No training from health, there is minimal information e.g., menstruation, cannot teach what you do not know.” [T]*

P2: *“It would be better if they employ healthcare workers to come to the school more often to teach children.” [T]*

One male educator showed the value of specialisation or having advanced training in increasing the confidence of an educator in teaching a subject. He had specialised in sexual education at a local university.

Researcher: *“What about reproductive health, are you comfortable teaching it?” [F]*

P14: *“Anything, I have a degree in sexual education.” [F]*

However, the same educator had negative feelings towards creative arts, which he had not specialised in.

P14: *“I am not challenged, but creative arts is not my speciality, I do not like it.” [F]*

The educator spoke broadly about his education in sexual education. He had a passion for the subject and pride in his qualifications. He suggested that the

department should sponsor educators to advance their studies. Other educators had also suggested that LS should have educators specialise in one of the three components of LS because it was difficult for one educator to be good at and have passion for all three.

P11: *“If it were possible, like in other schools, one teacher would specialise in PSW, another physical education and the other in creative arts. It becomes better that way, you get trained, you can concentrate on that part. Some parts of the subject, like I said the physical parts I struggle with. You see my challenge; I have a knee injury, so the things I am supposed to do physically I cannot, if we were three teachers, one would take over.”*

Health promoters raised the point that all educators, even those not involved with LS or not in the committee, also needed to be trained in HPS as this would improve implementation. It would enable educators to support each other and replace each other when one left the school, so that HPS does no longer suffer. Health promoters related their frustration with schools only having a single educator trained; this hampered their work. When they visited schools for HPS activities, they did not get the necessary assistance when the one trained teacher was not available.

HP3: *“I think, maybe if they can train every teacher, not just one, because when that one is not there, aay, things doesn’t go well. So, if they can alternate to go for the workshop of HPS, it will be simpler for whoever you get there.” [F]*

6.5.3 Skill the whole school complement

This category showed that training for effective HPS implementation should not end with training the health promoters and LS educators; the whole school should also get some form of training. This is in line with the literature on HPS implementation.

HP2: *“I think also, some of the parents and the SGB must be trained and the learners themselves.”*

6.5.3.1 Principals

Principals getting HPS training would benefit the whole HPS programme, including the activities and the implementers. In the initial stages of establishing the health promoting schools, principals who had good knowledge on HPS could potentially accept the health promoters into their school to establish the programme, as they would understand its benefits. During the planning of activities, they would know how the activities should be implemented and the resources required. They would then have the skills required to support the implementation of the activities, including

supporting the LS educators. This would also assist in achieving the ISHP objective of expanding HPS to more schools and grades.

6.5.3.2 School governing body members

The school governing body is tasked with policy adaptation and programme prioritisation—a complicated task, especially when one does not understand the programme one needs to adapt to the local situation. Training in HPS would help SGB members adapt the HPS programme so it is feasible and give them knowledge on how the programme is expected to work so they can support implementation at the schools. If the SGB understood the benefits of HPS for the health of learners and the school community, they would make it one of the priority projects. During the interviews, SGB members expressed that their main concern was the health of learners.

P16: *“...we must prioritise which one is more important, which one needs urgency. Health of children is priority number one, must be. Health of children in this school comes first, health and safety comes first.” [F]*

Speaking on their training needs for effective implementation, the SGB members also requested training in first aid for themselves and the rest of the staff. Educators also requested that they get first aid training. First aid is an indicator for health promoting schools. School participants reported that schools had a specific staff member, usually the occupational health educator, trained in first aid. That staff member would be in charge of the first aid responsibilities at the school. The challenge was that when the staff member was absent or retired, no one could assist those needing first aid. School participants suggested that all school staff and SGB members should get training in first aid.

P16: *“For me, on that one basically, I for one feel that each and every teacher would be equipped in first aid, cause the injury of a child does not need one teacher. If we are many we can, even the SGB.” [F]*

P11: *“The teacher trained in first aid went on retirement last year.”*

School governing bodies are very important in schools. Though often overlooked, they have power over all school activities. This is how one participant described their power:

HP1: *“If they buy the concept, it becomes easy. Because they can derail the process, they have got the power of derailing everything in the school”.*

A school principal described their role in the schools as follows:

P10: *“They run the school, source funds and have signatory powers. Come up with policies and ensure that these policies are implemented or followed.”*

P14: *“They are the engine of the school’.*

There is no denying the power that the SGB has in schools; therefore, training them in HPS is important so they understand the benefits of the programme and know how the programme should be supported.

6.5.3.3 Learners, other school staff and parents

Learners should be part of the HPS committee, represented by student representatives. Only a few of the evaluated schools had functional HPS committees, and those that had active committees did not include learners in them. Some educators expressed that the learners in primary school were too young to engage in such committees fruitfully. However, learners can still be engaged through arts and drama in schools, where they teach others on health topics at assembly, during class or on career day. The audit results showed that schools in COT did not have peer engagement. Health promoters suggested that peer educators such as Love Life should work closely with schools on some health topics, as learners felt comfortable around other young people.

HP5: *“The children, they are not free to talk because you are like their mom or their granny when they look at you, you are the same age with their mom or their granny.”*

HP2: *“Like in my area, I call Love Life, go to them for help.”*

6.5.4 Summary

This category illustrated the lack of training in HPS amongst all key implementers, which had a negative impact on implementation. Participants felt and expressed the need for training because they saw the lack of training as resulting in inadequacy in their performance of their duties. There was low morale and frustration amongst participants, resulting from incompetency due to lack of training. Schools need to find ways to include learners and peers in health promotion, as this will improve uptake of health information by learners and empower them.

6.6 Category 3: Achieve teamwork

This category is related to the role that each stakeholder needed to play to improve HPS implementation. It illustrated the importance of collaborative work, where multiple

stakeholders are engaged in the process, and how each stakeholder (including government departments) can support implementation efforts. Health promoters stated that all team members were equally significant to the programme. This category had the most subcategories, an indication that most of the work is done at the implementation stage, where all players are involved.

Health promoters reported that collaboration between the various stakeholders involved in HPS (clinics, schools, and the community) improved the implementation of the programme. Collaborative work enhanced the benefits of HPS, which they listed as (1) improved status of schools, (2) a holistic approach to treating learner issues and (3) reduced absenteeism. Other stakeholders cited as important to HPS were the SAPS, the social worker, the school nurse, and the private partners. The subcategories were (1) support health promotion actions, (2) improve parental and community engagement, (3) increase support from government departments, (4) strengthen lines of communication, and (5) involve external support structures

6.6.1 Support health promotion actions

The HPS is a health promotion programme based on the Ottawa health promotion guidelines. Therefore, it is imperative that health promotion actions are encouraged at all times during planning and implementation. Health promoters understood their roles and viewed them in the context of health promotion. They viewed themselves as responsible for providing preventative services to the community at large. They used verbs such as “advocating”, “lobbying” and “preventing” in describing their roles.

HP6: *“We are doing prevention to cut the queue in the clinic. We are focusing mostly on the neighbourhood than at the clinic.” [F]*

HP5: *“As health promoters we advocate for the client.” [F]*

HP3: *“To add on that, the important part of it is that as health promoters we are trying to promote good health by preventing. Teaching people to prevent before an illness can come. It’s all about preventing.” [F]*

Health promoters were more knowledgeable and passionate about health promotion. They expressed that they wanted to do their work well and improve the lives of communities. Optimal health promotion outcomes, however, required support from the DOH, the DOBE, the school community, private partners, and academic institutions. Health promoters reported on challenges they faced in establishing health promoting

schools and implementing HPS activities. The challenges were not many, but of such a serious nature that they hindered implementation. Training has been mentioned before as a challenge. They also reported lack of support by the department. Principals did not receive them well because schools had not received any mandate from the department to implement the programme; hence, health promoters were sometimes not given the opportunity to “sell” the concept. However, if principals got a directive from the department to implement the programme, this would increase uptake of HPS.

They expressed that though they were expected to implement the programme, but the people who had given them this responsibility seemed not to be involved themselves. They expressed that the DOH and GDOE do not seem to communicate amongst themselves on the programme. Speaking about this, health promoters were annoyed and did not have much to say about the department, despite probing by the researcher.

HP4 had this to say:

HP4: “.... then we know that if department of education and department of health, though being once, when they meet, they talk about these programmes and this programme must be escalated down to us. Then is where I’m having that power to go to schools as a health promoter, tell them I am HP4, I’m doing this, I’m coming to market the concept of HPS. That is when they buy in, if the district communicates with the schools”. [F]

HP1: “The mandate must come from education.” [F]

Implementation would be improved if the department took more of a responsibility in the establishment of HPS and supported the health promoters in their efforts to increase health promoting schools.

With regard to health promotion actions under HPS, educators are responsible for promoting health inside and outside the classroom. This was not the case in COT schools—educators were involved in health promotion only through the classroom curriculum. When asked how they implemented HPS activities in the school as LS educators, the answers were that it was only curriculum-based, within the classroom. There was also no collaboration between educators and the whole school community on health promotion activities.

P14: “No, it was part of the curriculum, we treat it as a theme or topic.”

P13: “I do them in my classroom, every teacher is responsible for his/her class to promote health education.”

6.6.2 Poor parental and community engagement

Participants in the study all reported the importance of parental engagement for improved health and learning outcomes for learners. According to the opinions of health promoters, the positive benefits of parental involvement started during the establishment phase, they reported that to establish a health promoting school, health promoters needed to garner the support of parents for the process to be successful. After the introduction of the programme, parental and community involvement remained an important facilitator to implementation. For health promotion to be effective, it needed to be promoted within and outside the classroom, parents needed to assist learners in practising the health behaviours they were taught in the school, in the home. One educator put it this way,

P12: *“Parents also need to further what is taught at the schools in the home.” [F]*

Parental involvement was associated with the following benefits;

- Reduced vandalism and burglaries
- Improved motivation for learners to learn (seeing parents involved has a positive impact on learner motivation)
- Improved school cleanliness (parents volunteered to clean the schools)
- Improved communication with teachers to assist challenged learners
- Increased assistance for learners with homework (parents took interest in children’s schoolwork)
- Improved identification and treatment of learners with health or mental challenges
- Reduced complaints from parents

These benefits resulted in an improved school environment for teaching and learning. As shown in the audit, the number of general assistants was limited in the schools. In schools where parents were involved, they helped perform some of the duties general workers could not get to, such as cleaning and gardening.

HP1: *“One other thing as I’m listening to them, the other important thing is to get the parents. Because if the parents don’t buy in, to make the school conducive, to make the environment to be conducive for the learners, ehhh.... our parents need to be involved.” [F]*

HP2: *“We really need the parents to buy in for the schools not to be vandalised, for the schools to be clean, for them to understand the whole set up.” [F]*

Participants highlighted the benefit of the parental involvement for learner mental health and learning...

P2: *"It will build a good child...a good child."* [T]

P15: *"You know how our kids are like. They want support, kids need support. So, if ever it was like that our kids, some are bright but for the fact that they don't get support, they become...the child will not be right."* [F]

Schools also had limited security, in most of the schools the security was untrained community members who were given a stipend for their security services, this led to a lot of burglaries. Health promoters suggested that parents and communities who were involved with the school could be the 'eyes' of the school, their 'eyes' could be 'bought'.

HP4: *"...in order to buy their eyes, their watching out for the school."* [F]

HP1: *"If you can have a good relationship with the neighbour, just buy them, be smart."* [F]

If there was a good relationship with the schools, those living close to the schools assisted in guarding the school and reported suspicious acts at the school.

P16: *"I was explaining the breakages we have at school. But in terms of most things, you find we are not available after hours, the community calls the principal about what's going on, the principal calls a person close by to check what is going on."*

Despite the consensus amongst key implementers on the vital role that parents had to play to improve school environments, participants reported that parental involvement was currently disappointing in schools. This is in line with the results of the audit tool in Phase 1, where only 36% of the schools had parental support. Participants reported in frustration that parents did not come to school meetings, they did not assist with homework, failed to avail themselves to help in any needs that the schools had.

P16: *"Even now I can give you an example that when schools open when we call parents to come and assist us in preparing the schools so that when kids come, they find the schools clean, painted and all. They don't come. But if you find committed parents those things happen. When a child or learner comes into the schools, they find a peaceful environment, clean, that freshness."* [F]

One participant mentioned that the parents were so not willing to be involved with the schools that they even struggled to make up the SGB, as parents did not want to be

part of the SGB, complaining that it took too much time and had a lot of responsibilities with no rewards.

Educators seemed more frustrated by the lack of involvement as it affected them directly in the classroom. COVID-19 was reported to have worsened matters due to the rotational timetable. Educators complained of the frustration and pressure they were under. The district office expected them to complete the syllabus, however, parents did not assist children with homework, which caused further backlogs in teaching. The perception of school participants of parents can be seen in the choice of words used to describe the parents' behaviour in the statements below, 'troublesome' and 'eish'.

P17: *"Parents are troublesome and learners with challenges do not attend meetings, this limits learner support education involvement and intervention."* [F]

P15: *"Eish...honestly speaking they are not supportive. You can count the number that support."* [F]

It was noteworthy that school participants seemed to have given up on parental support. When asked on suggestions to improve the relationship with the schools, most answered with 'I don't know'. The researcher observed that most school participants did not even attempt to think of strategies. Those that suggested said...

P11: *"The best, I think would be to call a meeting, but they do not come—difficulty in answering."* [F]

P1: *"Parents should be brought on board and explain their roles regarding the school."* [T]

An SGB member had been thinking on this issue and this was what he reported as his plan for his school.

P16: *"I for one I spoke to the principal last. Whereby, I was thinking of drafting a pledge, whereby parents will sign that pledge that I will assist my child with schoolwork, whenever I'm needed at school I'll be there, Ill support my child financially when coming to the school. I'm still gonna present it to the SGB."*

All the suggestions by school participants were centred around trying to get the parents to the school, pleading with them to get involved and make them commit. Health promoters on the other hand, seemed more open to suggesting what schools could do to improve parental and community engagement. They believed that schools taking even the smallest steps to show kindness and support would go a long way to

foster a good relationship. The relationship would be engendered if it was reciprocal, that is schools also contribute towards the community needs and not only expect the community to support them. They emphasised that schools should try to “buy their eyes’ or ‘woo’ the community. They further described this process as schools being ‘smart’.

HP1: *“...you wooing them to your side, they will be able to take care of the school. But if you snub them, I’m telling you hell is gonna break loose.”*

They suggested simple gestures such as...

HP6: *“When the school closed why can’t the school identify that family, the remaining food of feeding scheme, take it to them, in order to buy their eyes.”*

HP5: *Most of the schools that are having Wi-Fi and if you can run them off as you are the principal, they are going to vandalise your school.... Give them something to eat, because there is a lot of food at school, rather than taking that food home to eat as teachers.*

HP1: *And here is another important thing, if you want a groundsman you start by identifying in the community. If you want food co-handlers for feeding scheme, start with the very neighbours. For safety’s sake consider them, then you will see your things will run smoothly.”*

Suggestions by health promoters implied that schools, especially the principals needed to merge themselves in the community, assess the community needs and contribute to meeting these needs. Most methods of ‘wooing’ the community would not cost the school in terms of monetary expenses, but rather in time and kindness. One health promoter even suggested that when the principal passes members of the community, they should greet them and make small talk. All these small gestures go a long way to buying the eyes of the community.

The findings of the audits showed that schools that had good relationships with parents’ and the community performed better as health promoting schools, largely because the parents were able to volunteer at the schools and close the gaps caused by lack of GAs and also work with educators towards better learning outcomes for learners.

6.6.3 Support from government departments

The collaboration between the GDOE and DOH would assist in expanding health promoting schools and improving implementation. The ISHP states that it intended to

expand HPS in the country and even introduce it in high schools.⁽²⁹⁾ This intention was supported by health promoters as they had seen the benefits of HPS in schools.

HP4: *“Maybe all schools, even we mustn’t say primary, all schools if it comes to a push.” [F]*

Lack of support from government departments was a hindrance to expansion of the programme, meaning failure of policy implementation. Health promoters suggested that the DOH and DOBE should hold high-level discussions on HPS activities and communicate with the schools on the programme, this communication from DBE to schools would increase the acceptability of the programme. They also expressed dissatisfaction with the lack of support and monitoring that they received from their leaders in the district office. The district was described by a participant in this way,

HP4: *“The district, it’s an umbrella of everything.”*

The Department of Education was seen as not taking the needed responsibility in the implementation of the programme; they had left the responsibility to health. The HPS programme is equally the function of health and education delivered in the education territory.⁽³⁵⁾

HP4: *“Education must go and revisit the HPS guidelines, because as health, we are just supporting them; we want them to achieve whatever their aim and objectives at the schools.”*

Interestingly, health promoters mentioned that there was also poor collaboration amongst themselves. Though they were few in number and had an overwhelming number of activities, working together could mitigate some of these challenges and improve implementation.

HP5: *“When you are invited to a life skills session with many children, you need manpower. When there are 5 classes you need to attend to all 5 classes. Other health promoters’ support is needed to help. So, manpower, health promoters need to support each other.” [F]*

The health promoter continued on in anger.

HP5: *“No man...we don’t support each other!”*

If there was adequate monitoring and support, health promoters who needed assistance with activities could call the sub-district office, who would organise reinforcement from other health promoters.

6.6.3.1 The role of the DOH and DSD

Poor collaboration with nurses was noted by health promoters as a hindrance to holistic care of learners. Health promoters reported that school nurses worked in silos, coming to the school to run their programme without interaction or collaboration with health promoters. According to health promoters, the various teams servicing the schools needed to plan together. Good communication between parties would facilitate this process, and improved collaboration would enhance the services that the learner and the school received. The Department of Health is responsible for assigning a nurse to the school as prescribed by the ISHP, to provide health services to the whole school community. School health services form part of the six action areas of the HPS framework. When health promoters were asked about their relationships with the school health nurse:

HP4: *“They are not part of our programme. They are having their programme. ...when they go to the schools, they are going to do their duties for that day, whereas they say we must team up when we go to schools.”*

One health promoter reported that, in her school, there was good communication from the local health facility manager:

HP1: *“But I want like to say, it depends on the district. In the regions, region 6 our school health nurses before they do anything, the facility manager reports. So, communication is there.” [F]*

This comment caused an argument amongst the health promoters; the other six all disagreed with this comment. In their experience, none of the facility managers communicated with the schools. One health promoter expressed that even if they communicated their visit dates, it was not enough. Planning for visits needed to be done as a collective, with all interested parties involved.

HP6: *“They need to start with the planning and not to say we are going, come and follow us. You need to come and plan together so when the date comes, we know.”*

Poor communication and collaboration between the school health nurses and health promoters adversely affected the health needs of the learner, where services to the learner were not complete. One health promoter explained it this way:

HP4: *“And the intervention they are doing, it won’t be reported that we found a child that is having a problem of 1, 2, 3 we referred them. They were supposed to tell you we have referred how many children, in order for you the health promoter to go and do the home visit for that child.”*

When school participants were asked for their opinions on the role of the DOH in schools, they were divided. Some felt that the DOH had done enough by providing school health nurses who visited the schools for screening of learners every once in a while, usually twice a year. Some reported that the frequency of visits was not adequate and the DOH should increase the frequency of visits.

Most educators were not aware of the package of services that school nurses were supposed to provide to the schools as stated in the ISHP. They thought it was just for the nurse to visit once or twice a quarter and attend to referred cases. When the researcher explained the requirements of the school nurse—such as to screen all learners (eyes, mental health), attend to immunisations for those who had missed dosages at local clinics, and attend to current illnesses in learners and staff⁽²⁹⁾—those who had perceived the visits as adequate changed their opinions and expressed that the visits were not enough. School participants who had initially stated that the visits were not enough suggested that a school nurse should visit the school at least once a week, while others suggested a nurse be stationed at the school.

P7: “We need a stationed nurse; we are dealing with children who have special needs. Dietitian and social worker should come once a week.”

P15 and P16: “Full time nurse stationed at the school and frequent eye screening.”

P10: “Frequency should be once a week.”

The school nurse was not only required to come in once a week to screen learners, but also to assist with health topics in LS, as mentioned previously.

P1: “Nurse departments should be involved in workshops related to topics on the curriculum. Their visits should be once a week.”

Participant 7 also requested other services: a dietitian and social worker. Social development did assign social workers to schools, but not on a fulltime basis. Most had offices close to the schools, and schools could ask for assistance whenever necessary. Most schools reported that they were happy with the social services they received; however, more schools had a better relationship with school health nurses compared to social workers. This was also found to be the case in the audit results.

PP12: “Social workers come when they are called. Nurses come every quarter; however, they respond to emergencies.”

Addressing the health of the school staff was not seen as part of the school health policy. However, within the HPS framework, the health needs of both learners and staff should be addressed. In the schools, participants were surprised when asked if there was a programme that addressed educator needs.

Researcher: *“Are the health needs of teachers taken into consideration within the school services?”*

P10: *“No, everyone takes care of themselves.”*

P13: *“No. Every individual is responsible for their own health.”*

Educator health was seen as an individual responsibility, outside the school health policy. Some participants did not understand what the school could do for them. When asked what they do when they are not well, one educator responded with laughter:

P13: *“I buy grandpa at the tuckshop if I have a headache.”*

6.6.4 Strengthen lines of communication

Communication, or rather lack of communication, is the common thread that ran through all the categories.

6.6.4.1 Schools and government departments

The poor relationships between health promoters and school health nurses mentioned above indicated the poor lines of communication between implementers within the school and at a higher level. They indicated lack of communication between the DOH and DOBE. This also illustrated the lack of coordination and monitoring of policy implementation activities.

6.6.4.2 Principals and educators

There was poor understanding by principals of the challenges that educators faced regarding teaching reproductive health, creative arts and physical education. Educators had reported that their lack of training in these areas led to them feeling incompetent, lacking confidence and ending up teaching only as a responsibility, without any passion. However, principals were of the opinion that teachers had had adequate training and did not have any specific challenges with teaching LS besides the common challenges that all other educators faced, such as parental support and inadequate resources. Some principals admitted that they did not know about the

challenges of teaching LS. The training statements by principals and the SGB contradicted those of educators, as shown below:

P9: *‘Teachers are trained. We have not had meetings to discuss teacher challenges. COVID-19 has ruined everything.’ [F]*

P7: *“Yes, they know their roles because they did it as a major in university.” [F]*

Principals also had little knowledge on the contents of the LS subject. They were aware of just a few of the health topics taught in class, as expressed by Participant 10.

P10: *“I am not a LS teacher; I do not know. All I know is that they teach children the importance of washing hands.” [F]*

The experiences of the educators being different to the opinions of the principals illustrated poor communication and lack of prior planning for HPS activities. As reported by health promoters previously, this also illustrated school dynamics—poor relationships between staff. Principals are leaders in the schools; they drive and support learning. It would stand to reason that they wouldn’t fully executive their role in this regard if they did not know the challenges faced by educators.

Educators did not fully understand the specific role that principals had to play in health promotion either. When asked, “What do think about the role of leadership in health education and health promotion activities in your school (principal)?”, most did not have an answer and took time to think over it. One responded that they did not know what was expected of the principal in health promotion:

SP9: *“I do not know the role of the principal in health promotion.”*

The researcher noted that principals themselves did not mention any distinct role they believed they needed to play in health promotion and often responded in the third person, as seen with the two principals below:

P10: *“Principals need to teach and encourage both teachers and learners.”*

P12: *“They support the staff with everything they need.”*

Principals’ referral to their roles in the third person indicated that they were speaking from a general point of view, not on roles they had been practising. The lack of understanding of principal roles in health promotion indicated both the lack of

communication between key implementers within the school and lack of planning for health promotion activities.

After probing, the researcher managed to gather a list of roles that educators perceived as the responsibility of the principal in promoting health in schools.

Role of principal

- Ensure implementation of HPS activities
 - Provide needed materials, funds, and support
 - Lead the implementation of HPS activities
 - Engage/consult with parents on HPS topics

If principals performed their roles as stipulated by the list, the HPS programme would advance in schools. On the last point on engaging parents on HPS topics, besides the usual engagement, an educator raised the challenge they had with parents regarding sexual health. Parents were not in agreement with the curriculum on some parts taught in the subject. This caused a lot of strife with parents who did not assist with learners' homework in these topics.

P14: "The principal should lead and also involve parents, especially in sexual health education before it is taught to learners, as some parents are against or uncomfortable about such topics."

What was noted by the researcher was that educators seemed uncomfortable talking about the principals. Even when the researcher assured them that it was not to find fault, they remained uncomfortable.

6.6.4.3 Schools and health promoter

When school participants were asked about the state of their relationship with the school health promoter, most did not know what a health promoter was. When the researcher explained who the health promoter was, most responded. "Oooh...those that come and give toothpaste and toothbrush?" Even though health promoters came to the schools, they did not have a relationship with the participants interviewed in this study.

P16: "Those who give those small Colgate's."

P14: "Yes, but they do not come often."

Describing the health promoters' role at the school as that of toothpaste distributors indicated the poor lines of communication between schools and health promoters and the lack of collaboration.

Health promoters also admitted that educators did not always receive them well; they reported that they were often too busy to work with them.

HP4: *"Sometimes they will accept you, but you are going to work alone."*

They also related their experiences with schools that had time for health promoter activities, indicating that they considered this a strength of a school.

HP3: *"Sometimes some schools they do recognise us, HP4 said. They recognise health promotion, because if something goes wrong in the school, they will call you, because they know that this person will come with other role players, they believe in you."*

HP1: *"..they even have a health calendar and say HP1 have you seen this month is health awareness and we want you to come help us organise an event on this topic, maybe its TB month. We want our children to be screened, come and educate us. Those are the most ehh... it makes us to be very effective."*

Poor acceptance or understanding by schools of health promoters' roles hinders health promoters' effectiveness in the schools; the schools, and the learners especially, miss out on an opportunity for improved health. As HP3 explained that when they are involved, they are most effective.

HP3: *"The health promoter is the driver, as long as you have a good relationship."*

6.6.5 Involve external support structures

Support was needed from within the school community and government departments but was also needed from external structures who had an important role in advancing HPS implementation.

6.6.5.1 Roping in peer educators

The health promoters reported that the services of peer educators helped in improving health education in schools as young people related better with other young people. Most learners did not feel comfortable discussing certain topics with older people. A school participant also suggested that the relationship with peer educators would benefit schools in teaching health education.

P14: *“Soul buddies should be brought back to schools, and they should come more often.”*

6.6.4.2 Improving relations with private partners

According to school participants, schools did not have good relationships with private partners. This was in line with the audit tool results, where only a few schools had productive relationships with partners. Good relationships predicted performance in the audit tool; schools with good relationships did better in the assessment. Private partners helped improve the school environment by donating materials to learners such as toothpaste, toothbrushes, and sanitary towels. Items like sanitary towels assisted in reducing teenage girls' absenteeism. They also donated infrastructures such as classrooms, computers, eating facilities, sports facilities, mobile kitchens, gardening material and security services. Schools that had poor relationships with partners performed worse on the audit tool and lacked some essentials that the other schools had. When schools were asked for the reasons, they had not established good relationships with partners, some cited reasons that put the responsibility on the principal and SGB for these relationships.

P7: *“Principal needs to approach private sector and not keep quiet like we are doing now.”*

P12: *“SGB needs to approach sponsors.”*

Other reasons were related to the attitude and lack of interest of the private partners.

P16: *“These people are stingy, honestly. Private partners are not enthusiastic to donate; hence the building of the relationship is difficult.”*

P10: *“Businesses do not want to sponsor small rural schools like ours, they like to go to big schools so they can appear on TV.”*

Some participants reported that they do apply, but sponsors give very little or were not responsive to their requests. The SGB is mainly responsible for getting funds and donations for the school. Working together with the principals, they are responsible for building relationships and getting funding. One educator spoke of the good relationship they had with sponsors.

P17: *“Our school has a good relationship with KFC, they donate seeds and food for our school orphan's kitchen.”*

Another educator related how an NGO had assisted them recently with sanitary towels for girl learners.

P12: *“Previously we did not have sanitary towels for the learners, and this was a problem as some learners would start experiencing their periods during school hours, however, a week ago an NGO provided for them.”*

In some schools with good relationships with private companies, the companies donated seeds, tools and training for food gardens.

P17: *“We have no challenges; seeds are donated by an NGO.”*

P12: *“Currently we are working on a project that we are busy with, it is the installation of a borehole by a sponsor and seeds will be provided by the sponsor.”*

Private partners made up for some of the shortfalls by government, which helped improve the school environment.

Academic institutions were also referred to as partners that could play a role in improving implementation through training key implementers. As suggested by one educator, the government departments should work with academic institutions to provide training for schools.

6.6.6 Summary

This category contained most of the activities that are performed during HPS implementation. It illustrated the importance of teamwork and collaboration, without which an HPS fails. Every stakeholder needs to be clear on their roles and take responsibility for them. There was a lot of poor communication amongst all stakeholders, and key implementers were not clear on their roles and the roles of their counterparts. Even the GDOE and DOH, which are responsible for the programme, seemed to be out of the picture when it came to implementation. Participants expressed that they did not receive the support they needed from government. There was also no accountability for each stakeholder to play their part. Those who did not perform their roles accounted to no one. It almost seemed like HPS was a matter of choice in the schools.

6.7 Address barriers to implementation

The audit found a number of barriers to implementation. Some have been mentioned in the sections above, such as lack of training, poor communication and relationships

amongst stakeholders, and insufficient support from parents and government institutions. This category explored other barriers as experienced by key implementers in COT. It illustrated that the barriers were many and similar for all the participants, from health promoters to school participants. The subcategories developed were (1) lack of resources for implementation and (2) unsupportive nutrition environments.

6.7.1 Lack of resources for implementation of activities

Schools need resources for the implementation of HPS services. Participants expressed frustration over not having the needed resources, which hindered their work and led to low staff morale.

6.7.1.1 Inadequate staff

Health promoters lacked many of the resources required to implement HPS activities. The insufficiency started with the limited number of health promoters within COT schools to implement the HPS activities. Schools had only one health promoter, who was responsible for other schools and other responsibilities outside HPS. In the recruitment process of this study, the head of health promotion spoke on how there were not enough health promoters for all the health promotion activities in the district, so they did not have much time for school health. They did not have enough time to attend to existing health promoting schools and establish new ones.

Schools also reported the shortage of staff in general and for LS in particular. As mentioned previously, LS educators reported that they needed teachers trained in LS to assist in teaching the three components of the subject. In addition, LS educators who had other managerial responsibilities at the school, such as also being an HOD, expressed that they did not have the time to do all the activities owing to time constraints.

P14: "Time limitation, there is too much work and responsibilities as an HOD. The work is too much for one educator. The government should capacitate more teachers for life orientation and life skills and employ staff to share the workload."

6.7.1.2 Lack of teaching material

Health promoters expressed anger and frustration when speaking on lack of resources.

HP5: "Also frustrating, you find that different stakeholders they bring something for the kids, pens, etc. but health promotion brings nothing. You just talk, you don't bring

anything, and they don't take you seriously. No support, no resources, they will tell you about budget, especially for health promotion, zero, zero resources." [F]

They spoke about the lack of presentation materials that negatively affected their work.

HP6: *"We don't have presentation material; we don't have flip charts, marking pens. Even laptops, some of us don't know how to use it because we not used to it, how to assemble the overhead projector." [F]*

HP1: *"My heart is sore, as I was saying for us to win teenage pregnancy, we were using overhead projectors. We were educating learners so now I don't know who came with the idea of taking it from us. Those are the resources that are needed for your programme to run smooth and be effective and to attract the learners." [F]*

Health promoters went on to discuss their lack of transport to get to the schools for activities and how it created a negative impression of them at the school.

HP5: *"And the other principal chased us away; we were there for HPS. Because we were walking for a long distance to the school, full of dust." [F]*

Participants believed that HPS was important and beneficial for the schools as it improved the status of the schools. However, lack of resources and poor support led to low implementer morale. They described how they felt using phrases such as "sore heart", "frustrated", "not taken serious", "don't shine" and "don't have anything". One participant stood up to show us how she had to improvise to teach on the reproductive system during health education talks with learners.

HP3: *"When we are telling them about fallopian tubes, you have to act out, you become a uterus yourself." [F]*

They reported that they were often outshined by private companies during campaigns because they could not give anything to learners, not even toothbrushes after teaching on brushing of teeth. Companies came along with materials to teach with and give to learners to take home.

HP6: *"And I still remember 2018/2019, we planned a global handwashing campaign, neh. It ended being the Lever Brothers project because we didn't have anything. We didn't shine like we were supposed to shine." [F]*

The health promoter related how they had worked so hard to organise this campaign, only to end up being outshined.

HP6: *"We were working during the weekends, we were preparing".*

Life Skills educators requested charts, LS books, props for creative arts and sports equipment for physical education in order to implement activities. In the Phase 1 evaluation, schools were found to not have HPS posters and IEC material as required by the HPS audit tool.

6.7.1.3 Lack of infrastructure

In the audit conducted in Phase 1, results showed that schools failed to implement the environmental element, especially the safety and hygiene and conducive playground aspects of the element. All schools had inadequate toilets to service the number of learners and staff in the schools. School participants reported that this shortage led to constantly blocked toilets. They also added that COVID-19 worsened that problem because schools had assistant educators come in to assist, which further increased the number of people utilising the toilets. Shortages of cleaners were also reported to increase blockages, as toilets were not cleaned as frequently as they needed to be. This is in line with the audit results, which found that all schools had limited numbers of GAs, with one school having as few as 1 GA in the school.

P13: *“Toilets are not enough, and this results in frequent blockage.”*

P2: *“We do not have enough cleaners; the toilets are blocking.”*

The DOBE is responsible for building toilets at schools and for hiring GAs. However, most schools hire additional GAs with the school funds handled by the SGB. When the researcher asked an SGB member what they could do to improve the toilet capacity at the schools. He responded that the school not only had inadequate toilets, even the fence was worn out in some parts. He explained that easiest way would be for schools to raise funds and to do it for themselves, because the government had not responded to their requests; however, schools lacked the funds for such a costly project.

P16: *“...another option of which it takes long, the department. You can put in a requisition, like we did for the fence. They take long to respond if they will respond we don't know. But the easiest thing is to raise funds and do it for yourself.”*

This was the same response given by a principal regarding their school not having a fence and classroom doors; he said that they had requested this from government, but it had not been done.

Playgrounds were also an issue raised by school staff that led to poor implementation of activities. During the audits, playgrounds in most schools were not well kept and were not conducive for playing. However, during the interviews, school participants reported the contrary, saying the playgrounds were conducive and the only challenge was the lack of sports equipment.

P13: *“Playgrounds are there.”*

P11: *“Playgrounds, that one is a big challenge; we do not have anything to play with, it is like we do not have a playground.”*

P12: *“Playgrounds are there, there are no stones, it just needs proper grass and demarcation. But the land is not enough. We need people to come on board so that they can build us a tennis court for boys, netball court for girls.”*

Educators seemed to assess the conduciveness of playgrounds as just having an open space with no “stones”.

Crime also contributed to the shortage of sports equipment in some schools.

P14: *“The ground is cut every 3 months. Soccer and netball poles are damaged and some stolen because we allow the community to use our facilities.”*

6.7.2 Create a supportive nutrition environment

Health promotion in HPS expands far beyond the classroom. The whole school environment should be supportive to health, including what is sold in the schools, what food is served by the NSFS and maintenance of food gardens. The food provided to the schools through the NSFS was nutritious and well-balanced. This was found to be the case from audit results and was also reported by the participants; therefore, it facilitated health promotion rather than hindering it. On the contrary, the audit results showed that vendors and food gardens were poorly implemented.

6.7.2.1 Monitoring of vendors

During the conducting of this evaluation, vendors had been stopped from selling in all schools due to COVID-19 regulations. Though vendors were not present at the time of study, participants related on their experiences and opinions of vendors. Participants viewed food sold by vendors as a hindrance to healthy eating. Some participants attributed health issues such as vomiting, hyperactivity in class and allergies in learners to the food sold by vendors. In the quotes below, the principal and educators expressed their concern for the unhealthy foods sold and the health problems they could cause.

P7: “...yes, we do not know what is in the food, food allergies in some children.” [F]

P1: “Before COVID-19 they sold expired and unhealthy food.” [T]

P14: “Yes, a lot. Some learners vomit and some become hyperactive after drinking sweetened drinks and eating.” [F]

When interviewing participants on vendors, there was a sense of annoyance from those participants who were opposed to the food that vendors sold. When asked what they thought could be done to improve the current situation. Some suggested that schools should have their own tuckshops, while others suggested that schools should be responsible for feeding learners with balanced meals and vendors should be done away with. One principal got frustrated at the question and suggested that the government should create employment for the people so that they can earn money and not have to rely on this sort of income.

P10: “The government should create more jobs, people need employment.” [F]

The suggestion that schools solving the vendor problem by having their own tuckshop may be challenged. In the audits, one school had a tuckshop. However, the school tuckshop sold similar foods to what the vendors sold.

The interviewer was informed indirectly by one of the participants that vendors paid a fee to the schools from their profits. This was not openly spoken of; when other participants were asked, they confirmed this. Schools used the money as petty cash for school needs, making vendors useful to the schools; therefore, stopping them from selling was a challenge as the petty cash would be lost.

P14: “They cannot be stopped from selling because they give a stipend to the school. The money does make a difference because it helps us buy, for instance some of the cooking ingredients which fall short, such as salt.” [F]

Contrary to the frustrations of other school participants on foods sold by vendors, there were a few participants who reported that they did not see anything wrong with the food sold. When asked if they saw a problem with the foods sold by vendors, an SGB member and principal responded that it was “good food” and “normal food”. This indicated the lack of knowledge on the school health policy and healthy eating amongst some key implementers and the poor communication amongst implementers

on health policy and implementation. This may contribute to barriers to HPS implementation in the area of nutrition.

P12: *'Before COVID-19 we had vendors who were selling good food, sephathlo, Simba chips, bread, atchaar, polony—normal stuff.'*

When asked if they thought the food was not healthy for learners:

P12: *"No, because I also eat them, except for the Simba chips which we stopped them from selling as it was causing them to be hyperactive." [F]*

P9: *"Food sold by vendors is not a problem, we all grew up eating that food and we are fine." [F]*

6.7.2.2 Maintaining food gardens

The audit tool showed that only 20% of schools had food gardens that were well maintained, a requirement for any health promoting school. Schools had had gardens in the past but had failed to maintain them through the years. When school participants were asked for their opinions on food gardens, they all responded that food gardens were important and beneficial for schools.

P15: *"It is important for schools. We don't have one, but we are planning to have one."*

Reasons given by school participants for not having maintained food gardens were mostly related to lack of seeds, water, and manpower to work the gardens. Some school participants admitted that there were no reasons for not having the food gardens.

P16: *"We had started it at the schools, but it died, for reasons we don't know. If we can get community to work, it and they can sell and also benefit."*

P14: *"Lack of seeds caused our food gardening project to stop as there was no support from the school."*

In one school, where the LS educator had recently started a food garden project with his learners working to cultivate the garden, the educator was excited. He showed the researcher pictures and videos of the learners working in the garden.

P: *"You see how they are enjoying. No one even needs to direct them on what to do."*

In the same school, another participant commented on the garden project; the participant was not happy that learners were working in the garden. Her concerns were that the sun could pose as a danger to the learners, especially because it was learners

with learning challenges—she believed that these learners were more susceptible to danger than mainstream learners. All schools with gardens did not involve learners in their gardening projects.

There was no accountability and monitoring of schools to implement this element. There also seemed to be no staff member who was responsible for the food gardens; any member who saw the need for them could start one, and if there was no member who saw the need, it was not done.

6.7.2.3 The state of physical education

Schools have physical education as part of the LS subject, and all the school participants were in consensus on the importance of physical education.

P11: *“We just do physical activities during the LO class. LO has 3 periods to accommodate all the activities. With COVID-19 we have stopped though.”*

P10: *“It’s important and already incorporated, teachers are responsible.”*

It was previously shown that schools did not have the sports equipment and educators in charge of physical education were not trained. One educator also found it challenging to effectively give a PE class to 32 or more learners, so PE was seen more as a means of just getting the children outside the classroom to run around in the playground.

School participants cited some reasons for believing that PE was important:

P14: *“They are very much required; they help refresh the learners from time to time.”*

P12: *“yes, children get bored when they stay in class the whole day.”*

Beyond the boredom, some learners seemed to have talents in sports rather than academics. However, with an untrained educator, working alone with no equipment and sometimes under time constraints, the opportunity to help these learners excel and possibly make a career out of sport was limited. COVID-19 had worsened the situation, since it resulted schools stopping PE.

P17: *“COVID-19 disturbed activities which is depriving learners with learning challenges, because they are very good in sports.”*

P13: *“...for now there is none.”*

The schools' physical environment did not promote health but rather hindered some learners from growing in their talents.

6.7.3 Summary

This category looked into the nutrition environment in the schools and illustrated that implementation of the nutrition element has some shortfalls, as was seen in the audit findings. Schools were not mandated to have food gardens or deal with vendors selling unhealthy foods. The government needs to support the PE aspect in schools, as some learners may not be academically inclined, but could excel in sports. With proper support, they have the potential to take their skills to competitive levels and even do sport professionally.

6.8 Evaluate the progress and give feedback

There was consensus amongst participants that evaluation of the programme was important and necessary to improve implementation efforts, as it would identify gaps and schools could work to improve them. This category had three subcategories: (1) inclusive accreditation process, (2) facilitate sustainability and (3) ensure continuous evaluation.

6.8.1 Inclusive accreditation process

Evaluation in HPS starts at the accreditation stage. When schools are assessed, if compliant, they are declared as health promoting schools. The health promoters indicated that they were in no way involved in the accreditation process. They even reported that they did not know how the process works. This was rather unexpected as they were the ones who got the schools ready for accreditation. In fact, health promoters were not even interested in speaking about the accreditation process. After probing, all they said was that the process excluded them and was poorly conducted, which led to poor sustainability of the programme.

HP2: *"We were not involved in the tool, even when they decide to go to accredit a school, they don't involve us."*

The use of "they don't involve us" indicated the sense of exclusion felt by health promoters. When the researcher attempted to probe further, they all answered in unison:

Health promoters: *"We are not involved!"*

6.8.2 Facilitate sustainability

Sustainability of the HPS was a concern for health promoters. Often, schools deteriorated back to their previous condition after receiving their HPS status, as was seen in the audit findings, where schools had not maintained their health promoting school standards. The first factor health promoters attributed to poor sustainability was the poorly conducted accreditation process. They reported that schools received an HPS accreditation even when they had not met the required standards. This is how one health promoter described it:

HP4: *“According to the way they give that school accreditation, sometimes you can see that, but this school was not supposed to get the platinum. They didn’t meet the whole criteria of the tool or assessment. They go back to the status that you found it. It’s not sustained as an HPS.”*

School participants were also not involved in the accreditation process; they did not even know about the accreditation process. The interviewer had to explain what it was. Therefore, they had no comments on the process. Even school participants who were part of the school health committee did not have any knowledge on HPS accreditation. School participants all answered with,

P2: *“I do not know anything.”*

Health promoters also expressed that although they were not involved, and the accreditation process was flawed, they were still expected to be responsible for sustaining the programme. No one took responsibility for sustaining the programme at the school—neither the departmental officials nor the school staff.

HP4: *“...when you look back at that school you find that no, they are not taking responsibility now. They still want to say, why you didn’t sustain this, why?”*

Health promoters reported that their responsibility within HPS is to establish and support schools. However, after accreditation, they give the schools full responsibility and continue to recruit other schools and prepare them for accreditation. Schools therefore take responsibility for the programme and rely on the health promoter only as a support system.

Schools not having a succession plan was reported as a second major factor for schools deteriorating back to their old state. When an active HPS committee member left the school, especially a supportive principal or an active educator, the programme would regress or stop totally. In the audit phase, it was found that new principals were

often uninformed on HPS or not interested, and they did not continue the legacy of the previous principal. Relationships with private donors ended, the donated infrastructure was poorly maintained, and programmes under HPS ceased.

HP3: *“Another challenge, like the school I was working in. The school was booming but when the principal went to pension, you have to start from scratch, they don’t know anything. It’s frustrating, there is no passing on.”*

6.8.3 Ensure continuous evaluation

All participants reported that they had never received any evaluation feedback on how they were performing their activities and fairing as a school.

HP6: *“Not just training the person and leaving him or her to go through the whole year without support or evaluation, to see if you are in the right track or what.”*

When they were asked if they would appreciate the feedback, all participants without reservation, expressed that they would, as it would assist them to know how they were performing, so they would identify the gaps and improve on them.

P8: *‘Yes, a lot, so we can make changes.’*

6.8.3.1 Documentation and record-keeping

Health promoters suggested that schools needed to document all activities related to HPS for evaluation purposes. In the audit phase, it was very difficult for the researcher to get some of the information needed as it had not been recorded and kept safe. Schools did not even have results of the school accreditation process, and only two schools had the HPS certificate in the administration area or principal’s office.

6.8.4 Summary

Schools had not been evaluated since they were accredited. Schools remained health promoting schools based on the initial evaluation, some of which had been conducted more than a decade ago. Implementers expressed the need to get feedback on how their implementation efforts have progressed. A successive plan also has to be in place to facilitate implementation.

6.9 Core category

The core category must fit the stories it represents (Strauss and Corbin, 1990).(139) During the analysis of data and developing the categories, the common thread was the “lack of guidance and accountability for HPS implementation”. It seemed that

without guidance on what was expected and accountability for what was done or not done, schools failed to implement the policy in COT.

6.9.1 Lack of guidance

Participants, who were the key implementers, did not understand the programme and the policy guiding it. Principals knew about the HPS policy, but not to the extent of articulating how it was part of the school health policy and how they were expected to implement the programme in their schools. Life Skills educators taught LS as prescribed in the curriculum but had no further knowledge of how the subject is integrated within the school health policy. New staff members could not sustain HPS in their schools as they lacked the know-how. It stands to reason that the participants would not be able to implement a programme they were not guided on—not once off guidance, but continuous guidance as dynamics are constantly changing within schools, in the community and in education. Participants were willing to implement the programme, but their willingness was of little value if they did not know what they were doing or how they were expected to do it.

6.9.2 Lack of accountability

Lack of accountability actually starts with the establishment of health promoting schools. The policy speaks on extending the programmes to more schools and levels; however, principals are given the authority to either accept or reject the programme, without accounting for the rejection. Schools that are already health promoting schools are expected to maintain their HPS status through implementation of the HPS indicators. However, schools were not accountable to any higher-level body for what they were doing or give reasons for absconding. At the time of research, schools had never received any feedback since being declared health promoting schools. This reflected that there had not been any attempt to know the schools' performance and hold them accountable. The schools that did well in the HPS implementation did so because of the support from the principal and the community, not as a mandate from the department. Schools that did poorly did not have to account for their failure. The decision of whether to implement HPS or not was at the discretion of the implementers.

Guidance and accountability are the backbone to HPS implementation's success. They encompass training implementers on HPS, engaging with the school community, provision of resources, support for establishing and maintaining health promoting

schools, addressing barriers at each school, facilitating relationships with other services such as academic institutions, monitoring and evaluation. The Department of Education, supported by the DOH are responsible for policy implementation in the schools and for guiding schools and holding them accountable on the state of implementation.

6.10 Grounded theory

Schools did not comply with the implementation of the HPS programme as intended by the ISHP. Lack of HPS training, lack of resources and community issues were amongst the main barriers to implementation. However, the underlying reason was that participants lacked understanding of school health policy and its daily application to school life. The school principals and the SGB provided leadership on all school activities. Their lack of comprehension of the programme, due to poor training on HPS, meant they did not understand the value of the programme and were not competent to provide guidance. This resulted in the programme often being overlooked in favour of other school programmes that were deemed more important and in which the leaders were competent. Leaders also tended to focus on programmes that government monitored the schools on. The HPS programme was not monitored, hence the fact that schools had not been evaluated since accreditation. This lack of monitoring and accountability placed HPS at the bottom of the priority list or led to it being totally excluded. Resources were not always the barrier; lack of accountability for implementation of the policy hindered a large number of activities.

For the health promotion activities that were implemented, this happened in the classroom through the curriculum. However, not even the classroom activities were completed, as resources were inadequate, and educators were not trained in some aspects of health promotion. Surprisingly, educators were reluctant to complain about challenges such as lack of resources or support from the DBE; there was a sense of futility in complaining. As a means of adaptation, educators implemented what was feasible and overlooked activities that were out of reach. They just “pushed the syllabus”, as one educator explained.

Parental and community support was a significant facilitator for HPS implementation. Most schools had not established good working relationships with parents/communities. School participants recognised the important role of the parents

in schools and understood this role mostly as parents “helping learners with homework”. Schools had also not devised strategies to engage parents/community and improve poor engagement with parents/communities. Health promoters conceptualised the role of parents/community as “making the school conducive for learning”, which was a much higher level of understanding.

Knowledge and understanding of the programme were seen as leading to increased appreciation, support, and advocacy for the programme, because of the benefits associated with it. Programme knowledge and understanding facilitated implementation of HPS. Even the participants who were not conversant with the programme had an interest in improving the health and learning outcomes of learners.

Effective implementation is possible within the current circumstances in COT, given that the government guides the schools and holds them accountable for implementation actions. This grounded theory is a novel contribution to health promotion policy formulation in COT and to health promotion literature in general.

6.11 Chapter summary

This chapter outlined the findings of the qualitative analysis for data collected from the FGD with health promoters and the individual interviews with 20 participants from health promoting schools. Due to COVID-19 regulations, half of the interviews were telephonic, though initially the study had planned on doing all interviews face-to-face; the FGD was conducted face-to-face. Five categories were identified from the data: (1) preparation is key, (2) need for continuous training of implementers, (3) achieve teamwork, (4) address barriers to implementation, and (5) evaluate progress and give feedback. Each of the categories had subcategories which explained the category. The core category was “lack of guidance and accountability”. This was chosen as the category that tied all the aspects of the findings together. The evaluation found that implementation of HPS in COT was disappointing, a confirmation of the audit findings in Phase 1. The grounded theory of this evaluation indicated that implementation was hindered by poor knowledge of the HPS programme and its implementation. However, participants were keen on improving the lives of learners—health-wise and academically. With proper guidance and accountability measures by government, implementation is feasible in COT. The next chapter discusses these findings within current literature.

CHAPTER 7

DISCUSSION OF QUALITATIVE FINDINGS

7.1 Introduction

The previous chapter gave a detailed account of the findings of the grounded theory analysis on data collected from HPS key implementers in COT. The findings of the quantitative analysis, confirmed by the qualitative analysis, showed that schools in COT did not implement the HPS as intended by policy. The findings of the GT analysis showed that there was poor adaptation of the programme to the local context, poor implementer competence and morale, lack of training for implementers, resource constraints, competing school responsibilities, lack of technical support, and poor accountability measures, which resulted in low prioritisation of the HPS programme. This evaluation adds to research by investigating the challenges schools faced in implementing a complex school health programme using the HPS framework.

7.2 Macro and micro contextual factors

7.2.1 Knowledge on policy

All schools in COT had the ISHP readily available; however, educators were not conversant with the policy, and some were not even aware of the term “health promoting schools”, while the principals and the SGB did not know how the HPS programme fits into the school health policy. Therefore, implementers were not sure of how the activities were to be implemented and exactly what these activities were. Molete et al⁽²⁰⁰⁾ reported the same challenge with the oral hygienist in COT, who had not been trained on the South African Oral Health Policy and were uncertain of how to implement its activities or deal with challenges arising during implementation. The lack of training on the ISHP and HPS led to incongruity between policy intentions and what was done at the schools. In addition to lack of training on the policy, other structural factors such as poor infrastructure, lack of guidance by managerial structures, inadequate resources, and poor involvement of all stakeholders adversely affected implementation fidelity. The ISHP was not fully implemented, and the HPS programme was neglected in this study, as was found in a study by Adamowitsch et al.⁽⁴³⁾

7.2.2 Preparing for health promotion activities

The preparation stage for an intervention is crucial to the success of the programme. This process entails forming a leadership team and an HPS committee and developing plans on how the activities will be conducted within the school plans; this process is also known as “creating ownership”.⁽⁷⁰⁾ Lack of ownership by implementers could lead to low interest in the programme and poor sustainability.⁽⁴²⁾ Health promoters facilitate the establishment of health promoting schools.⁽²⁰⁵⁾ In this study, they emphasised the need to get the support of some stakeholders at this stage, including the principal, SGB, educators and parents/community. This is an opportunity for implementers to consider the planned activities against the available resources and time needed to implement activities, and thus, plan accordingly to reduce compromise to implementation fidelity.⁽²⁰⁰⁾ The majority of schools in COT had no HPS committees, and the existing ones were not effective HPS committees but rather focused on other duties outside of HPS. This may be as a result of schools prioritising academics over health issues, as health is often viewed as the responsibility of the school nurse.⁽⁴²⁾ Adamowitsch et al⁽⁴³⁾ also found in his study that there were no health promotion teams in the schools he worked with and there was very little done in terms of planning for activities and coordination between implementers. They also reported that school staff delivering health promotion in the schools could only give information on their duties and were unable to discuss overall implementation, including the school principals⁽⁴³⁾, as was the case in this study.

Studies in a systematic review showed that there is lack of guidelines for implementation of the HPS programme in most schools, making this preparation process essential, as it would enable schools to develop guidelines that are easy to follow and tailored for the particular school context.⁽⁴²⁾ The school management team, in collaboration with the HPS committee, would use their interpretation of the policy to assess schools’ needs, develop aims and indicators, allocate funds and develop monitoring systems.

The study findings showed that simply having a school calendar was a strength for schools. Such schools usually involved health promoters to assist in implementing health promotion items on the calendar. These planning sessions need to be done on an ongoing basis, to update new staff and adjust the programme. For instance, what

was done before COVID-19 may not be feasible during the pandemic. During this study, schools had abandoned many of their activities, including PE, due to COVID-19 regulations. Educators were concerned about this. They reported that learners were getting tired sitting down all day, and it affected their concentration levels. Theft is another concern that was highlighted in this evaluation. The Mail & Guardian released an online article written by Mbusi ⁽¹⁷⁷⁾ which reports on the increased theft in South African schools during the COVID-19 period, where 1577 schools were vandalised during the lockdown. The writer attributes the increase in theft to increased hunger in communities during the lockdowns. ⁽¹⁷⁷⁾ Crime occurred on such a frequent basis that it seemed to have become part of the schools. This was observed in the interview with SGB members, when the researcher asked on sporting activities offered at the schools. An active HPS team could have worked out a strategy to get the learners to do some physical activity within the COVID-19 regulations and strategies on plans to deal with the high rates of burglaries in the schools.

Health promoters essentially started the health promoting schools. The process included the identification of schools and conducting a needs assessment before approaching the principals. The needs assessment findings were also used to convince the principal of the need for the school. Of concern was that the needs assessment was done without the inputs of the schools, who have better knowledge of the school community. Including the schools would not only yield a truer reflection of the school community, but participation would facilitate schools' acceptance of the programme. The International Union of Health Promotion and Education⁽²⁰⁶⁾ recommended an audit of the six elements of the HPS framework, involving all staff members, to promote commitment to establishing a health promoting school. In addition, in this study, health promoters were not formally trained and requested training; however, they were expected to conduct formative evaluations. The National Health Promotion Strategy (NHPPS) advocates for evidence-based decisions regarding health promotion interventions, through formative assessments.⁽²⁸⁾ It stands to reason that for quality formative assessments, the evaluators would need proper training in this regard. However, management at national to district level in health had failed to comply with the NHPPS, to facilitate and support training and development for sub-district staff.⁽²⁸⁾

Secondly, schools are dynamic and continuously evolving systems.⁽¹⁰⁷⁾ Most of the current principals, educators and other school staff were not in the schools during their establishment as health promoting schools; the SGB revolves every three years and the parents have also changed. If the needs assessment is done once in a lifetime, it fails to be relevant after a while. The programme should rather be reviewed and renewed every three to four years.⁽²⁰⁶⁾ This time period would coincide with the cycle of SGBs, allowing for the new SGB to be part of the process. Failure to explore the needs and fit for the planned programme⁽²⁰⁷⁾ and inefficient systems for selecting schools posed barriers to expanding HPS.⁽⁶⁹⁾

Thirdly, the principal could accept the programme into the school without communication with educators. This may have led to the problems found in COT, where schools were declared as health promoting schools but had educators who did not know about the programme or took no interest in the programme. The establishment phase should be used to communicate the programme to the educators and encourage their commitment.⁽⁴³⁾ The process of translating the policy to all implementers would ensure that implementers understand the policy, have a shared common vision and develop a common plan to implement.⁽³⁵⁾ This was missing in COT, as implementers had not been involved in any step towards adapting the HPS policy for the local environment.

There was a sense of rushing the establishment of health promoting schools in COT, especially seen in the lack of engagement with stakeholders. This may have been due to the release of the revised school health policy in 2012, which highlighted its aim at prioritising the health of school-going children and listed the HPS programme as an initiative that needed to be implemented in schools across the country.⁽²⁰⁵⁾ This may have led to provinces wanting to have a certain number of health promoting schools as a sign of compliance. Bartelink et al⁽⁹³⁾ advised that the establishment phase of an HPS programme in schools should not be rushed, as the process of creating bottom-up involvement takes time to accomplish. A systematic and coordinated planning of HPS activities with an in-depth understanding amongst key implementers is more important to its success than many isolated activities.⁽³²⁾ Adamowitsch et al⁽⁴³⁾ also advised that schools need more support and guidance at this teething phase of the programme.

7.2.3 Localised implementation

In this evaluation, context was understood as any factor outside of the programme that could hinder or facilitate programme implementation or the outcomes of the programme.^(33, 70) Schools differ in their contextual factors such as the number of staff available, number of classes per educator, other programmes being implemented in the schools and the socioeconomic status of the schools.⁽²⁰⁸⁾ If programme adoption is not properly done, it will impact on the implementation and sustainability of a programme.⁽¹¹²⁾ Bonde et al⁽⁷⁰⁾ emphasised the need for proper preparation of the “context” for the intervention.

As seen in the audit findings, schools had different numbers of school educators, learners, and GAs. There were even differences in management numbers, with some schools having two deputy principals and HODs, which increased school capacity. Planning sessions would entail planning activities according to the schools’ capacity in terms of staff and resources available. The SGB, if properly trained in the HPS programme, can facilitate the process of aligning the programme to the local situation. Participants in COT regarded the SGB as the engine of the school and having power over school programmes. In a systematic review by Hung et al,⁽⁴²⁾ the authors found that most studies reported that the SGB had an important role in supporting HPS implementation, coordination, policy and commitment. In some schools in COT, the SGB was already in charge of adapting policies to fit the schools; however, the HPS programme was excluded. Therefore, the SGB having knowledge of the HPS programme, its benefits and how it needs to be implemented, they would be equipped to prioritise the activities and pick activities that are feasible for the schools. Hung et al⁽⁴²⁾ suggested that implementers be given the power to prioritise their health promotion activities. An SGB that is supportive of the programme would also include HPS activities in the fund’s allocation plans, as they are in charge of raising and allocating funds for school activities. According to Mestry ⁽¹⁵⁷⁾, the SGB has extensive decision-making power and authority, putting them in a position to promptly attend to the changing financial needs and priorities of schools.

In COT, the schools that participated had different socioeconomic statuses, ranging from the poorest in quintile 1 to the least poor in quintile 4. Though the schools were classified up to quintile 4 schools, the actual state of the schools did not place them at

the socioeconomic status of the quintile 4 schools. Other schools that were better off socioeconomically than schools with a lower quintile classification were quintile 1 schools. It was reported in a study by Van Dyk and White⁽²⁰⁹⁾ that the South African quintile system had misclassifications—schools that needed more support from government were given a higher quintile classification and those that needed lesser were given more funds because of a lower classification. This led to unfair distribution of funds, which resulted in poor school resources, maintenance, and teaching. There is a call for a reclassification of schools to redress this unfair funding.

Schools in COT were not homogeneous; therefore, adapting school health programmes to school settings would ensure that the programme is implementable and relevant in different school cultures.⁽²⁰⁸⁾ The findings showed that the impact of poverty on schools varied across schools. Crime was also a problem in most schools but affected some schools to a greater degree than others, and schools with better security suffered from crime to a lesser degree. There were also differences in levels of bullying, abuse, and orphanhood in the schools. In the audit findings, it was shown that schools also had different relationships with the parents and private partners, schools that did well in the audits had better relationships with parents and private partners. In the strategic planning of schools, therefore, some schools may have to focus more on building relationships, while others have to focus more on orphans.

Networking between schools in COT and other settings has been neglected, but health promoting schools should have communication over health activities, where schools share best practices. Educators in Hung et al's⁽⁴²⁾ review requested for health promotion symposiums with other implementers and stakeholders so that they could have a platform for knowledge exchange and experience. The NHPPS tasked the national and provincial management with sharing best practices internationally and locally.⁽²⁰⁵⁾

Outside of lack of training, infrastructure and theft were perhaps the main hindrances to policy implementation in COT. Oral hygienists in Molete et al⁽²⁰⁰⁾ reported that poor infrastructure, poor access to water, sanitation, and lack of washing basins were contextual factors that hindered their tooth-brushing programmes in COT schools. This confirmed the audit findings that showed that COT schools in this study had poor infrastructure, with toilets and washing basins that were inadequate, broken and

leaking. Regarding theft, schools often had their sports equipment, recycling material and teaching material stolen. Oral hygienists also reported that the theft of toothbrushes and toothpaste had hindered implementation of tooth-brushing programmes.⁽²⁰⁰⁾ The condition of the infrastructure and the surrounding environment in COT was found to be poor, an environment that could potentially lead to dangerous and violent activities amongst the learners and the community.⁽²⁰²⁾

For effective implementation of the policy, there needs to be work done to improve the organisational capacity in COT. This would include finding ways to help schools against theft, which may mean building more secure fencing and hiring professional 24-hour security. There is also a need to improve toilet facilities and increase the number of GAs in the school. The development of the organisational capacity takes time and needs commitment to develop structures, garner external support, develop appropriate policies, provide resources and develop the implementers.⁽⁶⁹⁾

7.3 Implementation

7.3.1 Communication and management

The ISHP places the responsibility for comprehensive and sustainable implementation of the school health policy on stakeholders, including the DOH, GDOE and DSD, through collaborative work.⁽²⁰²⁾ It acknowledges international evidence that effective and supportive school health programmes are only possible with collaboration between the DOH and GDOE, educators and healthcare workers, schools and community groups, students,⁽²⁰²⁾ and tertiary institutions.⁽¹⁷⁾ These sectors should come together to build holistic systems that prioritise preventative services⁽²⁰⁵⁾ and perform their roles to meet the objectives of the policy.⁽²⁹⁾ Once stakeholders have been identified and collaboration has started, all stakeholders should have frequent communication and feedback sessions. This increases coordination and team cohesion, which in turn facilitates implementation. These meetings also create a platform for all actors to communicate regarding expectations for the programme and clarify roles and responsibilities.⁽⁹³⁾ The misunderstanding of roles was a challenge in this study. In actual fact, there seemed to be poor communication on who was in charge of the health activities between health and education. Hung et al⁽⁴²⁾ stated that relationship between health and education is often reported as underwhelming, largely due to traditionally rooted perceptions of their responsibilities.⁽⁴²⁾ Health promoters

suggested that the GDOE had transferred their duties to health, who were only supporting health promotion in schools. These were also the findings of Fathi et al⁽⁶⁹⁾ in Iran, who reported that health representatives believed that education had absconded on their responsibilities, while representatives from education believed that health had failed to fulfil their roles. The neglect of action by education and the opinions of the health promoters are incongruent with the school health policy, which assigns joint responsibility to the two departments, including the DSD, for ensuring the reach of the policy to all learners.⁽²⁹⁾

Guidelines for implementation of HPS in Iran were found to lack sufficient detail on the roles of departments and partners involved in implementation. It failed to promote collaboration and involvement of actors in making major decisions.⁽⁶⁹⁾ The ISHP gave a broad overview of the responsibilities of the different management levels in health and education and stated that health is responsible for providing the health services in schools, while education needs to create an enabling environment.⁽²⁹⁾ This highlights the need for communication between the two departments, facilitated by the ISHP Task Team on clarifying responsibilities and roles, and the involvement of the school community in policy adoption.

The HPS framework has placed a responsibility on health promoting schools to adopt an inclusive approach to health education, which involves multisectoral engagement. School staff and management are held accountable for ensuring environments, links and policies that sustain HPS.⁽²¹⁰⁾ The findings of this evaluation showed that in COT there was no accountability for the state of the HPS programme in schools. This was reflected in the deteriorating state of health promoting schools and the poor multistakeholder relationships in the schools. There was poor collaboration at all levels of implementation, between implementers within the school community and with government departments. Fathi et al⁽⁶⁹⁾ also found that there was poor coordination and collaboration, as well as a lack of commitment at all levels of management, within the schools and in the departmental structures.

The findings also revealed that in COT, implementation of the HPS approach was at the discretion of the school principals, who had the authority to accept or reject health promoters' requests to establish the programme at the schools. This was found to be a barrier to achieving the intention of the ISHP, to expand the HPS programme to more

schools.⁽²⁹⁾ The voluntary nature of the programme and the optional increase in the number of schools becoming health promoting schools hindered HPS implementation.⁽⁶⁹⁾ The evaluation also showed that principals who had adopted the programme at the schools were not held accountable for implementing it. The lack of mandate for HPS from top management to schools and the lack of monitoring of activities led to poor implementation.

Even in regard to the school community, Adamowitsch et al⁽⁴³⁾ found that participation of school staff varied in the different schools. Some schools' educators did not take any interest in HPS, so the health promotion coordinator conducted all the activities alone. Principals were often not actively involved as implementers and, in some schools, parents and external partners were involved. This is in line with this study's findings, where participation varied across schools. Hung et al⁽⁴²⁾ explained that the principals' individual enthusiasm for HPS guided their actions in garnering support from within and outside the school. The schools that performed better in the audit findings had leadership who were interested in health and supported health promotion. Health promoters considered this support from the principal as a "strength of the school" because it improved implementation fidelity. At this point, it seems that schools in COT are reliant on the individual interest of the principals and educators to establish and implement the HPS activities. The development of appropriate policies and legislation would facilitate implementation and sustained school health activities.⁽⁶⁹⁾

Top-down guidance, bottom-up involvement, and external support were essential components to successful implementation of the HPS programme in a study by Bartelink et al.⁽⁹³⁾

7.3.1.1 Top-down leadership

According to Adamowitsch et al⁽⁴³⁾, without the needed political will at national, provincial and district levels, as much as the HPS approach is needed, it would be impossible to implement. According to the NHPPS⁽²⁹⁾, the DOH is responsible for communicating health policies and identifying resources to achieve programme implementation. They also need to provide strategic directives, technical support, and advice to staff. It is also within their roles to promote intersectoral collaboration in the various programmes and develop norms and standards for health promotion. They also need to monitor programme progress and develop systems of reporting. The audit

findings and qualitative findings both showed that these responsibilities and roles had not yet been accomplished.

Management at the district office has an important role to play in guiding and supporting schools to implement the programme.⁽⁴³⁾ Participants in this study did not receive the support from the district office that they needed to implement activities; they expected the office to provide resources and support their implementation efforts. There was also a lack of communication and supervision regarding HPS. Health promoters suggested that the two departments should at least meet to discuss the programme and give schools the mandate for HPS based on the meeting outcomes. According to Mclsaac et al,⁽¹¹²⁾ creating a working relationship between the departments would facilitate implementation, as the management from both departments would understand the mutual benefits of the programme and be better positioned to promote the programme in the schools.

Lack of encouragement by management was reported by Fathi et al⁽⁶⁹⁾ as a deterrent to implementation efforts. A review by Hung et al⁽⁴²⁾ suggested that management at district office could give schools certificates for the work achieved to boost school morale. In COT, only three schools had the accreditation certificates displayed on the walls. However, these dated back as far as 2012, meaning most of the current staff did not associate themselves with the accreditation, as they were not at the schools then. Also, giving the individual implementers recognition and marketing was effective—for instance, featuring the schools on media platforms seemed to have a positive influence on implementer morale in the Hung et al⁽⁴²⁾ review. The City of Tshwane has numerous local newspapers, radio stations and social media pages. Schools can be featured on these platforms, not only to motivate the schools but also as a means of educating parents and communities.

7.3.1.2 Bottom-up involvement

As mentioned before, involving all stakeholders at the start of planning and decision-making for a health promoting school facilitated programme ownership and sustainability.⁽⁹³⁾ Bartelink et al⁽⁹³⁾ found in their study that the process started with enthusiastic educators, who had informal and formal talks with the parents to sell the programme, which assisted in getting parents interested as well. However, in COT, the programme started without the support of most of the stakeholders, such as

parents, the SGB and educators. Instead, there was poor communication amongst the educators and the school management on health promotion activities. School management was not knowledgeable of the full scope of what LS entailed and they were not aware of challenges that the LS educators faced. Poor communication in some COT schools led to poor collaboration and sabotage at the expense of HPS activities. Having a good relationship with colleagues in the school has been linked to HPS success. A good and trusting relationship with peers fosters support in the workplace.⁽⁴²⁾

School-level leaders include the principals, educators with management positions, and the SGB.⁽²¹¹⁾ These leaders are responsible for policy development, the vision statement of the school, and allocation of resources.⁽²¹¹⁾ Principals and the SGB in this study were not conversant with the HPS programme and how it could be made part of the school culture. Leadership and guidance were therefore low, which may have hindered implementation fidelity.⁽⁷⁰⁾ According to Naidoo,⁽²¹²⁾ there have been a number of studies highlighting the need for school principals in public schools to take a much stronger leadership role, so as to facilitate improved school functioning and academic outcomes. Leadership development for principals is important for school improvement because of active teaching and learning.⁽²¹²⁾

7.3.2 Links with parents and community

Parental involvement is essential to the success of the HPS programme. It is one of the most important aspects of stakeholder involvement.^(29, 210) The school and the home are the two main influencers on a learner's health choices; therefore, these environments need to be in sync regarding the health promotion messages that they send to the learner. The theory of the HPS framework is that, to promote long-term healthy lifestyles amongst learners, schools need to have a good working relationship with parents and communities.^(202, 210) Evaluations have also shown the disappointing results of health promotion activities and events that have had their focus on schools only and neglected other settings that have influence on the learners. They found that although the programmes may have increased learner health knowledge, these bore no long-term lifestyle modifications.^(210, 213)

In COT, parental and community engagement was poor in most schools. Parents reportedly did not engage learners on their schoolwork or participate in any way in the

academic life of the learners or other school-related matters. Educators wanted parents to be more involved so that they could reinforce what the learners had learned in class. Clelland et al⁽²¹⁰⁾ described this reinforcement as a way in which parents reflected and supported learning in the home setting, a necessary practice if health education is to be effective. Parental involvement was also found to be disappointing in other studies conducted in New Zealand and COT. These studies found that poor relationships with parents created a barrier to policy implementation.^(70, 202, 210) Rasesemola et al⁽²⁰²⁾ found that parents and the surrounding community in COT were not involved in any school activities, not even activities related to school health services.

7.3.2.1 Strategies for involving parents/communities

Fostering good collaboration with parents has remained one of the most challenging hindrances to health education.⁽²¹⁰⁾ School participants in COT understood that the involvement of the parents would benefit the schools in that involved parents would help with learning at home (homework), complain less about the schools, and help with keeping schools clean. They also reported that an improved relationship would reduce absenteeism and improve the mental state of the child, which was line with other studies.^(210, 213) The CDC also noted reduced risk of pregnancy, substance abuse and physical inactivity in learners whose parents were involved with their schools.⁽²¹³⁾ In addition, schools could also benefit from parents giving their skills, expertise and information about the child.⁽²¹⁰⁾ In the audit findings, parents involved in schools offered their gardening expertise, worked as cooks, and some were assistants in lower grades. In a society like South Africa, where a lot of skilled people (including some parents) are unemployed, schools can use this to their benefit.

To gets parents involved, schools need to develop strategies that will attract the parents to work closely with the schools. School staff in COT had no hard suggestions for strategies to promote parental involvement. Most suggested calling parents to meetings, although they noted that meetings had failed repeatedly. The lack of ideas meant that school staff did not do much in the way of improving parental involvement. This lack of ideas by school staff, compounded by limited focus on parental education and the inadequate education received by educators on working with parents, prevented schools from taking steps to involve parents.⁽²¹⁰⁾ The past experience with

poor parental involvement may also have led to educators being hesitant to try engaging parents.⁽¹⁹⁸⁾

When schools tried strategies to involve parents, such as calling them to a meeting, they failed because schools use methods based on their point of view and needs and tended to use the same method on all parents, disregarding parental needs, social class, and individual circumstances.⁽²¹⁰⁾ Parents in COT were reported as not coming meetings at the schools, so it was necessary to develop other strategies. For instance, schools could go to where the parents are, in places such as churches, community events, their workplaces, and in the community. This new way of looking at engaging parents required schools to have a clear vision for parental involvement and establish a committed team that would deal with this aspect of health promotion.⁽²¹³⁾

Health promoters, however, seemed to have a deeper understanding of these dynamics. They suggested that schools serve the needs of the parents/community, and in turn, the parents/community would serve their needs—a reciprocal type of relationship. Clelland et al⁽²¹⁰⁾ suggested that schools needed to factor in the socioeconomic status and cultural differences of the communities they serve in developing strategies. This confirms what health promoters suggested—to hire community members, identify the vulnerable ones and help feed them, let them use the schools' services, and be kind to them. Health promoters also suggested that for an HPS to be a success, parental involvement should be sought at the preparation phase of establishing the school. This would provide the parents with a sense of ownership of the programme because they would have been part of the process and decision-making.⁽²¹⁰⁾

Clelland et al⁽²¹⁰⁾ also found that some school staff perceived the work of educating parents in health education was beyond their scope; they saw learner educational outcomes as their primary task. This suggested the need for governmental involvement to guide schools and include other partners that would assist in educating communities on health education.⁽²¹⁰⁾ The ISHP also states that there should be collaboration with stakeholders at national, provincial and district level, along with the assistance of local NGOs or partners and the SGB to conduct advocacy and social mobilisation.⁽²⁹⁾ In COT, educators believed that the role of engaging parents was the responsibility of the school principals and the SGB. The SGB is, in fact, a good

connection between the schools and the parents/community, as some are parents themselves and they all come from the local community. They could drive the process of improving relationships with the parents/community. Awareness day celebrations at the schools could be used as a way of involving parents.⁽¹⁰¹⁾

7.3.2.2 The role of the learner

The ISHP encourages the involvement of learners in health promotion activities in the schools and communities as part of planning and decision-making, through learner structures.^(29, 202) Bonde et al⁽⁷⁰⁾ found that this was not the case during programme delivery. As seen in the audit findings, schools in this study did not integrate learners into plans for health promotion activities to ensure implementation success; these were the same results reported by Rasesemola et al⁽²⁰²⁾ on COT schools. If learner involvement is done well, it can give learners a sense of responsibility for their schools and their academic achievements, as well as improving their self-worth.⁽²⁷⁾

In COT, educators thought that because of their young age, learners would not be able to give any credible input on such matters. An explanation for this side-lining of learners given by Bonde et al⁽⁷⁰⁾ was that educator might not know how learners can be involved and allowed the platform to participate in school health matters. Educators need to be adequately equipped to give learners this role. Schools can create various platforms for learner participation, through school programmes, as student representatives, and through community-level initiatives.^(202, 211) Daly-Smith et al⁽²¹¹⁾ suggested that learners can be responsible for leading PE. Another way that learners become important actors in health education is by sharing the nutrition education taught at school with their parents and initiating health changes in the family.⁽²¹⁰⁾

7.3.3 Implementer training and support

7.3.3.1 Acceptability of implementing health promotion activities

Educators are not only expected to improve the academic performance of learners but also to be involved in dealing with societal issues.⁽²⁰⁸⁾ Therefore, educators need to accept the programme in their schools for it to be successfully implemented. Educators in a study by Bennet et al⁽²⁰⁸⁾ advised that educators are more receptive of programmes that are shown to have taken the school's current curriculum workload into consideration, and the health promotion programmes needed to be discussed with

educators using the education-sector language.⁽²⁰⁸⁾ Low programme fidelity in COT may have been increased by educators not being addressed in the language they understood but rather being spoken to in health terms. Most educators also reported that their roles as LS educators had not been explained to them with regard to health promotion. It was difficult to question educators on their acceptance of health promotion activities as they did not fully understand health promotion, outside of teaching learners on curriculum health topics such as handwashing, COVID-19 regulations, emotions and behaviour, bullying, sexual education, and use of sanitary towels — unlike in Bennett et al⁽²⁰⁸⁾, where educators understood school health promotion and could give suggestions for programme implementation. Lack of implementer understanding of the programme hindered participation and subsequent implementation.⁽⁶⁹⁾

In planning implementation, it's important for school health promotion policy developers to note that educators are most comfortable in the classroom, so planning health promotion implementation activities for educators should start with ensuring implementation in the classroom, facilitated by the provision of friendly and interactive resources.⁽²⁰⁴⁾ After implementation has been achieved in the classroom, schools can expand health promotion to include the whole school community. Daily implementation of the health promotion activities will only be successful if the school implementers have the capacity to coordinate activities, allocate resources and implement the activities.⁽²⁰⁴⁾

Expansion to the whole school community requires the support and assistance of trained health workers, who will assist in building staff capacity for sustained implementation. Schools should, however, aim to get the correct balance between the responsibilities of the healthcare worker and those of the school staff in implementation efforts.⁽²⁰⁴⁾ The findings in this study showed that health promoters felt they were expected to ensure that the schools sustained the programme over time. Even though their responsibilities, according to the DOH, were to assist in establishing health promoting schools and then provide support and guidance, while they continued to establish other schools. They also expressed that school staff sometimes did not assist them in conducting activities when they visited the schools. Bennett et al⁽²⁰⁸⁾ advised that, from the initial stages of establishing health promoting schools, the

different roles of healthcare workers and the school staff should be clearly defined and communicated. Educators should be accorded the position of being experts in the school environment, and healthcare workers should give the necessary guidance and oversee implementation. In this study, educators were not knowledgeable of the HPS programme, but they had extensive knowledge on context and its effect on teaching and learning. Educators are not experts in health promotion but rather experts in their school communities.⁽²⁰⁸⁾

Staff capacity-building has been recognised as an important facilitator for successful implementation.^(29, 208) This should not only include educators but would be beneficial for school management who, in COT schools, were responsible for the allocation of funds and other resources and needed to oversee implementation in schools. Building capacity can be achieved through training and constant reinforcement. Educator training should be a policy directive as a means of ensuring that educators are qualified and confident to teach health promotion topics.⁽¹¹²⁾ Life Skills educators were not trained in LS and admitted to not being confident in teaching some aspects of LS because they felt incompetent. Conversely, specialisation in LS resulted in increased confidence in educators to teach the subject, as was shown in this study.

7.3.3.2 Resources for teaching Life Skills

Life Science educators are expected to promote health within the classroom, through the curriculum. However, the curriculum does not seem sufficient to guide educators in teaching prevention of common health problems, as schools in South Africa do not have health promotion manuals to guide educators.⁽¹⁰¹⁾ In Peu et al,⁽¹⁰¹⁾ health educators did not have knowledge on how to deal with health challenges they faced in the schools. For instance, they reported having limited knowledge on how to deal with learners from poor backgrounds. Poverty in learners was an issue in most schools in this study. Educators reported that children from poor homes came to school hungry and were bullied for their torn clothing, which all affected learning. Peu et al⁽¹⁰¹⁾ developed a health promotion education manual that educators used in their study. The manual assisted educators in dealing with poverty, taking initiative to assist learners and their families. They worked closely with the health promoter and the parents to establish food gardens in the schools. This was also the case in a school in the audit findings. The school had a food garden that supplied vegetables to poor

families and orphans, and they formed a partnership with a private entity to feed and clothe poor learners, which made a positive impact on the lives of learners from low-income families. Such initiatives should be extended to all schools with underprivileged learners.

Educators in Peu et al⁽¹⁰¹⁾ also reported that before the manuals, they did not know how to identify learners with medical problems, and during PE, they unintentionally excluded learners with medical problems and pregnant girls as they did not know how to include them in activities. The use of manuals equipped educators to effectively implement health promotion activities in schools. They were better equipped to include all learners in PE and avoid any form of prejudice. In this study, there was also unintentional discrimination as one participant believed that children with learning disabilities should not be involved in PE activities such as gardening, as it could be harmful to them, especially exposure to the sun.

Educators in this study requested the LS workbooks and reported that they needed more training in some LS topics, even requesting that a health professional assist in teaching sexual education. Physical education educators did not have a structured programme for activities or guidance on how to implement activities. Implementers in COT requested continuous in-servicing training, workshops, charts, and LS booklets. This is in line with implementers in the Hung et al⁽⁴²⁾ systematic review.

In South African public schools, sexual education has been included as part of the curriculum taught in LS/LO to learners in grades 4 to 12 to equip learners with knowledge to make healthier choices regarding sexuality and lifestyle. Topics include prevention of pregnancy, HIV and AIDS, menstruation and family planning.⁽²⁹⁾ Educators in this study, especially male educators, were uncomfortable teaching sexual education, citing lack of training and insufficient knowledge in this area. Educators in Peu et al⁽¹⁰¹⁾ had the same predicament; however, through the assistance of the manuals, they were more knowledgeable and knew how and when to teach sexual education topics. There seems to be a gap between what educators are expected to do and the resources and guidance they receive to help them meet these expectations. The manuals not only equipped educators to teach health promotion in the conventional way; the educators also initiated awareness campaigns for health

promotion topics and invited guest speakers. They also collaborated with local NGOs for peer education.⁽¹⁰¹⁾

Participants in this study mentioned that they needed the involvement of peer educators as learners did not feel comfortable listening to adults on some topics. Schools working together with health promoters could organise awareness campaigns, invite guests and peer educators and involve parents and communities. Parents in this study were not comfortable with some of the sexual education topics. These campaigns could assist in helping the parents understand the aim and value of the topics. They could also be involved and contribute to planning for sexual education activities in the schools.

7.3.3.3 Nutrition education

According to Kupolati et al,⁽¹⁹⁰⁾ school-based nutrition education should include an enhanced nutrition curriculum, hands-on activities, gardening, and card/computer games. Giving educators exposure through nutrition workbooks improved their nutrition knowledge. In COT, these components were missing; schools had only managed to feed learners a balanced meal through the NSFS. In the audit findings, schools reported that they did not have enough (or, in some cases, any) computers, mostly due to theft; therefore, educative gaming was not feasible. The majority of schools did not have food gardens, and even the schools with food gardens did not involve learners in the project. Kupolati et al⁽¹⁹⁰⁾ recommended that educators participate in the process of enhancing the curriculum, as participation increased educator knowledge and motivation to implement the element. At the time of study, educators in COT were not involved in curriculum enhancement and had not received any recent nutrition-related training.

The findings in this study showed some gaps in nutrition knowledge amongst educators. For instance, most educators understood that foods sold by vendors were not healthy for learners, citing evidence such as vomiting, allergies and hyperactivity. However, none of the educators spoke about good nutrition for growth and development or prevention of NCDs or malnutrition—especially obesity, which is on the rise in South Africa. This may be an indication that educators understand the types of food that are not healthy but do not fully grasp the impact of unhealthy foods.

There were also a few educators who felt that the food was normal, as they had also grown up eating these foods. This shows the gaps in the educators' nutrition knowledge; interventions to improve nutrition knowledge are recommended.

Kupolati et al⁽¹⁹⁰⁾ reported that, in their nutrition intervention conducted in Bronkhorstspuit (outside Pretoria), nutrition educators taught using a nutrition teaching manual developed for the study. The intervention improved educator dietary recommendations for learners, the sources of nutrients and food hygiene, while the control group had no improvements in these areas and failed on knowledge in the diet–disease relationship. A systematic review by Wang⁽²²⁾ also showed that school nutrition interventions improved knowledge on nutritional deficiencies, nutrition-rich foods, healthy eating guidelines, obesity, lifestyle diseases, infectious diseases and food classification. The improvement in educator knowledge resulted in improved learner nutrition knowledge, which instilled better lifestyle choices even into adulthood.

The success of the intervention by Kupolati⁽¹⁹⁰⁾ may be attributed to the participatory nature of the intervention. Educators were trained in the use of the workbook to teach nutrition topics, each learner actively participated through their workbook, and there were educative materials made available such as posters and games, as well as practical demonstrations as part of teaching. All these factors have been shown to contribute to increased nutrition knowledge. The workbooks were developed after conducting a needs assessment and aligning topics to GDOE content, and all the activities were conducted within the schools' allocated nutrition lessons and were in line with the curriculum. This resulted in increased acceptability to the school system, as it did not cause disruptions to the normal running of the school, and this could facilitate sustainability.

Different settings have unique nutritional needs, especially when dealing with learners from low socioeconomic communities. Nutrition education needs to be developed for the particular context, with the participation of the school community. The needs assessment done prior to developing the nutrition education will assist in making the education feasible for learners in their schools and community. It has also been suggested that teaching nutrition education is more beneficial for learners from poor communities, as this education will equip learners who may drop out of school to start their own families.⁽¹⁹⁰⁾ As shown in Phase 1, lower quintile schools had a challenge of

vendors who sold unhealthy snacks. The schools were reluctant to stop or regulate vendors because of the stipend they received from them and out of sympathy for the vendors, who were unemployed parents. This was also found by De Villiers et al,⁽¹⁹⁸⁾ who stated that the threat to the extra income from vendors and consideration for their socioeconomic status may have resulted in schools not being willing to plan nutrition-related activities. However, for improved HPS outcomes, schools and vendors should seek viable solutions that will promote healthy eating behaviours for the school community.⁽¹⁹⁷⁾ In the policy adaption and guideline development process, the SGBs need to engage with vendors to address such challenges. As it is, the SGBs have a responsibility to ensure that the foods sold to learners in the schools is healthy and promotes the objectives of HPS.⁽⁴²⁾

7.3.4 Delivery of physical education

There has been growing scientific support for the health benefits of regular physical activity and reduced sedentary lifestyles in school-going-age children and youth; however, progress in this area has been disappointing.⁽²¹⁴⁾ About 50% of the world's children do not yet meet the internationally recognised requirement of 60 minutes of moderate-to-vigorous physical activity (MVPA) per day.⁽²¹¹⁾ Inactivity in children and youth has been associated with negative mental, physical, social and cognitive health challenges and poor physical activity that extends into adulthood.

The decline in the offering of PE in schools globally has become a public health concern. This underpins the need for governments to take political action to develop quality PE in schools to increase activity levels of learners.⁽²¹⁵⁾ The HPS programme is the ideal approach for promotion of physical activity as the majority of children have access to schools.⁽²¹¹⁾ However, recent evidence has shown that school health programmes have had insignificant improvements on the MVPA of learners. South Africa was found to have the lowest number of learners involved in physical activity (PA), ranking first out of 12 countries, with 32% of learners not involved in PA at schools.⁽²¹⁶⁾ The 2018 South Africa Report Card for children and youth found that the country had not made enough improvements towards the promotion of PA in school-going-age children. The study found no evidence of strategies, policies, or interventions to improve organised sports.

A high proportion of South African learners were found to be engaged in active transportation, meaning most walked to school, though not by choice. Nevertheless, this form of physical activity is threatened by parental concerns over environmental and community safety.⁽²¹⁶⁾ In COT schools, most learners used private transport or walked short distances to school, meaning that they did not benefit from active transportation. The study also found that the levels of screen time had also increased, worsening sedentary lifestyles amongst children and youth.⁽²¹⁶⁾ Clinical trials have attributed the failure of PE to improve MVPA to poor planning and implementation of sustainable physical activity programmes. These included the exclusion of school stakeholders from the planning of the activities and poor training of educators delivering of PE to learners.⁽²¹¹⁾

7.3.4.1 Physical education in the South African context

Physical education in SA has had several policy-related changes. Prior to 1994, it was a standalone subject, and currently it is taught as one of the learning outcomes in LS and LO, administered to learners from grade R to 12.^(100, 202) Various reasons have been suggested for this policy reform, including low perceived status of PE, inadequate allocation of time, crowded curriculum, and inadequate financial and material resources.⁽²⁰²⁾ There is no available evidence of PE prioritisation in the school curriculum⁽¹⁰⁰⁾ and no documentation of what is currently being done with existing interventions, such as the Sport and Recreation South Africa National School Sport Programme (2016–2017 strategic plan), which has been poorly implemented, and there is no new PA or sports policy.⁽²¹⁶⁾

According to UNESCO,⁽²¹⁷⁾ quality physical education (QPE) is defined as “planned, progressive, inclusive learning experience that forms part of the curriculum in early years, primary and secondary education. The learning experience offered to children and young people through PE lessons should be developmentally appropriate to help them acquire psychomotor skills, cognitive understanding, and social and emotional skills they need to lead a physically active life.” To achieve QPE through public policy, schools need conducive physical environments, adequate infrastructure, resources, proper educator training, versatile curriculums, community involvement, and monitoring of quality standards.⁽²¹⁵⁾

7.3.4.2 Provision of quality physical education

Continuous educator training is required to enable them to provide PE that is well balanced within a diverse curriculum, innovative, and enables learners at all stages (grade R to 12) to develop lifelong healthy habits.⁽²¹⁸⁾ PE educators not being trained in PE was a challenge echoed by LS educators in this study. This is not isolated to COT; most educators providing PE in South African public primary schools are generalist educators who lack the skills to teach PE.⁽¹⁰⁰⁾ In an Australian study, it was found that PE educators were not specialised in PE and lacked confidence and competence in the subject, often avoiding it.⁽²¹⁸⁾ Educators in Osborne et al⁽²¹⁵⁾ were enthusiastic about getting training to improve their teaching competency, as were educators in COT, who repeated the need for the GDOE to give them training to improve themselves as PE providers. Due to the neglect of PE needs and the lack of training for providers, educators in Roux⁽¹⁰⁰⁾ provided PE and performed the required assessments out of obligation, which was echoed in the findings of this study, where educators provided PE out of a sense of duty and not for the learners to learn anything.

Current educator training does not equip educators to deliver PE. Physical education training needs to evolve to meet the demands of a curriculum that is focused on delivering physical activity, social and emotional development. In the meantime, educators should receive quality in-service training that has CPD points attached to it. The point system will motivate educators to attend workshops and implement the new knowledge.⁽¹⁰⁰⁾

There is a need to change the traditional perceptions of health education, especially regarding PE, which usually has less value compared to other subjects.⁽¹⁰⁰⁾ Incorporating behavioural science in training is essential to facilitate improved understanding of PE and increase the likelihood of change in educators, communities and all other stakeholders.⁽²¹¹⁾ According to UNESCO,⁽²¹⁷⁾ continuous training for educators to qualify as PE educators needs to be a policy priority. Current physical education is not able to meet the needs of learners or act as a starting point for lifelong physical fitness due to the limited time allocated to it in the school curriculum. Establishing collaboration with parents and communities is one way of increasing time for learners to engage in physical activity.⁽²¹⁵⁾

The educators in Osborne⁽²¹⁵⁾ related challenges to the side-lining of PE in schools. It received low priority in schools as it was considered to have no valuable content when compared to subjects like Maths and Science.^(215, 218, 219) Though it has been included in the curriculum, it is often perceived as an addition to another subject and not a subject on its own. Educators reported that PE was perceived as the subject used to keep learners busy when they had no other work to do. In COT, PE was perceived as a way of alleviating learners' tiredness from sitting for too long and giving learners with learning challenges a break from academic work, which was not their strong point. This is a misunderstanding of the objectives of PE, according to Roux,⁽¹⁰⁰⁾ who stated that physical activity is needed to develop critical thinking skills and help learners enjoy learning. It can also act as a catalyst to lifelong sports participation for learners and should provide opportunities for talent scouting.

7.3.4.3 Physical environment

Schools need to have a physical environment that promotes physical activity. The physical environment reflects the amount, variety (greening, playground, school hall) and quality of school spaces and the available resources.⁽²¹¹⁾ The schools in this study did not meet the physical environment criteria. As shown in the audit findings, schools had poor greening, with most playgrounds not being conducive for playing as they were not well kept. Schools in COT had one playground which accommodated all the PE needs and recess activities of the school. In a study by Osborne⁽²¹⁵⁾ in Brazil, PE educators had similar challenges, with lack of demarcation for PE space, and schools were affected in that classes had to share the same space with learners on recess. Roux⁽¹⁰⁰⁾ also found lack of facilities and equipment to be a hindrance to implementing PE, while a study by Lynch and Soukup⁽²¹⁸⁾ conducted in Australia found that facilities and equipment were sufficient in the schools and were a strength in implementing PE. UNESCO⁽²¹⁷⁾ issued a directive that schools ensure QPE by providing equipment and facilities. Schools' failure to do so shows the gap between policy statements and the reality in schools.⁽¹⁰⁰⁾

7.3.4.4 Supervision and guidelines

School administrators need to provide the resources that educators require to provide QPE. Educators in Osborne et al⁽²¹⁵⁾ agreed that supervision for PE was lacking, which is necessary to avert behaviours of educators where they do what they wanted to do

and neglect what they did not like. Supervision allows for accountability for educators, so they do not only teach what they enjoy or feel comfortable with. Most educators in this study did not enjoy PE and did not have a planned programme for PE classes. Educators need to work according to guidelines that have been adapted to the school's environment and are flexible and allow educators to be creative in administering them.⁽²¹⁸⁾ Besides the passion for PE, educators with physical restrictions in COT were not able to be actively involved in the class and felt that this hindered their provision of PE to learners. However, Osborne⁽²¹⁵⁾ argued that this is a misguided opinion, because there are many strategies that can be used to teach, as the focus is not on the educators' restrictions but the learners needs and interests. This reinforces the urgency for training to be a policy priority, so educators will be equipped to teach in various circumstances. School administration needs to build a strong relationship with educators and communicate on the needs of the educators as a means of offering support to educators to provide QPE.

7.3.4.5 Inequalities in physical activity

Social challenges were an important factor affecting physical activity. This included safety of children when walking to school and participating in organised sports. Schools seemed to still experience a lot of inequality in the area of PE. Schools in socioeconomically poor areas seemed worse off in their implementation of PE.⁽¹⁰⁰⁾ Schools in COT faced many structural barriers to PE. Educators were not trained; schools did not have well-maintained playgrounds or sports equipment for play; educators were incompetent in their provision of PE; and the LS educator was the sole provider of PE to his class, with no other assistance. Educators reported that they let the children run and play, but there was no structured programme for PE. Roux⁽¹⁰⁰⁾ confirmed these structural issues in his findings, stating that schools in quintile 1–3 did not have specialised PE educators, while quintile 4–5 schools had a fairly high proportion of specialised PE educators, which facilitated the delivery of QPE as specialised educators had more confidence and competence in providing PE. Higher quintile schools also enjoyed multiple stakeholder participation, which further improved provision of QPE.

Life Sciences educators worked alone in providing physical activity in schools. Multistakeholder involvement within and outside the school is needed to provide and

sustain physical activity.^(100, 211) The school social environment indicates the level of collaboration and support from other school stakeholders, namely school leaders, other educators and staff, learners, and parents/community. Parental involvement is a factor related to improved physical activity. Children who see their parents being active and receive support from their parents in their physical activities are likely to be more active.⁽²¹⁰⁾ In Bartelink et al,⁽⁹³⁾ the involvement of external support from entities such as NGOs, sports organisations and health promoters facilitated PE implementation. Educators responsible for providing PE in schools have fewer barriers to implementation efforts when they have support from the school community.⁽²¹¹⁾ The 2016 Active Healthy Kids Global Alliance's Report Cards on the physical activity of children and youth, representing 60% of the world's population, showed that low-income countries did poorly in support on "Family and Peers, Community and the Built Environment, and Government Strategies and Investments".⁽²¹⁴⁾

The differences in the delivery of PE in the different quintile schools is a reflection of past socioeconomic segregation, which still affects education and learning in South African schools.⁽¹⁰⁰⁾ To bridge this gap, educators in lower-quintile schools need to be provided with continuous professional development so they are well-equipped to provide QPE.⁽¹⁰⁰⁾ They also need resources for PE activities. Inequalities between schools contradicted the ISHP, which stated that the policy should reach all learners, starting with learners in the disadvantaged communities, and ensure quality and equitable distribution of resources.⁽²⁰⁵⁾

Making playgrounds safe and creating simple activities will improve physical activity. Studies have shown that it is feasible to implement PA in low-income settings such as South Africa.⁽¹⁹⁸⁾

7.3.5 Fragmented school health services

According to the ISHP, school nurses should have school health as their primary focus. The policy's recommended output is for one school nurse to assess 2 000 learners annually.⁽¹⁹¹⁾ Health services in schools should include early screening for health conditions and illnesses, especially those conditions that hinder learning such as poor eyesight and learning difficulties.⁽²⁰⁵⁾ However, this has not been the case in COT as nurses face numerous structural factors that hinder the rendering of these services. In Rasesemola et al,⁽²⁰²⁾ school nurses reported that poor infrastructure at COT schools

meant that they had no proper space to conduct their assessments. They often did not have transport to reach the schools and were short-staffed for the growing number of learners in schools. They also mentioned the lack of management support and guidance as affecting the quality of the work they provided.⁽¹⁹¹⁾

School services should be accessible, available, affordable, equitable, effective and efficient.⁽¹⁹¹⁾ Despite such policy statements, Rasesemola et al⁽²⁰²⁾ noted with concern that basic healthcare services offered in South African public schools were not constant, consistent or systematic. Some children never got the opportunity to consult with a nurse until they graduated from school.⁽²⁰²⁾ The inconsistency was also seen in the audit findings, where one school sometimes had physiotherapists and a dental assistant visit the school, but other schools had not received such services. Molete et al⁽²⁰⁰⁾ also reported that oral hygienists did not cover all schools in COT and did not render the same services in all the schools they visited due to resource constraints.

School participants in this study were not aware of the full package of services that was meant to be delivered by the school nurses at the schools. They were under the impression that the services they were currently receiving were those required by the DOH, namely a visit by a school nurse who screened some of the learners and attended to the referred cases, once or twice a year.

Poor communication with school nurses included health promoters, who were supposed to work together with school nurses and the local clinic facilities. The NHPPS outlines supporting healthcare workers and the primary healthcare outreach teams in their health promotion work as one of the responsibilities of health promoters.⁽²⁰⁵⁾ The health promoter is supposed to be the mediator between schools and other services;⁽²⁰⁵⁾ however, they reported having no working relationship with school nurses. Poor relationships amongst actors compromised meeting learner needs, as it was within their work requirements to conduct home visits with learners referred by nurses, but this was not done as they were not given any reports by the nurses. Health promoters were also supposed to facilitate other services that the identified learner may require, such as social services, or liaise with local health facilities for tracking the learner where necessary.⁽²⁰⁵⁾ This indicated the lack of referral systems to address identified health needs of learners.^(202, 205) Compliance with the ISHP in COT schools is characterised by poor collaboration and integration of the

various stakeholders, local departments, agencies, mental health, social development and health service staff in schools.⁽²⁰²⁾

Schools requested that the DOH assist in the teaching of health topics, which LS educators were not competent in as they had not received training. Due to cultural expectations, some males were not comfortable teaching some topics such as reproductive health. School nurses holding workshops with the educators would improve educator knowledge and thus confidence. Working with men and reassuring them could also break down the cultural ideology they may hold regarding such topics. The requests of the educators are not far-fetched, according to Dibakwane et al.⁽¹⁹¹⁾ Ideally, school health nurses should provide physical, social and academic support to learners and schools. Hung et al⁽⁴²⁾ also reported that schools sometimes invited specialists to present and lead discussions on learner concerns. Just as school staff in COT requested to have a nurse stationed at the schools, implementers in Hung et al⁽⁴²⁾ suggested that a full-time nurse be hired for each school.⁽⁴²⁾ Some school participants requested more than a school nurse to visit the school and suggested that a dietitian be part of the school health team. According to Dibakwane et al⁽¹⁹¹⁾ and the NHPPS,⁽²⁰⁵⁾ a multidisciplinary team must be available to deal with all the various health needs of learners. School nurses in Hung et al⁽⁴²⁾ also recommended working in multidisciplinary teams and reported that this improved their motivation for their activities and allowed for sharing of cases and challenges with other team members.

The HPS programme includes meeting the needs of the whole school community, which includes learners, school staff and parents/community.⁽¹⁰¹⁾ However, in this study, the school health policy was translated as only including the learners in receiving the services of a school nurse and a social worker. Educators did not know that the policy included them as well; educator health was treated as a personal issue. An atmosphere of openness about stress and easily accessible mental help are especially important in this era of COVID-19, when participants were overwhelmed with repetitive classes, ensuring that all learners catch up, achieving curriculum targets, dealing with colleagues and family members who were ill with COVID-19, and some educators having been infected or fearing infection.

Schools also saw parents' involvement only in the sense of helping with teaching and communication with schools, they did not see parents as a target for health education.

It would seem that increased parental nutrition knowledge would benefit learner health knowledge and the parents' interest in learner's education. Adamowitsch et al⁽⁴³⁾ also found that only one school in his study targeted educators' health, and schools did not define parents as a target group.

7.3.6 Ongoing programme assessment

Breitenstein et al⁽¹⁹⁰⁾ suggested that fidelity assessment should be conducted on a frequent basis in community settings: (1) ensure continued validity of the intervention, (2) ensure sustainability of the intervention, and (3) gather observations from different settings. This study's findings highlighted the potential gaps in the accreditation process. Firstly, none of the implementers in the schools had any knowledge of the process or had been involved in it, and none of the schools had ever received feedback. Secondly, health promoters raised concerns over the accreditation's process validity to accredit schools that had met the full criteria to be declared as a health promoting school. Findings in this study showed that accrediting schools with underwhelming health environments undermined programme's sustainability, which may have contributed to the poor performance of schools in the audit findings. Participants in Fathi et al⁽⁶⁹⁾ expressed the same concerns, questioning the validity of the process. They believed that poor-quality processes could reduce implementation fidelity and suggested a reliable, standard, concise and clear checklist. The National School Health Promotion Policy recognises the role of establishing systems for conducting monitoring and evaluations. The district office should conduct research on implemented programmes and facilitate a feedback mechanism for implementers, which was missing with the HPS programme in COT.⁽²⁰⁵⁾

7.4 Chapter summary

STEP 1: Entry into schools	
<ul style="list-style-type: none"> • Conduct district level meetings between health and education to identify schools and outline plans for establishing the schools as a health promoting school <ul style="list-style-type: none"> ○ Assign responsibilities and roles to staff for establishing the programme in schools 	<ul style="list-style-type: none"> • Facilitators: trained district staff, district indicators and targets for programme implementation
<ul style="list-style-type: none"> • Hold meeting/s between responsible health promoter and school management to discuss plans for establishing programme in the school 	<ul style="list-style-type: none"> • Facilitators: trained health promoter, presentation

	material and school management knowledgeable on school policy programmes
STEP 2: Establishment of health promoting schools	
<ul style="list-style-type: none"> • Involve school staff (educators and school administrative staff) in programme plans <ul style="list-style-type: none"> ○ School management conduct meetings with school staff to explain the programme and planned implementation 	Facilitators: programme presented to educators using educational lexicon
<ul style="list-style-type: none"> • District, school management, educators and health promoters conduct a formative evaluation to ascertain the needs of the school community 	Facilitators: academic institution support, enthusiastic school staff and time allocation for staff to partake in evaluation
<ul style="list-style-type: none"> • School management and health promoter identify and recruit school staff to be part of the HPS committee responsible for HPS programme coordination • Recruit parents and learners to be part of the committee 	Facilitators: involve parents and learners in decision-making
STEP 3: Programme implementation	
<ul style="list-style-type: none"> • Teach health education topics in the Life Skills classroom 	Facilitators: trained educators, health education manuals, interactive teaching materials and management support
<ul style="list-style-type: none"> • Extend health education outside the classroom 	Facilitators: trained whole school complement, adequate and well-maintained facilities, involvement of parents
<ul style="list-style-type: none"> • School management and HPS committee coordinate health service visits to schools 	Facilitators: availability of school healthcare workers, time allocation for learner assessments and availability of referral systems
<ul style="list-style-type: none"> • Garner the support of private partners to assist with school resources 	Facilitators: resourceful school management
STEP 4: Establish a feedback loop	

<ul style="list-style-type: none"> • Establish systems for implementers to discuss implementation progress and develop strategies to improve implementation where needed 	Facilitators: academic institution and district support and leadership by school management
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Health promoting schools in COT did not implement the HPS programme as intended by the ISHP. Deviation from the policy started with the establishment of the schools. The methods used for identifying schools and conducting the formative assessment were not evidence-based and excluded the schools, who are experts on the school community. Expanding health promoting schools was also voluntary; principals had the power to accept or reject the programme in their schools. Implementers, including school management, were not conversant on the ISHP and the HPS programme. LS educators did not know that there was an expectation of them to promote health education outside the classroom. They were also not able to effectively teach some of the components of LS, such as sexual education, PE, and creative arts, due to lack of training and resources.

Guidance and accountability from school management and from the district office was low. School management could not offer much guidance as they were not well versed in the programme and its expectations. The district office failed to provide the resources required for implementation; they did not hold schools accountable for expanding the programme or for failures in schools with poor implementation fidelity.

Participants showed willingness to implement health activities, as they believed that health topics taught in class were relevant and important for their learners and health promoters had experienced the benefits of HPS in schools where it was implemented. School health services were also not delivered as outlined in the ISHP; school nurses visited the schools at a lesser frequency and had a higher number of learners to attend to. They were not able to complete the full package of services required in the ISHP.

There were various reasons for poor compliance, mostly related to structural constraints, which included poor resources, unskilled implementers, lack of guidance from management, and poor knowledge of the policy and its expectations. This led to poor prioritisation of the programme in schools. Through adapting the programme to the local context, collaboration amongst stakeholders, investment into training

implementers on the programme, guidance, and resource allocation, it is feasible to implement HPS in schools in COT with the current implementers.

CHAPTER 8

REFINEMENT OF THE FRAMEWORK

8.1 Introduction

This chapter presents the last phase of the study. It outlines the stages that were involved in refining the conceptual framework, which was developed using reviewed literature and findings from Phase 1 and Phase 2. The Delphi method was used to evaluate and refine the framework. The method was appropriate for this phase since it allowed for local and international experts, who couldn't converge in one sitting, to partake in the study. This method was particularly appropriate for the study as it was conducted during COVID-19, when gatherings were limited. The findings of the method and the final framework are presented in this chapter.

The framework was developed with the intention of assisting policy makers, government departments, schools, and academic institutions to successfully implement and evaluate the HPS programme. The framework proposes that successful implementation is mainly dependent on the three pillars, namely the government, schools, and external support structures. These pillars are not exhaustive, as there are a number of other stakeholders that are needed to improve implementation. However, the findings showed that these were the most critical for any success to be achieved in implementing the programme.

8.1.2 Delphi study participants demographic details

Experts who met the criteria were invited to be part of the study. In total, 56 experts were invited via email. Of the (n=56), only (n=20) experts responded and agreed to participate. In the time allocated for the first round, only (n=9) had evaluated the framework, and returned the consent form and rated the framework using the Likert scale. The other (n=11) who had not returned the consent form and evaluated the framework were sent various reminders by the researcher; however, they did not respond. **Table 22** shows the demographic details of the (n=9) experts who participated in the study.

Table 22: Delphi study participant demographic details

Qualification	Occupation	Employer	Experience in health promotion/HPS/monitoring and evaluation
Master of International Public Health	Senior MEL Specialist	Management Systems International, Mozambique	15 years monitoring and evaluation (M&E) experience
Master's in research for international development	Evaluation Officer	Management Systems International, Mozambique	11 years M&E experience
PhD in Sociology	Professor and senior lecturer	Austrian National Public Health Institution, Austria	Health promoting school programme and evaluation
Master's in public health	Lecturer in health promotion	University of Pretoria, South Africa	More than ten years supporting the implementation of the health promoting school programme in primary schools
PhD Nutrition	Nutritionist	Well Being Africa, South Africa	7 years school nutrition education and research
	Evaluation Officer	Mozambique	
PhD Health Sciences	Lecturer	University of KwaZulu Natal, South Africa	Research on inclusion of oral health promotion into the health promoting school programme
	Assistant Director	Gauteng Department of Health (Tshwane Health Promotion Directorate)	Managing health promotion projects in Tshwane schools
Master's in public health, PhD candidate	Manager (Community orientated primary health care)	University of Pretoria	6 years' experience in implementation of community projects

Participants for the Delphi study were recruited from academics and industry, locally and internationally. See **Figure 29** for participant distribution per position and **Figure 30** for participant location distribution.

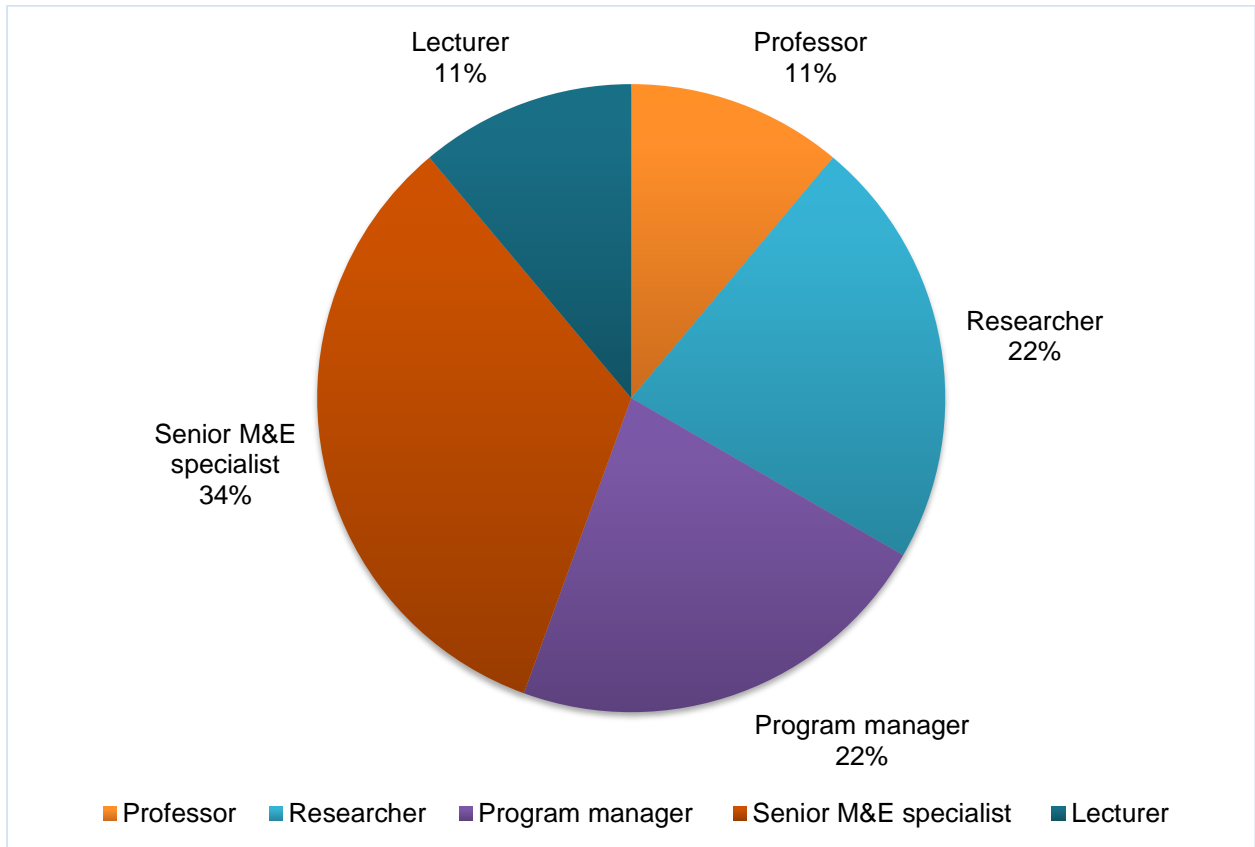


Figure 29: Pie chart showing Delphi study participant position distribution

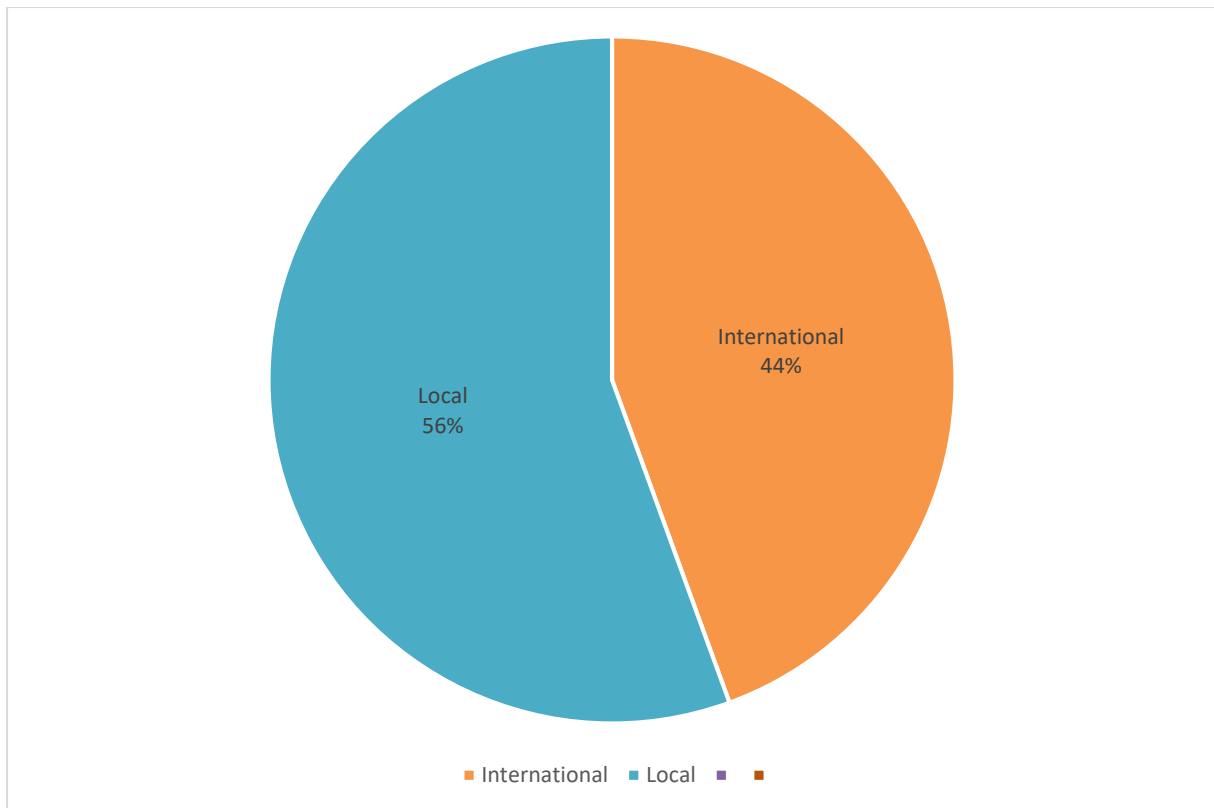


Figure 30: Pie chart showing Delphi study participant location distribution

8.2 Validating the framework

Participating experts were sent the proposed framework and its narrative via email (see **Figure 31** and **Table 23**).

8.2.1 Summary of framework

The framework was developed for health promoting schools in South Africa, its goal is improved health outcomes of learners. The framework was designed for implementation over a 5-year period, as with most government strategies.

The framework is based on 3 pillars, in the form of outcomes.

- Outcome 1: Improved guidance and capacity of the national, province and district level government to support the implementing of the health promoting school programme;
- Outcome 2: Increased school management capacity to plan, implement and monitor the implementation of health promoting school programme; and

- Outcome 3: Strengthened collaboration between schools and private sectors and academic institutions in the implementation of health promoting school programme.

Each of the 3 outcomes is aligned to intermediate outcomes and indicators. The accompanying framework narrative is a detailed narration of the framework.

The DOE and DOH are responsible for working together in the planning for implementation, the implementation and evaluating the programme. The district office, school management, parents, communities, multiple government departments, private partners, academic institutions, and businesses are included in the framework as partners for successful implementation.

The framework includes frequency of reporting of indicators. Reporting of national and provincial indicators was scheduled annually, as most of their indicators are time consuming. Therefore, to make the reporting feasible, frequency of reporting was minimised. On the hand, reporting frequency on indicators within the district, academic institutions and schools was scheduled quarterly, to improve monitoring of the programme. Programme assumption have been included in the narrative, as programme frameworks often rely on assumptions.

Figure 31: Health promoting school conceptual framework

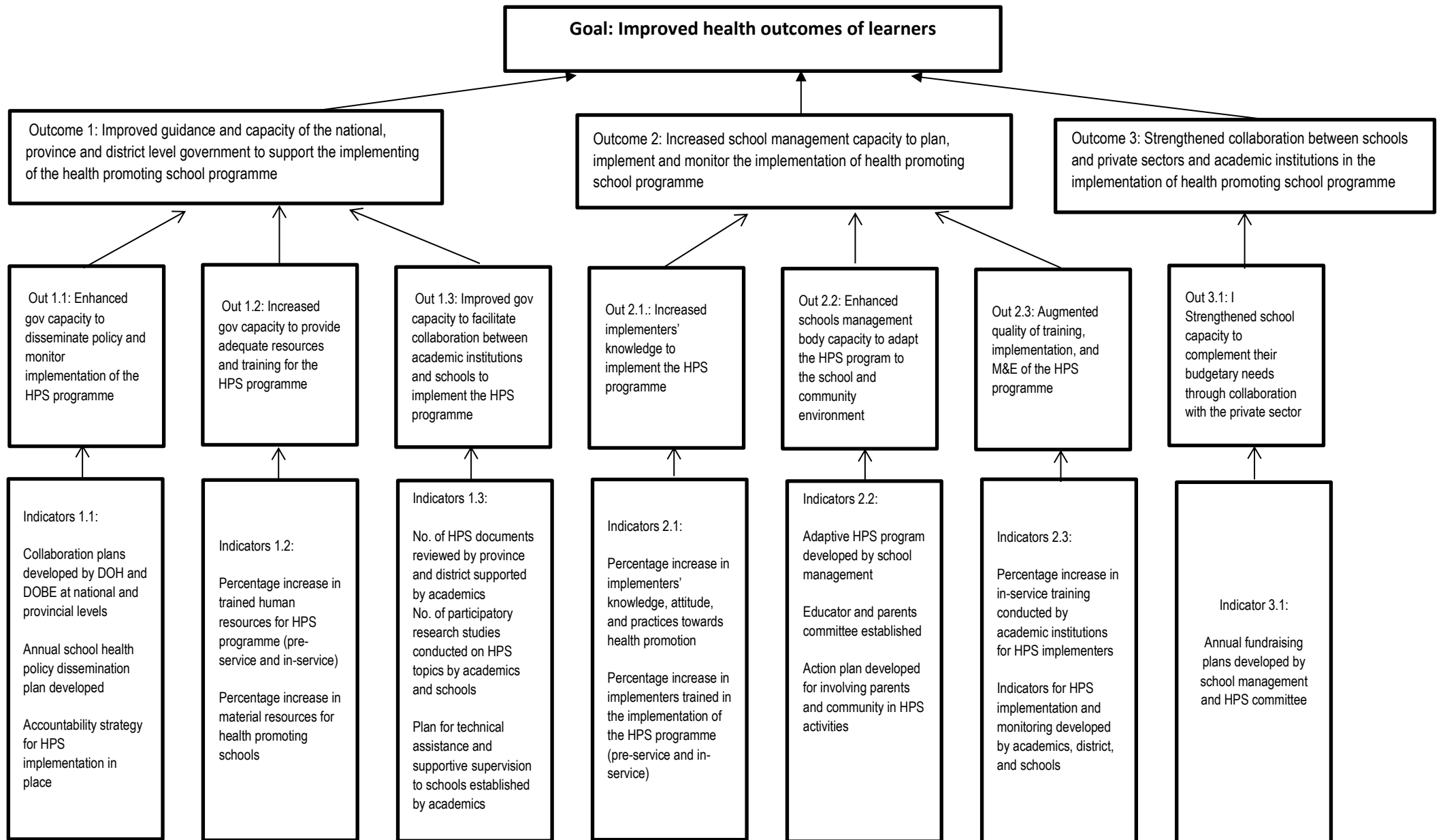



Table 23: Framework narrative

	Indicator	Type of indicator/ unit of measure	Data collection method/s	Data source	Frequency of reporting	Baseline data		Targets	
						year	value	year	value
Outcome 1: Improved guidance and capacity of the national, province and district level government to support the implementing of school health programmes									
Out 1.1: Enhanced gov capacity to disseminate policy and monitor implementation of the HPS programme	<i>Collaboration plans developed by DOH and DOBE at national and provincial levels</i>	<i>1 Document</i>	<i>Document review</i>	<i>Policy guidelines</i>	<i>Annually</i>	<i>2021</i>	<i>None</i>		
	<i>Annual school health policy dissemination plan developed</i>	<i>1 Document</i>	<i>Document review</i>	<i>Policy guidelines</i>	<i>Annually</i>	<i>2021</i>	<i>None</i>		
	<i>Accountability strategy for HPS implementation in place</i>	<i>1 Strategy document</i>	<i>Document review</i>	<i>Policy guidelines</i>	<i>Annually</i>	<i>2021</i>	<i>None</i>		
Activities <ul style="list-style-type: none"> • Conduct meetings to outline roles and responsibilities for stakeholders • Communicate policy expectations to province and district levels • Conduct support and monitoring visits to health promoting schools • Develop accountability measures 									
<ul style="list-style-type: none"> 🇿🇦 DOH—Department of Health 🇿🇦 DOBE—Department of Basic Education 🇿🇦 HPS—Health Promoting School 									
Out 1.2: Increased gov capacity to provide adequate resources and training for the HPS programme	<i>Percentage increase in trained human resources for HPS programme (pre-service and in-service)</i>	<i>Quantitative</i>	<i>Document review, HRD database, school audits</i>	<i>Provincial HRD reports</i>	<i>Annually</i>	<i>2021</i>	<i>None</i>		
	<i>Percentage increase in material resources for health promoting schools</i>	<i>Quantitative</i>	<i>Document review, school</i>	<i>Provincial reports</i>	<i>Annually</i>	<i>2021</i>	<i>None</i>		

			<i>audits, school observations, interviews</i>						
Activities <ul style="list-style-type: none"> • Increase staff complement • Train staff working with health promoting schools at province, district, and school levels • Rehabilitate and increase school infrastructure (playgrounds, toilets, fencing, classroom doors) 									
 HRD—Human resource department									
Out 1.3: Improved gov capacity to facilitate collaboration between academic institutions and schools to implement the HPS programme	<i>No. of HPS documents reviewed by province and district supported by academics</i>	<i>1 Document</i>	<i>Document review</i>	<i>Provincial reports</i>	<i>Every 3 to 4 years</i>	<i>2021</i>	<i>None</i>		
	<i>No. of participatory research studies conducted on HPS topics by academics and schools</i>	<i>Quantitative</i>	<i>Document review, interviews, focus groups</i>	<i>Government documents, academic articles</i>	<i>Annually</i>	<i>2021</i>	<i>None</i>		
	<i>Plan for technical assistance and supportive supervision to schools established by academics</i>	<i>1 Document</i>	<i>Government reports, academic articles</i>	<i>Document review</i>	<i>Annually</i>	<i>2021</i>	<i>None</i>		
Activities <ul style="list-style-type: none"> • Invite academics to assist review HPS programme implementation plans and the life skills curriculum • Identify research gaps in the implementation of the HPS programme in schools • Conduct participatory research projects at health promoting schools • Develop a plan for technical assistance and support to schools 									
Outcome 2: Increased school management capacity to plan, implement and monitor the implementation of school health programmes									
Out 2.1.: Increased implementers' knowledge to	<i>Percentage increase in implementers' knowledge, attitude, and practices towards</i>	<i>Quantitative</i>	<i>Questionnaires/surveys</i>	<i>School reports, academic</i>	<i>Annually</i>	<i>2021</i>	<i>None</i>		

implement the HPS programme	<i>health promotion</i>			<i>articles</i>					
	<i>Percentage increase in implementers trained in the implementation of the HPS programme (pre-service and in-service)</i>	<i>Quantitative</i>	<i>District training database, school audits</i>	<i>District training reports</i>	<i>Annually</i>	<i>2021</i>	<i>None</i>		
Activities <ul style="list-style-type: none"> Train implementers in HPS implementation 									
Out 2.2: Enhanced schools' management body capacity to adapt the HPS programme to the school and community environment	<i>Adaptive HPS programme developed by school management</i>	<i>1 School calendar</i>	<i>Document review, interviews, focus groups</i>	<i>School reports, minutes</i>	<i>Quarterly</i>	<i>2021</i>	<i>None</i>		
	<i>Educator, learner and parents committee established</i>	<i>1</i>	<i>Document review, interviews, focus groups</i>	<i>School reports, minutes</i>	<i>Quarterly</i>	<i>2021</i>	<i>None</i>		
	<i>Action plan for involving parents and community in HPS activities developed by school management and HPS committee</i>	<i>1 Document</i>	<i>Document review, interviews, focus groups</i>	<i>School reports</i>	<i>Quarterly</i>	<i>2021</i>	<i>None</i>		
Activities <ul style="list-style-type: none"> Conduct a needs assessment of the school community Adapt policy for implementation in local context Develop a school calendar for health promotion activities and events Allocate funds for health promotion activities Establish a committee including educators, learners, and parents Develop a plan for increasing parental involvement in HPS activities Invite parents to be part of decision-making during meetings on the HPS programme 									

Out 2.3: Out 2.3: Augmented quality of training, implementation, and M&E of the HPS programme	<i>Percentage increase in in-service training conducted by academic institutions for HPS implementers</i>	<i>Quantitative</i>	<i>Document review, district training database</i>	<i>School reports, district training reports</i>	<i>Quarterly</i>	<i>2021</i>	<i>None</i>		
	<i>Indicators for HPS implementation and monitoring developed by academics, district, and schools</i>	<i>1 Document</i>	<i>Document review</i>	<i>District documents, academic articles</i>	<i>Every 3 to 4 years</i>	<i>2021</i>	<i>None</i>		
Activities <ul style="list-style-type: none"> • Provide in-service training to implementers • Develop indicators for schools 									
Outcome 3: Strengthened collaboration between schools and private sectors and academic institutions in implementation of school health programme									
Out 3.1: Strengthened school capacity to complement their budgetary needs through collaboration with the private sector	<i>Annual fundraising plans developed by school management and HPS committee</i>	<i>1 Document</i>	<i>Document review, interviews, focus groups, school audits</i>	<i>School reports</i>	<i>Quarterly</i>	<i>2021</i>	<i>None</i>		

8.2.2 Validation tool

A five-point Likert scale consisting of seven questions was developed to validate the framework, see **Table 24**. The development of the statements in the tool were informed by literature on monitoring and evaluation of health interventions and the data collected in this study. Each level was assigned a numerical value;

- 1—Strongly disagree
- 2—Somewhat disagree
- 3—Neither disagree nor agree
- 4—Somewhat agree
- 5—Strongly agree

The experts rated the framework and made comments where they deemed it necessary.

Table 24: Delphi Technique Validation Tool

		Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
	Statements	1	2	3	4	5
1.	Validity The framework measures the implementation of the HPS programme as intended					
2.	Reliability/consistency Given that circumstances do not change, the framework can be used repeatedly in a given setting to produce the same results					
3.	Hierarchy The defined steps in the framework will achieve the goal (indicators → intermediate outcomes → outcomes → goal)					
4.	Feasibility The framework is within the power of government, schools, and academic institutions to implement					
5.	Adaptability The framework allows for modifications for use in various settings					
6.	Concise yet comprehensive The framework contains all the relevant elements to achieve the goal, without including unnecessary information					
7.	Relevance The framework has the potential to improve the implementation of the HPS programme in the South African context					

8.3 Findings

8.3.1 First round findings

In the first round, participants responded with high ratings on most of the statements on the Likert scale. **Table 25** below shows the results of expert ratings for round 1; all the neutral responses were excluded (n=6).

Table 25: Round 1 expert ratings

	Statements	Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree	No. of responses
1.	Validity	0	0	5	4	9
2.	Reliability/consistency	0	0	4	5	9
3.	Hierarchy	0	0	1	5	6
4.	Feasibility	0	0	3	4	7
5.	Adaptability	0	1	4	3	9
6.	Concise yet comprehensive	0	1	4	4	9
7.	Relevance	0	0	2	6	8
Total			2	23	31	>70% approval

Consensus had been achieved in this round; approval was above 70%. However, there were some expert concerns that needed to be addressed to increase the acceptability and quality of the framework. Some of the comments did not imply that there needed to be any changes to the framework. Some comments were questions, while others were recommendations to improve the framework. Each comment was addressed accordingly (see **Table 26** for the expert comments and researcher responses).

Some of the recommendations on amending the framework were incorporated, but some were not, because these changes would have meant that the framework was not grounded in the data, but rather would have been based solely on available theory/literature in the field of HPS. This would have defeated the purpose of using grounded theory methods for data collection and analysis to ensure that the findings are based on field data.

The Likert scale was amended for the second round of the method, in accordance with comments by experts (see **Table 27**). The framework was also amended, and assumptions

added that were related to expert comments (see **Figure 32**). In some cases, experts requested a dialogue to discuss their comments and suggestions. This was a helpful process as it allowed for more than just a rating and comment contribution to the framework, but gave opportunity for a broader and iterative discussion, which benefited the framework and increased the researchers' insights into M&E and HPS programme implementation.

Table 26: Expert comments and researcher responses

<p>1. Expert comment: The framework is heavily skewed towards two components of the HPS framework (school organisation; Partnerships & services) with very little reference to the third component (Curriculum)</p>
<p>Response: Though the curriculum is an important aspect of HPS, it was not made an intermediate outcome in this framework because the study findings did not indicate that curriculum was one of the major challenges to implementation, but it was rather a secondary challenge caused by untrained implementers who were not conversant with the objectives of health education. However, the improvement of the curriculum has been addressed in the framework under “<i>Out1.3: Improved gov capacity to facilitate collaboration between academic institutions and schools to implement the HPS program</i>” and “<i>Out 2.3: Augmented quality of training, implementation and M&E of the HPS program.</i>” The indicators of these outcomes are related to the review of HPS documents and training of implementers, which including the curriculum (teaching and learning).</p>
<p>2. Expert comment: None of the outcomes and indicators relate to the health of the learners themselves; it’s therefore not clear how these would lead to the goal i.e., improved health outcomes of learners. In other words, supposing Outcomes 1,2& 3 were to be achieved, would they necessarily improve health outcomes of learners? Perhaps you should consider changing the Goal, so it relates more to HPS implementation rather</p>
<p>Response: An alternative goal would have been “Improved implementation of the HPS program” however this is not the goal of the framework but a means to the goal. The framework intends to help improve the learners health outcomes, through effective implementation of the HPS programme. It is assumed that if the proposed framework pillars are well implemented, meaning (1) the government guides and capacitates schools, (2) the school management is well resourced and trained to implement the programme and (3) academics and private businesses get involved in implementation, these will lead to improved health education, which results in improved learner choices. It also means that health care services will be made available for learners and parental involvement will ensure that health education is continued in the homes and communities in which the learners live. All these outcomes will lead to the goal, to improve learners’ health outcomes. An ideal situation would be to have all possible intermediate outcomes included in the study, but this was not possible as the scope of the study was restricted to implementation efforts and did not look specifically into learners’ health status. This expert comment showed the limitation of this study and highlights the need for future studies that will focus on learners’ health status.</p>
<p>3. Expert comment: It is difficult to judge the validity without empirical research, but in my experience all the necessary components needed for HPS implementation are included</p>

<p>Response: This question has been changed to “content validity” which will relate to only the inclusion of all HPS elements in the framework, which can be judged without empirical research</p>
<p>4. Expert comment: Such frameworks always have a rather high threshold and are therefore not entirely practical. If it is “translated” into simpler questions I think it could be more practical</p>
<p>Response: One of the indicators in 1.3 is “Plan for technical assistance and supportive supervision to schools established by academics” and 2.2 “adaptive HPS programme developed by school management.” These were included as they would provide a platform for translation into simpler questions that are relevant and understood by the local implementers. The district office also has the responsibility to support schools to translate the framework into simpler questions relevant for local implementation.</p>
<p>5. Expert comment: Various settings meaning other than schools? No, I don’t think so. Various school settings: yes, it is quite general</p>
<p>Response: This question has been changed to “various school settings in South Africa”</p>
<p>6. Expert comment: Issue of robberies and school gardens to improve nutrition were mentioned in the main findings, but I was not able to identify any items on the framework that would address either. Or is that something that was deemed outside of the scope of the project? Or it is implicit in some of the items, and I did not understand it?</p>
<p>Response: These issues are present in various extents at the different schools, as schools were found to not be homogenies. Some schools were burdened by theft while others were burdened by poverty. Therefore, schools are responsible for identifying their own issues and prioritising them in programme implementation plans. This has been addressed in out 2.2: “Enhanced schools management body capacity to adapt the HPS programme to the school and community environment.”</p>
<p>7. Expert comment: Different settings as in different geographical locations? Or different settings in the same locations? Because I don’t think a framework should ever be made to be useful in different geographical (or temporal) locations.</p>
<p>Response: This framework was intended to be used in public primary schools in South African with similar socio-economic profiles, quantile 1-3 schools. The framework gives a broad guideline for implementation success but allows schools and communities the opportunity to adapt the programme to their own specific needs, as seen under outcome 2. This makes the framework general, but adaptable in different settings with similar social and economic status. This question has been changed to “various school settings in South Africa” to make it more specific</p>
<p>8. Expert comment: I usually suggest people to re-think indicators that include the “and”, because it may produce inconclusive results. For example, “Increased school management capacity to plan, implement and monitor the implementation of health promoting school program”, what</p>

<p>if management capacity is achieved but monitoring capacity is not, how would you judge the indicator? This usually leads to results that frustrate implementers or funders because no definite word is given on the status of the outcome. Usually looking for a word or measurement that would aggregate all separate items on the indicator is a good option, even if you produce an index or composite indicator.</p>
<p>Response: The framework has not included “and” with the indicators that need to be measured on a one-to-one basis. “And” has only been included in the outcomes as the indicators below each outcome will measure the various aspects included in the outcome. Ideally the outcomes would have been broken down into their various variables, but this would have resulted in a framework that would be too long and confusing. Composite indicators or an index would have been too high level for a framework of a school health programme for implementation in only one specific country.</p>
<p>9. Expert comment: The need to indicate the type of data collected through observations, interviews, and focus groups.</p>
<p>Response: This has been corrected in the framework</p>
<p>10. Expert comment: If there is political will and financial commitment from decision makers</p>
<p>Response: Programme assumptions have been included</p>
<p>11. Expert comment: At school level it will depend on location and resources available- different for urban and rural</p>
<p>Response: Programme assumptions have been included</p>
<p>12. Expert comment: Besides in-service training, all relevant aspects of the HPSI should be included in teacher training and school nurse training curriculums as required so that they start their careers having the knowledge, so it becomes a part of their work and not looked at as an extra chore</p>
<p>Response: Programme assumptions have been included in the framework that address training of implementers, especially skills development for educators. Implementers to be trained also include nurses that service the schools. The findings showed that what results in nurse low morale in servicing schools is the lack of support and resources (weak management support, lack of transport, lack of space in schools, weak guidance, and a high learner to nurse ratio).</p>
<p>13. Expert comment: It would work if there is commitment from all stakeholders</p>
<p>Response: Programme assumptions have been included</p>
<p>14. Expert comment: Include something about learners’ outcomes</p>
<p>Response: Out 3.2 has been included which addresses learners’ concerns</p>

15. Expert comment: Outcome 3 – This outcome shouldn't be limited to collaboration with private sectors and academic institutions, e.g., a critical collaboration with WBPHCOT might be excluded if collaborations are only specific to private and academic institutions.

Response: This framework was developed using the ISHP, literature and data from participants. The WBOT was not included in the policy nor the literature and findings as an essential component to HPS implementation in schools in COT or anywhere else. Health promoters have been appointed to play the role of mediator between schools, the health facilities and the homes where the learners come from. In Out 1, Gov departments are expected to collaborate and make plans for implementation, these plans may include involving the WBOT and other stakeholders that may be necessary to improve implementation. Indicator 1" Collaboration plans developed by DOH and DOE at national and provincial levels". It was beyond the scope of this framework to mention individual stakeholders that may improve programme implementation.

16. Expert comment: Success in collaboration with other stakeholders isn't only dependent on government, schools, and academic institutions, it also depends on willingness of other stakeholders to collaborate.

Response: Frameworks rely on assumptions. This has been addressed under Assumptions in the framework

8.3.2 Second round findings

For the second round, the experts were sent **Table 26** showing the changes that had been made and justification where changes were not made in accordance with recommendations. The experts were asked to rate the amended framework using an amended validation tool (see **Table 27**). The changes to the tool and framework were highlighted in blue.

Table 27: Amended Delphi Technique Validation Tool

		Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
	Statements	1	2	3	4	5
1.	Content validity The framework measures the implementation of the HPS program as intended					
2.	Reliability/consistency Given that circumstances do not change, the framework can be used repeatedly in a given setting to produce the same results					
3.	Hierarchy The defined steps in the framework will achieve the goal (indicators → intermediate outcomes → outcomes → goal)					
4.	Feasibility The framework is within the power of government, schools, and academic institutions to implement					

5.	Adaptability The framework allows for modifications for use in various school settings in South Africa					
6.	Concise yet comprehensive The framework contains all the relevant elements to achieve the goal, without including unnecessary information					
7.	Relevance The framework has the potential to improve the implementation of the HPS program in the South African context					

Experts were requested to respond and determine if they would still rate the framework as previously, despite the changes and given the justification where changes were not implemented. All nine experts responded in the second round. Some experts had rated the framework positively on all statements in round 1; they were also asked if they would still rate the framework in the same way, even after seeing the changes and reading other experts' comments.

Seven experts responded with new ratings that indicated that they were satisfied with the changes; however, one expert kept some of the “neither agree nor disagree” ratings and only improved one rating. Below are examples of responses from some experts during round two.

Expert 1: *“Thank you for addressing my comments—I think you did a good job responding to them and making some small adjustments. I can now agree with all of the statements.”*

Expert 2: *“The framework is clear and well structured.”*

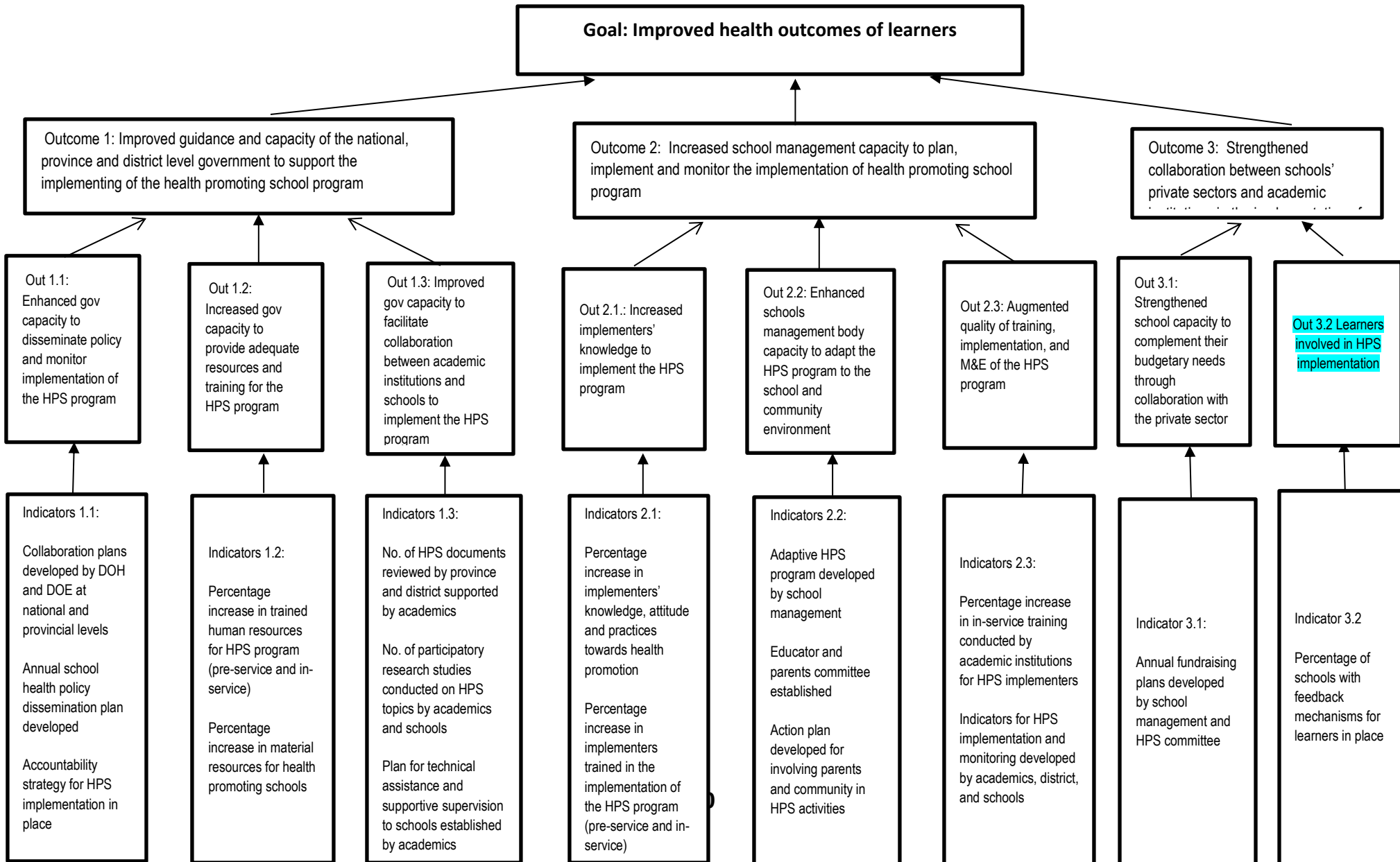
Those that had rated the framework positively maintained their initial ratings. One expert only responded that they accept the amended framework but did not rate it, while others only rated the new framework without making any comments. See **Table 28** for the results of the ratings for round 2. The neutral answers were excluded (n=2).

Table 28: Round 2 expert ratings

	Statements	Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree	No. of responses
1.	Validity	0	0	2	5	7
2.	Reliability/consistency	0	0	3	4	7
3.	Hierarchy	0	0	1	5	6
4.	Feasibility	0	0	1	6	7
5.	Adaptability	0	0	3	4	7
6.	Concise yet comprehensive	0	0	3	4	7
7.	Relevance	0	0	0	6	6
Total		0	0	11	22	>70% approval

Consensus was improved on all the statements of the Likert scale, which meant that the framework was accepted in its current form. The final framework is presented below with the changes highlighted in blue (see **Figure 32** and **Table 29**).


Figure 31: Health promoting school conceptual framework



Assumptions	External factors
<ul style="list-style-type: none">• Educators have the ability to teach health topics in the curriculum.• Stakeholders (Learners, teachers, the parents/community, other government departments, NGOs, businesses, and research institutions) have interest in and accept the intervention activities and commit to programme implementation.• Programme components in the framework are effective in changing learner health behaviours and attitudes and health outcomes.• Learners maintain changed behaviours into adulthood.	<ul style="list-style-type: none">• There is political will to implement the programme.• Government supports the intervention implementation with the necessary guidance and resources in the various school settings.• No natural disaster occurs that will result in stopping programme implementation.

Table 29: Framework narrative

	Indicator	Type of indicator/ unit of measure	Data collection method/s	Data source	Frequency of reporting	Baseline data		Targets	
						year	value	year	value
Outcome 1: Improved guidance and capacity of the national, province and district level government to support the implementing of school health programmes									
Out 1.1: Enhanced gov capacity to disseminate policy and monitor implementation of the HPS programme	<i>Collaboration plans developed by DOH and DOBE at national and provincial levels</i>	<i>1 Document</i>	<i>Document review</i>	<i>Policy guidelines</i>	<i>Annually</i>	<i>2021</i>	<i>None</i>		
	<i>Annual school health policy dissemination plan developed</i>	<i>1 Document</i>	<i>Document review</i>	<i>Policy guidelines</i>	<i>Annually</i>	<i>2021</i>	<i>None</i>		
	<i>Accountability strategy for HPS implementation in place</i>	<i>1 Strategy document</i>	<i>Document review</i>	<i>Policy guidelines</i>	<i>Annually</i>	<i>2021</i>	<i>None</i>		
Activities <ul style="list-style-type: none"> • Conduct meetings to outline roles and responsibilities for stakeholders • Communicate policy expectations to province and district levels • Conduct support and monitoring visits to health promoting schools • Develop accountability measures 									
<ul style="list-style-type: none"> • DOH—Department of Health • DOBE—Department of Basic Education • HPS—Health Promoting School 									
Out 1.2: Increased gov capacity to provide adequate resources and training for the HPS programme	<i>Percentage increase in trained human resources for HPS programme (pre-service and in-service)</i>	<i>Quantitative</i>	<i>Document review, HRD database, school audits</i>	<i>Provincial HRD reports</i>	<i>Annually</i>	<i>2021</i>	<i>None</i>		
	<i>Percentage increase in material resources for health</i>	<i>Quantitative &</i>	<i>Document review,</i>	<i>Provincial reports</i>	<i>Annually</i>	<i>2021</i>	<i>None</i>		

	<i>promoting schools</i>	<i>Qualitative</i>	<i>school audits, school observations, interviews</i>						
Activities <ul style="list-style-type: none"> • Increase staff complement • Train staff working with health promoting schools at province, district, and school levels • Rehabilitate and increase school infrastructure (playgrounds, toilets, fencing, classroom doors) 									
 HRD—Human resource department									
Out 1.3: Improved gov capacity to facilitate collaboration between academic institutions and schools to implement the HPS programme	<i>No. of HPS documents reviewed by province and district supported by academics</i>	<i>1 Document</i>	<i>Document review</i>	<i>Provincial reports</i>	<i>Every 3 to 4 years</i>	<i>2021</i>	<i>None</i>		
	<i>No. of participatory research studies conducted on HPS topics by academics and schools</i>	<i>Quantitative & Qualitative</i>	<i>Document review, interviews, focus groups</i>	<i>Government documents, academic articles</i>	<i>Annually</i>	<i>2021</i>	<i>None</i>		
	<i>Plan for technical assistance and supportive supervision to schools established by academics</i>	<i>1 Document</i>	<i>Government reports, academic articles</i>	<i>Document review</i>	<i>Annually</i>	<i>2021</i>	<i>None</i>		
Activities <ul style="list-style-type: none"> • Invite academics to assist review HPS programme implementation plans and the life skills curriculum • Identify research gaps in the implementation of the HPS programme in schools • Conduct participatory research projects at health promoting schools • Develop a plan for technical assistance and support to schools 									
Outcome 2: Increased school management capacity to plan, implement and monitor the implementation of school health programmes									
Out 2.1.: Increased implementers' knowledge to implement the HPS	<i>Percentage increase in implementers' knowledge, attitude, and practices towards health promotion</i>	<i>Quantitative</i>	<i>Questionnaires/surveys</i>	<i>School reports, academic articles</i>	<i>Annually</i>	<i>2021</i>	<i>None</i>		

programme	<i>Percentage increase in implementers trained in the implementation of the HPS programme (pre-service and in-service)</i>	<i>Quantitative</i>	<i>District training database, school audits</i>	<i>District training reports</i>	<i>Annually</i>	<i>2021</i>	<i>None</i>		
Activities <ul style="list-style-type: none"> <i>Train implementers in HPS implementation</i> 									
Out 2.2: Enhanced schools' management body capacity to adapt the HPS programme to the school and community environment	<i>Adaptive HPS programme developed by school management</i>	<i>1 School calendar & Qualitative</i>	<i>Document review, interviews, focus groups</i>	<i>School reports, minutes</i>	<i>Quarterly</i>	<i>2021</i>	<i>None</i>		
	<i>Educator, learner, and parents committee established</i>	<i>1</i>	<i>Document review, interviews, focus groups</i>	<i>Schools' reports, minutes</i>	<i>Quarterly</i>	<i>2021</i>	<i>None</i>		
	<i>Action plan for involving parents and community in HPS activities developed by school management and HPS committee</i>	<i>1 Document & Qualitative</i>	<i>Document review, interviews, focus groups</i>	<i>School reports</i>	<i>Quarterly</i>	<i>2021</i>	<i>None</i>		
Activities <ul style="list-style-type: none"> <i>Conduct a needs assessment of the school community</i> <i>Adapt policy for implementation in local context</i> <i>Develop a school calendar for health promotion activities and events</i> <i>Allocate funds for health promotion activities</i> <i>Establish a committee including educators, learners, and parents</i> <i>Develop a plan for increasing parental involvement in HPS activities</i> <i>Invite parents to be part of decision-making during meetings on the HPS programme</i> 									
Out 2.3: Augmented quality of training, implementation, and	<i>Percentage increase in in-service training conducted by academic institutions for HPS implementers</i>	<i>Quantitative</i>	<i>Document review, district training database</i>	<i>School reports, district training reports</i>	<i>Quarterly</i>	<i>2021</i>	<i>None</i>		

M&E of the HPS programme	<i>Indicators for HPS implementation and monitoring developed by academics, district, and schools</i>	<i>1 Document</i>	<i>Document review</i>	<i>District documents, academic articles</i>	<i>Every 3 to 4 years</i>	<i>2021</i>	<i>None</i>		
Activities <ul style="list-style-type: none"> • Provide in-service training to implementers • Develop indicators for schools 									
Outcome 3: Strengthened collaboration between schools and private sectors and academic institutions in implementation of school health programme									
Out 3.1: Strengthened school capacity to complement their budgetary needs through collaboration with the private sector	<i>Annual fundraising plans developed by school management and HPS committee</i>	<i>1 Document and qualitative</i>	<i>Document review, interviews, focus groups, school audits</i>	<i>School reports</i>	<i>Quarterly</i>	<i>2021</i>	<i>None</i>		
3.2 Encourage learners to participate actively in HPS implementation	Consultative sessions with learners using functional feedback mechanism set up	<i>Qualitative</i>	<i>Focus groups</i>	<i>School reports</i>	<i>Quarterly</i>	<i>2021</i>			

CHAPTER 9

CONCLUSION: LIMITATIONS, IMPLICATIONS AND RECOMMENDATIONS

9.1 Introduction

In the previous chapter, the refinement process of the HPS conceptual framework using expert consensus was described. In this chapter, the conclusion of the study, its limitations, implications, and recommendations are discussed.

9.1.1 Study rationale

The aim of the study was to evaluate the current state of health promoting schools in COT and develop an HPS conceptual framework. The significance of this study is that it will provide policy makers, government (health and education), academia, and schools with a framework to improve HPS implementation and evaluation in the COT school district and provincially. This evaluation also contributes to closing the knowledge gap in HPS research in the local context. The framework can be adapted and used by other researchers who wish to investigate HPS in COT and other settings.

9.1.2 Study aim and objectives

The overall purpose of this study was to evaluate the implementation of the health promoting schools programme to develop an HPS conceptual framework. The study was conducted in three phases, each phase having its objectives.

Phase 1 objectives:

- To assess and describe the extent of implementation of the HPS concept across COT schools
- To make recommendations on improving the audit tool
- To discuss the findings and their implications for research, practice, and policy

Phase 2 objectives:

- To collect and analyse data on the experiences, views, perceptions, and opinions of key stakeholders
- To develop a framework of HPS implementation for COT schools

- To discuss the findings and their implications for research, practice, and policy

Phase 3 objectives:

- To refine the conceptual framework
- To discuss the findings and their implications for research, practice, and policy

9.1.3 Summary of findings

Phase 1

The GDOE HPS evaluation tool was used to assess the current state of HPS programme implementation in schools accredited as such in the province. The tool used a four-point Likert scale to assess ten indicators/elements: environment and safety, water supply and safety, hygiene and sanitation, nutrition, general safety and security, policies, general, skills development, community/parental involvement, and services. The indicators are based on the six action areas of the HPS framework.

This audit-type evaluation contributes to closing the gap in knowledge on the HPS programme implementation in COT health promoting schools. The findings showed that HPS implementation was very low in COT, implementation levels were in general disappointing. Although schools scored differently on items, there were no statistically significant differences in their performance in COT ($p=0.44$) for the scale.

Schools lacked policy knowledge, leadership, and competence to implement the concept successfully. Schools also had no clear guidelines and indicators related to HPS implementation, and there was no clear understanding on HPS activities. This showed that although national government policies existed, provinces and district offices needed to communicate the policy to implementers and develop indicators that include direction on how schools should implement the activities and the conditions required for effective implementation in the local context.

Schools that implemented the least HPS activities had some characteristics in common. Respondents did not comprehend the HPS programme, there was no designated person for the HPS programme or other health promotion activities, principals opted to delegate the responsibility of being a respondent on HPS matters to another educator, schools had

poor relationships with parents and community, there were no relationships with private partners, there were no learner programmes in place, and schools gave low priority to matters that were not curriculum related. In schools that performed better in the implementation of the programme, it was found that school processes such as leadership by the principal, support from staff, parents/community and the SGB, high priority for policy implementation, and clear and structured team responsibilities facilitated successful HPS implementation.

Formal curriculum

All the schools in COT infused HPS skills in the curriculum, delivered as part of the Life Skills subject. Life Skills educators were responsible for teaching learners on health topics in the classroom; however, these educators were not conversant with the HPS programme. Life Skills topics were not seen as part of a wider school culture in COT schools, but rather as a standalone subject within the school curriculum. Educators who did not teach Life Skills were not involved or knowledgeable of health topics. Staff development in schools did not include any training on health topics.

Supportive school and classroom environments

The environment of COT schools was generally not supportive to improving the health of learners and the school community. Schools lacked the ethos of health and wellbeing, and health policies were not infused into the daily school activities, even in the schools that achieved high implementation levels. Sanitation had the lowest levels of implementation of all the indicators; compliance was dismal at all schools. There were not enough washing basins in school bathrooms, and most schools had basins that were found to be leaking or out of order. There was no handwashing soap, and toilet paper was not available in the toilets; learners had to ask the teachers in the classroom for a ration of toilet paper when going to the toilet. For washing of hands, water dispensers with liquid handwashing soap were placed outside the classrooms in all schools, one school used bar soaps instead of liquid soap.

Theft seemed to be a hindrance to creating supportive environments in COT. Classroom doors, recycling programme material and fire extinguishers were stolen at some schools.

The GDOE did not provide 24-hour security in the schools, and most of the available security personnel were not professional but included untrained parents/community members. School 9 had received a professional security personal from a private security company with which the school had established a relationship.

Nutrition

The menu provided by the GDOE to learners as part of the NSFIS was nutritious and balanced, which promoted healthy eating. However, vendors and the school tuckshop were found to be the primary challenge to healthy eating in schools. Food items sold were unhealthy (biscuits, crisps, sweets, sherbets, ice lollies). Vendors were identified as a barrier to creating healthy nutrition environments in COT schools. Snacks sold by vendors were cheap and affordable, even to learners from poor families, with snacks costing as little as ten cents.

Food gardens

Poor relationships between schools and the Department of Agriculture meant that schools could not access seeds and other support they needed to start food gardens. Schools were also challenged with limited numbers of general workers who would work the gardens. School 5 had a productive garden; it used community workers to work the gardens as they had good relationships with parents/community. For other schools, this was not viable, as poor relationships with parents/community hindered community involvement. The garden produce from school 5 was used to feed orphaned learners and sold to the community at low prices. School 5 excelled in their gardening efforts not only because of their good relationship with parents/community, but also because of the good relationship they had with a private company who supported the gardening project with seeds, training for the gardeners and by providing other needed resources.

Playgrounds

Playgrounds in most of the schools were not conducive to learners playing in them, they were not well kept, and the greening had deteriorated. Schools also did not have sports equipment or coaches to guide learners during play/sport. It was only School 9 that had

well-maintained sports ground with state-of-the-art facilities, which were donated by a private partner.

Health services

Schools did not receive the package of health services described in the Integrated School Health Policy, which guides the provision of health services to schools. There were shortages of school nurses, who were tasked with providing the bulk of health services to schools. Therefore, only a few learners received attention from the school nurse and educators were not included in the services.

Social wellbeing

In the schools evaluated, the policy was treated as if it only related to the health and wellbeing of the learners and excluded the school staff. However, the World Health Organisation has encouraged the adoption of the HPS programme as an effective means to be used by schools globally to improve the health of both learners and staff.

With regard to curtailing problematic learner behaviour, the study found that schools did not have any interventions outside of conflict resolution, meting out acceptable punishment or calling in the parents. Interventions for dealing with problematic behaviour should reduce incidents, disruptions, fights, bullying, crime, impulsiveness, uncontrolled anger, violence, early sexual debut, substance abuse, exclusions, and absenteeism. The interventions should be developed for schools, and the implementers (educators) should be trained to implement them effectively.

Engage whole school community

More than 50% of schools in this study did not have any type of learner programme or peer programme; learners did not have the opportunity to get actively involved in health promotion activities, except to learn health education in the LS class. Parental/community involvement in this study was low. Schools also had poor relationships with other school community members, which included the local businesses, NGOs, and political figures. These weak relationships negatively affected implementation levels in schools, especially relationships with parents. The schools that did well in HPS implementation (School 5, 8 and 9) had the strongest parent/community relationships. They found ways to involve

parents in school activities and benefited as parents volunteered as cleaners, cooks, and gardeners at the schools.

Expert advice from outside the school was found to improve implementation levels in action research done in the schools by experts working with teachers, it improved teacher understanding of HPS, which had a direct correlation with improved HPS implementation. The Universities of Pretoria and the Western Cape have done some research on HPS and have worked with government departments involved with HPS implementation. These collaborations should be supported by the GDOE and expanded to all health promoting schools in COT.

Feasibility within the local context

The GDOE audit tool had 72 items that schools needed to implement, schools failed on the majority of the items. Besides the individual schools' capacity, the GDOE had not managed to provide the schools with all the resources needed to fully implement the HPS programme. For instance, schools had not been provided with adequate sanitation, implementer training, infrastructure, and resources to fully implement HPS. These structural factors were found to be common across the schools, which hindered implementation. This study results suggested that policy makers need to consider developing a selected few core indicators for implementation, as schools seemed to be overwhelmed with having to implement HPS completely.

Schools in COT had not clearly and fully documented HPS activities, which posed a challenge in evaluating the schools' efforts. There was no evidence of what was done and how it was done, which meant there could be no advocacy for expanding HPS.

Internal consistency

The audit tool was assessed for internal consistency using the Cronbach's alpha test for reliability, and the alpha coefficient for the scale was 0.805. The alpha value was above 0.70, meaning it was acceptable and indicating high internal consistency reliability of the scale.

Content validity

The tool was found to be missing some crucial indicators for HPS implementation. It did not include indicators on (1) leadership, management, and communication and (2) curriculum delivery and resources for implementation.

Phase 2

The grounded theory analysis resulted in the development of five categories, which were (1) preparation is key, (2) continuous training of implementers, (3) importance of teamwork, (4) barriers to implementation and (5) evaluate progress and give feedback. The core category was “lack of guidance and accountability for HPS implementation”.

Lack of guidance was reflected in:

The participants, who were the key implementers did not understand the programme and the policy guiding it. Principals knew about the HPS policy, but not to the extent of articulating how it was part of the school health policy and how they were expected to implement the programme in their schools. Life Skills educators taught health education as prescribed in the curriculum but had no further knowledge of how LS is integrated within the school health policy. Participants were willing to implement the programme, but their willingness was of little value as they did not know what they were doing or how they were expected to do it.

Lack of accountability was reflected in:

Lack of accountability started with the establishment of health promoting schools. The school health policy speaks on extending the programme to more schools and levels across the country; however, principals are given the authority to either accept or reject the programme, without accounting for the rejection. Schools that were already health promoting schools were expected to maintain their HPS status through implementation of the HPS indicators. However, schools were not accountable to any higher-level body for what they were doing and did not have to provide reasons for absconding. At the time of research, schools had never received any feedback since being declared as health promoting schools. This reflected that there had not been any attempt to know the schools' performance. The schools that did well in the HPS implementation did so because of the

support from the principal and the community, not as a mandate from the department, and schools that did poorly did not have to account for their failure. The decision of whether to implement HPS or not was at the discretion of the principal.

Schools did not comply with the implementation of the HPS programme as intended by the school health policy. Numerous reasons contributed to that to this: lack of HPS training, lack of resources and community issues were amongst the main barriers to implementation. However, the underlying reason was that participants lacked understanding of school health policy and its daily application to school life. The school principals and the school governing body provided leadership on all school activities. Their lack of comprehension of the HPS programme, due to poor training, meant they did not understand the value of this programme and were not competent to provide guidance. This meant the programme was often overlooked for other school programmes that were deemed more important and in which the leaders were competent. Leaders also tended to focus on programmes on which government monitored the schools. The HPS programme was not monitored, hence schools had not been evaluated since accreditation. This lack of monitoring and accountability placed HPS at the bottom of the priority list or was totally excluded.

The health promotion activities that were implemented were implemented in the classroom through the curriculum. However, even the classroom activities were incomplete, as resources were inadequate, and educators were not trained in some aspects of health promotion such as sexual education and physical education. Surprisingly, educators were reluctant to complain about challenges such as lack of resources or support from the GDOE; there was a sense of futility in complaining. As a means of adaptation, educators implemented what was feasible and overlooked activities that were out of reach; they just “pushed the syllabus”, as one educator explained.

Parental and community support was a significant facilitator for HPS implementation. Most schools had not established good working relationships with parents/communities. School participants recognised the important role of the parents in schools and understood this role mostly as parents “helping learners with homework”. Schools had also not devised strategies to engage parents/community and improve poor engagement with

parents/communities. Health promoters conceptualised the role of parents/community as “making the school conducive for learning”, which was a much higher level of understanding. Knowledge and understanding of the programme by the implementers were attributed to increased appreciation, support, and advocacy for the programme, because of the benefits associated with it. Even the participants who were not conversant with the programme had an interest in improving the health and learning outcomes of learners. Effective implementation is possible within the current circumstances in COT, given that the government guides the schools and holds them accountable for implementation actions. This grounded theory is a novel contribution to health promotion policy development in COT and to health promotion literature.

Phase 3

The framework developed showed that there are three pillars for successful HPS implementation, namely government (national, provincial and district), school management, and private partners (private businesses and academic institutions). Each pillar had its role to play in achieving the goal, which is to improve learner health outcomes.

9.2 Strength of the study

The study showed the appropriateness, practicality, and benefits of using mixed methods in programme evaluation. The findings from the quantitative Phase 1 were used to guide the line of questioning in Phase 2 to understand the “why” “how” and “what” of implementation in COT. The sequential phases of the study allowed for a framework that was developed from multiple sources and methods, known as data and method triangulation, which facilitated study rigor and richer findings.

The study used the current GDOE health promoting school audit tool, which allowed for the assessment of the programme’s progress over the years since accreditation, comparing the current status of schools with the accreditation standard. Though the tool was not entirely validated in this study, it was found to measure 80% of the HPS framework elements, and it had a high overall internal consistency. The participants included in the qualitative inquiry were those who were involved with the implementation of the HPS

programme and had the most valuable information to offer regarding its implementation. This improved the richness of the findings.

The HPS conceptual framework was developed using multidisciplinary resources and was refined and validated using the Delphi method by a diverse expert panel to achieve consensus. Grounded data were also used to develop the framework, which ensured that the framework was realistic, feasible, adaptable, and acceptable in the local context.

9.3 Limitations of the study

The study had some limitations that are worth discussing. There were different data collection methods and sample sizes used at each of the three phases of the study.

Phase 1: The sample size was small, largely due to purposive sampling. Only certain schools met the criteria to participate; these were schools that were declared as health promoting schools in COT. Further, COT had only a limited number of health promoting schools. Conducting the study during the COVID-19 period was a limiting challenge to the study; some schools were averse to having visitors at the schools. The small sample size meant that there were no inferential statistics employed in this study. The study findings cannot be generalised to a larger population; however, the framework can still be adapted in other districts in the province and country.

Phase 2: Though most of the study participants contributed valuable first-hand experiences on HPS implementation, there were some participants who had little knowledge on the HPS programme and thus provided limited information towards the study. Conducting the study during COVID-19 limited the number of participants as some key implementers were not available for the study due to the academic backlogs and ill health caused by the pandemic. Poor school community dynamics also played a role in low participant numbers as the school principals were not keen on having the SGB discuss school issues with the researcher due to the fear that the SGB members may speak ill of them. Also, the study coincided with the three-year cycle rotation of SGB members in the schools. The new SGB did not meet the criteria for inclusion in the study as they had no experience working with the programme, and it was a challenge to find the previous SGB who had vacated the school.

Phase 3: Purposive sampling in this phase meant that only participants who met the strict criteria to be called an expert in school health programmes and evaluation were recruited, which contributed to a small sample size.

Lastly, the study did not specifically look at the learner health status, which may have limited the scope of the framework.

9.4 Unique contribution of the study

The study is novel in that it is the first evaluation study in South Africa to use mixed methods and various data sources to get rich data on local context HPS implementation processes and feasibility and to develop a comprehensive conceptual framework.

The initial contributions of this study were in Phase 1, where the schools were audited for HPS programme implementation fidelity, using the GDOE evaluation tool. The schools had never been evaluated since accreditation. The gaps in implementation and shortcomings with the evaluation tool were identified.

Other unique contributions were in Phase 2. The study was the first to use grounded theory methods for data collection and analysis in South Africa to evaluate the HPS programme. A programme theory for the local context based on participant experiences, opinions and views was developed. Further, it included the SGB and health promoters in HPS implementation research, which allowed for richer data from all key implementers involved in HPS implementation. It also highlighted the issue of school health programmes in participating schools and the district.

An additional contribution was in Phase 3. The study used an international and local expert panel to refine the framework. The framework can be used in COT and adapted in other school settings to implement and evaluate the HPS programme. It can be used by the government, academics, and schools to improve HPS implementation and evaluation.

Moreover, the study has shown that implementation of the programme is poor in the local context. There needs to be improved collaboration between government, schools, and private partners in order to improve implementation and evaluation. The findings have contributed to the narrowing of the knowledge gap in an under-researched area and

provided a body of evidence that can be used to inform policy on school health programmes and advocacy for programme expansion.

9.5 Study recommendations

The findings showed that schools cannot implement the programme successfully alone; there needs to be strengthened collaboration between the three pillars of HPS implementation, which includes the government (national, provincial and district), the schools, and private partners (business and academics). The study makes the following recommendations:

Government

- There need to be collaborative plans, regular meetings, and feedback on the implementation processes between DOH and GDOE. The DSD also needs to be engaged in the plans. Furthermore, the government departments need to involve academic institutions in plans to implement the school health policy in schools.
- Government departments involved in policy development need to ensure that the policy expectations are in line with the available resources. School health services were poorly implemented in COT due to a limited number of healthcare workers allocated to schools annually. Other resources necessary for implementation, such as infrastructure and equipment, were reported as a barrier to implementation. The government departments need to increase resources to schools and improve maintenance mechanisms.
- Poor understanding and knowledge of the policy by the implementers was a barrier to implementation. This indicated the lack of policy dissemination to implementers at all levels. The national government needs to ensure that there are structured and regular policy dissemination meetings at all levels of implementation.
- Untrained implementers, especially incompetent school management and LS educators, hindered implementation. All implementers need to be trained and there needs to be skills development for educators who are responsible for implementing health education as part of the LS subject. Health promoters need to be trained to facilitate the implementation of the programme in schools.

- Academic institutions need to be involved in the training of implementers and the development of health education manuals for the LS module. In studies where academics had developed context-specific health education manuals and trained implementers in using them, implementation had been successful.
- Findings showed that schools lacked guidance to effectively implement the programme. Implementers did not know what was expected of them or how to achieve policy expectations. The DOH and GDOE district offices need to get more involved in the daily implementation of the programme at schools. This can be achieved by having frequent health promotion meetings with school management and assigning all schools with a full-time health promoter, who will discuss school progress with the district office.
- There were no accountability measures in place for the implementation of the programme. Implementation extent seemed to be at the discretion of the school principals. Implementation in declared health promoting schools needs to be mandatory, and schools need to account to the district office and the province on their implementation efforts.
- The health of educators in schools needs to be addressed via the school health policy and not treated as an individual matter as it currently is in schools. Health services that form part of the policy need to be made available to educators, and this needs to be communicated to all educators and school management, as well as the service providers.
- Programme evaluation and feedback needs to be a continuous process conducted by the province and district office. Academic institutions also need to be involved in evaluation work to improve the quality of findings. The schools in COT had never been evaluated; participants in this study reported the need for evaluation feedback in order to identify gaps and improve their implementation efforts.

Schools

- Schools were not able to implement all the indicators on the tool to meet the criteria for health promoting schools. It is recommended that school management adapt the

school health policy to each context. The district office needs to support schools' development of their own core indicators that would be feasible in their context.

- Schools should establish HPS committees to facilitate their health activities and programmes.
- School management and the HPS committee should develop innovative strategies to improve parental and community engagement with the school. Schools that had better relationships with parents/community performed better as parents offered various services to the schools.
- School management, the educators and the HPS committee need to find ways of involving learners in health-related school programmes.
- Each school should have a school calendar that incorporates the national, provincial and district health plans and has school-specific health activities and events.
- Schools that had good relationships with private businesses performed better as the businesses provided them with necessary items that the department had not provided. School management needs to develop and strengthen relationships with local and private business and partners to supplement their budget.
- School management needs to build a good relationship with health service providers in the schools and develop a good referral system amongst the service providers.
- The SGB at each school needs to develop creative strategies for fundraising. Schools that had an SGB fund performed better as they used the funds to hire more staff at the schools, which improved school outcomes.

Further research

- The first recommendation for future research is to conduct a study on the validity and the reliability of the current tool in order improve its quality and develop core indicators for implementation in the South African context.
- Another suggestion related to the tool is for a study that will develop a tool that will monitor and evaluate learners' opinions regarding changes in health promoting schools in COT.
- Research needs to be done on the health status of learners and how this can be improved using the HPS framework.

- A study is suggested that will compare the implementation fidelity across the different provinces in South Africa, to assess similarities and differences in implementation and inform national policy development.
- Action research in HPS implementation is recommended as it improves implementer involvement and accountability towards the programme and improves acceptability of the study recommendation.

9.6 Conclusion

South Africa has been experiencing poor health and academic outcomes amongst school-going-age children, despite the various international and regional declarations to which SA is signatory, as well as national policy and legislative mandates. In order to comply with these policies and regulations, South Africa has pledged to “put the children first”. This pledge and plans by the government to improve the lives of school children is found in the ISHP, which is the guiding document for school health programmes. It aims to improve the health and learning outcomes of learners through the provision of school health services.

The ISHP introduced the WHO health promoting school programme to address learners’ health challenges. It is a school health programme that has been shown to improve learners’ health in settings where it is implemented properly. The HPS programme has also been endorsed because it is a whole-school approach and involves the whole school community to improve health outcomes, unlike previous programmes that treated learners’ health at the individual level. Studies have shown that school programmes that look beyond the individual learners to include the school, family, and community—which all influence the learner’s health choices—were far superior in improving lifelong healthy lifestyles.

The HPS programme has been adopted widely in South Africa, but evidence still shows no significant improvement in the health and educational achievements of learners. The school system is fraught with poor academic achievement, high rates of violence, a high number of teenage pregnancies, and malnutrition. The impetus for this study was to understand what schools were doing in regard to the implementation of the school health policy, looking specifically at the HPS programme.

The study made use of a mixed methods sequential research design comprised of three separate phases. Mixed methods were used to get a better understanding of the phenomenon and allow for corroboration of findings. The quantitative findings were used to develop questions for the qualitative study. Using different methods and various data sources also allowed for triangulation, which improved the richness of the data. Phase 1 was an audit of the participating schools. The findings showed that the implementation of the tool was poor across schools, largely due to lack of knowledge of the policy by the implementers, poor school leadership, and lack of resources. Phase 2 used grounded theory methods of data collection and analysis. Grounded theory was used because school health programmes are an under-researched area in South Africa. The intention of the study was therefore to develop a programme theory for the local context, instead of using or testing an already-existing international theoretical framework. An FGD was conducted with health promoters, and individual interviews were held with the school principals, SGB members and LS educators. The findings showed five core categories which were identified from the data: (1) preparation is key, (2) need for continuous training of implementers, (3) achieve teamwork, (4) address barriers to implementation, and (5) evaluate progress and give feedback. The central category was “lack of guidance and accountability”, chosen as the category that tied all the aspects of the findings together. There needs to be improved guidance and accountability for implementation of the programme at schools.

Phase 3 used a consensus method to refine the developed framework. Experts were invited to an e-Delphi technique panel to assist in refining the framework. The framework showed that there are three pillars to HPS implementation, namely government, schools, and private partners. These three pillars need to collaborate in order to achieve implementation success. Currently, schools have been left to their own devices to implement the policy—the involvement of the two other pillars has been weak. Government (DOH and GDOE) is supposed to be the leader in the process of implementation, but their performance of their roles has been inadequate. The study concludes that it is feasible for schools to implement some aspects of the HPS framework if these three pillars collaborate.

Lastly, COVID-19 has had devastating effects on the school system. Due to the rotational system, learners have missed out on school time and educators were overwhelmed trying

to finish the curriculum. The lockdowns resulted in increased break-ins at the schools and increased hunger amongst learners who depended on the NSFS. If schools had what the ISHP and the HPS framework requires—namely enough space in the classrooms, adequate handwashing facilities, efficient security, and good relationships with parents/community—some of the challenges brought on by COVID-19 would have been averted or at least minimised. Going forward, the government and schools need to work towards mitigating these challenges, lest they should cause further adverse health and educational outcomes in an already poorly performing school system. So far, the country seems to be far off from achieving goal 3 and 4 of the 2030 Sustainable Development Goals.

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APPENDIX 1: DECLARATIONS, KEY ACTS AND REGULATIONS

International declarations

<ul style="list-style-type: none"> • The Alma Ata (1978)
<ul style="list-style-type: none"> • The Ottawa Charter on Health Promotion (1986)
<ul style="list-style-type: none"> • United Nations Convention on the Rights of the Child (1989)
<ul style="list-style-type: none"> • African Charter on the Rights and Welfare of the Child (1990)
<ul style="list-style-type: none"> • Jakarta Declaration on Leading Health Promotion into the 21st Century (1997)
<ul style="list-style-type: none"> • The 5th Global Ministerial Conference Mexico (2000)
<ul style="list-style-type: none"> • The Bangkok Charter for Health Promotion in a Globalized World (2005)
<ul style="list-style-type: none"> • The Nairobi Call to Action on Health and Development (2009)
<ul style="list-style-type: none"> • The WHO/AFRO Strategy for Health Promotion in the Africa Region (2012)
<ul style="list-style-type: none"> • The Helsinki Statement on Health in All Policies (2013)
<ul style="list-style-type: none"> • Sustainable development goals 2030 (2015)

South African key acts and regulations

<ul style="list-style-type: none"> • The Constitution of the Republic of South Africa (No. 108 of 1996)
<ul style="list-style-type: none"> • The National Health Act (No. 61 of 2003)
<ul style="list-style-type: none"> • The National Development Plan 2030 (2013)
<ul style="list-style-type: none"> • The 10-point plan (mass mobilization to intensify health promotion programmes to improve health) (2010/11-2012/13)
<ul style="list-style-type: none"> • Negotiated Service Delivery Agreement (NSDA) (2010-2014)
<ul style="list-style-type: none"> • The National Health Insurance (NHI) (2016)

APPENDIX 2: ETHICAL APPROVAL



Faculty of Health Sciences

Institution: The Research Ethics Committee, Faculty Health Sciences, University of Pretoria complies with ICH-GCP guidelines and has US Federal wide Assurance.

- FWA 00002567, Approved dd 22 May 2002 and Expires 03/20/2022.
- IORG #: IORG0001762 OMB No. 0990-0279 Approved for use through February 28, 2022 and Expires: 03/04/2023.

22 September 2020

Approval Certificate Annual Renewal

Ethics Reference No.: 609/2019

Title: A process evaluation study of health promoting schools in Gauteng, South Africa

Dear Ms NA Mbatha

The **Annual Renewal** as supported by documents received between 2020-08-21 and 2020-09-16 for your research, was approved by the Faculty of Health Sciences Research Ethics Committee on 2020-09-16 as resolved by its quorate meeting.

Please note the following about your ethics approval:

- Renewal of ethics approval is valid for 1 year, subsequent annual renewal will become due on 2021-09-22.
- Please remember to use your protocol number (609/2019) on any documents or correspondence with the Research Ethics Committee regarding your research.
- Please note that the Research Ethics Committee may ask further questions, seek additional information, require further modification, monitor the conduct of your research, or suspend or withdraw ethics approval.

Ethics approval is subject to the following:

- The ethics approval is conditional on the research being conducted as stipulated by the details of all documents submitted to the Committee. In the event that a further need arises to change who the investigators are, the methods or any other aspect, such changes must be submitted as an Amendment for approval by the Committee.

We wish you the best with your research.

Yours sincerely

Dr R Sommers

MBChB MMed (Int) MPharmMed PhD

Deputy Chairperson of the Faculty of Health Sciences Research Ethics Committee, University of Pretoria

The Faculty of Health Sciences Research Ethics Committee complies with the SA National Act 61 of 2003 as it pertains to health research and the United States Code of Federal Regulations Title 45 and 46. This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki, the South African Medical Research Council Guidelines as well as the Guidelines for Ethical Research: Principles Structures and Processes, Second Edition 2015 (Department of Health)

Research Ethics Committee
Room 4-00, Level 4, Tswelopele Building
University of Pretoria, Private Bag x323
Gezina 0031, South Africa
Tel +27 (0)12 356 3084
Email: deepika.behari@up.ac.za
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Fakulteit Gesondheidswetenskappe
Lefapha la Disaense tsa Maphelo

APPENDIX 3: GAUTENG DEPARTMENT OF EDUCATION RESEARCH PERMISSION



GAUTENG PROVINCE
Department: Education
REPUBLIC OF SOUTH AFRICA

8/4/4/1/2

GDE RESEARCH APPROVAL LETTER

Date:	22 February 2021
Validity of Research Approval:	08 February 2021– 30 September 2021 2019/379A
Name of Researcher:	Mbatha NA
Address of Researcher:	Unit 12 Wilde Sering Amandasig Pretoria North
Telephone Number:	079 688 9582
Email address:	mbathanothando@yahoo.com
Research Topic:	A process evaluation study of health promoting schools in Gauteng ,South Africa
Type of qualification	Doctoral Degree
Number and type of schools:	13 Primary Schools
District/s/HO	Tshwane North and Tshwane South

Re: Approval in Respect of Request to Conduct Research

This letter serves to indicate that approval is hereby granted to the above-mentioned researcher to proceed with research in respect of the study indicated above. The onus rests with the researcher to negotiate appropriate and relevant time schedules with the school/s and/or offices involved to conduct the research. A separate copy of this letter must be presented to both the School (both Principal and SGB) and the District/Head Office Senior Manager confirming that permission has been granted for the research to be conducted.

The following conditions apply to GDE research. The researcher may proceed with the above study subject to the conditions listed below being met. Approval may be withdrawn should any of the conditions listed below be flouted:

1. Letter that would indicate that the said researcher/s has/have been granted permission from the Gauteng Department of Education to conduct the research study.

Making education a societal priority

Office of the Director: Education Research and Knowledge Management

7th Floor, 17 Simmonds Street, Johannesburg, 2001
Tel: (011) 355 0488

Email: Faith.Tshabalala@gauteng.gov.za
Website: www.education.gpg.gov.za

2. The District/Head Office Senior Manager/s must be approached separately, and in writing, for permission to involve District/Head Office Officials in the project.
3. **Because of COVID 19 pandemic researchers can ONLY collect data online, telephonically or may make arrangements for Zoom with the school Principal. Requests for such arrangements should be submitted to the GDE Education Research and Knowledge Management directorate. The approval letter will then indicate the type of arrangements that have been made with the school.**
4. **The Researchers are advised to make arrangements with the schools via Fax, email or telephonically with the Principal.**
5. A copy of this letter must be forwarded to the school principal and the chairperson of the School Governing Body (SGB) that would indicate that the researcher/s have been granted permission from the Gauteng Department of Education to conduct the research study.
6. A letter / document that outline the purpose of the research and the anticipated outcomes of such research must be made available to the principals, SGBs and District/Head Office Senior Managers of the schools and districts/offices concerned, respectively.
7. The Researcher will make every effort obtain the goodwill and co-operation of all the GDE officials, principals, and chairpersons of the SGBs, teachers and learners involved. Persons who offer their co-operation will not receive additional remuneration from the Department while those that opt not to participate will not be penalised in any way.
8. Research may only be conducted after school hours so that the normal school programme is not interrupted. The Principal (if at a school) and/or Director (if at a district/head office) must be consulted about an appropriate time when the researcher/s may carry out their research at the sites that they manage.
9. Research may only commence from the second week of February and must be concluded before the beginning of the last quarter of the academic year. If incomplete, an amended Research Approval letter may be requested to conduct research in the following year.
10. Items 6 and 7 will not apply to any research effort being undertaken on behalf of the GDE. Such research will have been commissioned and be paid for by the Gauteng Department of Education.
11. It is the researcher's responsibility to obtain written parental consent of all learners that are expected to participate in the study.
12. The researcher is responsible for supplying and utilising his/her own research resources, such as stationery, photocopies, transport, faxes and telephones and should not depend on the goodwill of the institutions and/or the offices visited for supplying such resources.
13. The names of the GDE officials, schools, principals, parents, teachers and learners that participate in the study may not appear in the research report without the written consent of each of these individuals and/or organisations.
14. On completion of the study the researcher/s must supply the Director: Knowledge Management & Research with one Hard Cover bound and an electronic copy of the research.
15. The researcher may be expected to provide short presentations on the purpose, findings and recommendations of his/her research to both GDE officials and the schools concerned.
16. Should the researcher have been involved with research at a school and/or a district/head office level, the Director concerned must also be supplied with a brief summary of the purpose, findings and recommendations of the research study.

The Gauteng Department of Education wishes you well in this important undertaking and looks forward to examining the findings of your research study.

Kind regards



Mr G. M. Mukatuni
Acting CES: Education Research and Knowledge Management

DATE: 23/02/2021

APPENDIX 4: SCHOOL PERMISSION TO CONDUCT RESEARCH

Study title: A process evaluation study of health promoting schools in Gauteng, South Africa

Principal Investigator: Nothando Mbatha

Supervisor: Professor McCrindle and Dr Shirinde

Institution: University of Pretoria

DATE AND TIME OF INFORMED CONSENT DISCUSSION:

dd	month	year

:
Time

Dear Prospective Research Participant

Dear Mr / Ms / Mrs

1) INTRODUCTION

You are invited to volunteer for a research study. I am doing this research for Doctoral degree purposes at the University of Pretoria. The information in this document is provided to help you to decide if you would like to participate. Before you agree to take part in this study, you should fully understand what is involved. If you have any questions, which are not fully explained in this document, do not hesitate to ask the researcher. You should not agree to take part unless you are completely happy with the kind of questions that will be asked.

2) THE NATURE AND PURPOSE OF THIS STUDY

The aim of this study is to explore and describe the implementation of the health-promoting school approach. By doing so I wish to learn more about how the approach is implemented at your school and how it can be improved.

3) EXPLANATION OF PROCEDURES AND WHAT WILL BE EXPECTED FROM PARTICIPANTS

This study involves answering some questions regarding how your school is implementing the health-promoting school approach, since you were declared a health-promoting school. We would like you to complete the Gauteng Department of Education health-promoting school accreditation questionnaire (checklist). It will take approximately 2 hours to complete. The researcher will be primarily responsible for completing the questionnaire but will need your assistance with some questions. After completing the questionnaire, you will be given the opportunity to read it and comment on it. The researcher will keep the completed questionnaires in a safe place to make sure that only people working on the study will have access to it. Please do not write your name on the questionnaire. This will ensure that your answers are kept confidential (so nobody will know what you have answered).

The questionnaire consists of 3 parts:

The Gauteng Department of Education health-promoting school questionnaire involves answering some questions about the school's:

Part 1: Curriculum, teaching and learning.

Part 2: School organization, environment, and ethos

Part 3: Partnership and services

4) RISK AND DISCOMFORT INVOLVED

There is no foreseeable physical discomfort or risk involved. If there are questions that are too sensitive for you to answer, you do not need to answer them.

5) POSSIBLE BENEFITS OF THIS STUDY

This study may help improve the implementation of the health-promoting school approach.

6) ETHICS APPROVAL

This Protocol was submitted to the Faculty of Health Sciences Research Ethics Committee, University of Pretoria, Medical Campus, Tswelopele Building, Level 4-59, Telephone numbers 012 356 3084 / 012 356 3085 and written approval has been granted by that committee. The study has been structured in accordance with the Declaration of Helsinki (last update: October 2013), which deals with the recommendations guiding doctors in biomedical research involving humans. A copy of the Declaration may be obtained from the investigator should you wish to review it.

7) INFORMATION

If you have any questions about this study, you should contact: Nothando Mbatha (0796889582, mbathanothando@yahoo.com)

8) CONFIDENTIALITY

All records from this study will be regarded as confidential. All results will be published or presented in such a way that it is not possible to identify the participants.

9) COMPENSATION

You will not be paid to take part in the study. There are no costs involved for you to be part of the study.

10) CONSENT TO PARTICIPATE IN THIS STUDY

- I confirm that the person requesting my consent to take part in this study has told me about the nature and process, any risks or discomforts, and the benefits of the study.

APPENDIX 5: GAUTENG DEPARTMENT OF EDUCATION AUDIT TOOL



education
Department: Education
GAUTENG PROVINCE

HEALTH PROMOTING SCHOOLS ACCREDITATION TOOL

Name of the School: _____

Physical Address: _____

Telephone Number: _____

Fax: _____

Name of the Principal: Mr. / Ms _____

School HPS Coordinator: Mr. / Ms _____

No. of Educators: _____

No. of General Assistants: _____

No. of Learners: _____

District Official/ s: Health 1. _____

Education 2. _____

Date of the first visit: ____ / ____ / ____

Requirements: 1= Not Yet Achieved; 2= Partially Achieved;
3= Satisfactory; 4= Outstanding

1. Environment and Safety		1	2	3	4
1.1	Is the environment clean, safe and supportive?				

2.	Are the classrooms conducive to learning and teaching?				
2.1.	Is there adequate space in the classroom for learners to move freely?				
2.2	Is there adequate furniture?				
2.3	Is there sufficient ventilation?				
2.4	Is there enough lighting?				
2.5	Cleanliness of classrooms.				
2.6	Windows, floors, doors status, exposed wiring.				
2.7	Are HPS skills infused in the curriculum?				
2.8	Are IEC materials (e.g. posters) displayed in the classrooms?				
3.	Hygiene and Sanitation				
3.1	Is there adequate ablution?				
3.2	Is it functional?				
3.3	Does the school have hand washing facilities?				
3.4	Is the sewage system intact, no leaks or spillages (pit, flush etc.)?				
	How does the school promote personal hygiene?				
3.5	Is there toilet paper?				
3.6	Does the school have adequate hand washing facilities?				
3.7	Refuse disposal:				
3.8	Recycling programme in place?				
3.9.	Is there a sick bay for boys and for girls?				
4.	Water supply and safety				
4.1	Is the water clean and safe for drinking purposes?				

Comments: _____

5.	Nutrition:				
5.1	Cleanliness of the kitchen.				
5.2	Food storage				
5.3	Menu displayed				
5.4	Menu nutritious and supplemented by food garden / donations				

5.5	Cleanliness of the tuck shop / vendor stalls				
5.6	Did vendors undergo any training?				
5.7	Sales of vendors approved/ monitored				
5.8	Type of food sold (tuck shop/ vendors)				
5.9	Is there space / room reserved for learners to sit and eat lunch?				
5.10	Safety precautions e.g. Fire extinguisher; Posters				

Comments: _____

6. General Safety and Security:					
6.1	Is access to the school controlled? (e.g., gates always locked, access register)				
6.2	School perimeter fenced and fencing intact.				
6.3	Playgrounds condition.				
6.4	Greening of the environment				
6.5	Evacuation Plan in place?				
6.6	Fire extinguisher accessible and in good working order?				
6.7	Signage displayed e.g., toilets, admin block				
6.8	Road safety practiced?				

Comments: _____

7. Policies		1	2	3	4
7.1	Does the school have a Health and Safety Policy?				
7.2	The vision and mission of the school; does it incorporate HPS activities?				
7.3	Are HPS activities in cooperated in the School Improvement Plan				
Policies in place					
7.4	HIV & AIDS				
7.5	Drug and Substance Abuse				
7.6	Tobacco				

7.7	Code of Conduct (Learners & Staff)				
7.8	Communicable Diseases				
7.9	First Aid				
7.10	Are policies accessible to all stakeholders?				
7.11	Are policies mediated and implemented?				
8.	General:				
8.1	Is there a functional School Health sub-committee within SBST or within any available structure in the school?				
8.2	Is there evidence of minutes?				
8.3	Does school have a school health calendar / HPS activities plan				

Comments _____

9. Skills Development		1	2	3	4
9.1	Staff Development Plans include health related matters.				
9.2	Evidence of implementation as indicated in the Staff Development Plan.				
9.3	Evidence of monitoring and support within the school.				
	Learner development				
9.4	Learner performance in the school				
9.5	Healthier choices				
9.6	Learner participation in school health programmes.				
9.7	Learner behaviour (recorded incidents)				
9.8	Are there any Peer Programmes in place?				
9.9	Is there a community skills development programme?				
9.10	Are learners actively engaged in physical activity e.g. mass based activities, indigenous games, inter schools competition.				

Comments: _____

10. Community /Parental Involvement	1	2	3	4
--	----------	----------	----------	----------

1.	Is the SGB committed to health promoting activities in the school?				
2.	Does the rest of the school community support health activities/ programmes in the school?				
3.	Are community leaders involved in health promoting activities?(ward councillors youth leaders etc.				

Comments: _____

SERVICES					
1.	Does the school work in partnership with the following :				
1.1	Department of Health and Social Development				
1.2	Department of Agriculture & Rural Development				
1.3	Department of Water Affairs and Forestry				
1.4	Department of Safety and Security (SAPS)				
1.5	NGOs and FBOs				
1.6	Referral Systems e.g. SANCA				
1.7	Sports, Arts and Recreation				
1.8	Department of Transport				
1.9	Municipality (Local government)				

Comments: _____

Assessment Date: -----/-----/-----

Accreditation Date: ____ / ____ / ____

Signatures:

Principal: _____

SH Coordinator: _____

Health District Official: _____

GDE District Official: _____

Approved by : _____

Date: _____

APPENDIX 6: STATISTICAL SUPPORT LETTER

LETTER OF CLEARANCE FROM THE BIOSTATISTICIAN

This letter is to confirm that the student(s), with the Name(s) Nothando Mbatha Studying at the School of Public Health, University of Pretoria discussed the Project with the title "A process evaluation study of health promoting schools in Gauteng, South Africa" with me.

I hereby confirm that I am aware of the project and undertake to assist with the Statistical analysis of the data generated from the project.

The analytical tool(s) that will be used will be descriptive presenting frequencies, proportions and associated 95% confidence intervals for the measurements or characteristics. In addition, principal component analysis will be used to identify the degree of importance of individual subdomain measurements and the main domains. The level of compliance among the schools will be evaluated and presented as scores for each of the 11 domains identified among the 13 Health Promotion Schools found in Tshwane, Gauteng. Furthermore, the inter-relationship between the 11 main domains will be presented using correlation analysis and multivariate analytical method called Cluster analysis. The methods enumerated above will assist the researcher in the development of the Conceptual framework of the implementation procedure. Stata 15 will be used in the analysis to achieve the objective(s) of the study.

Sample

The research will be carried out administering the Standardized Questionnaire to all the Health Promotion Schools in Tshwane.

Name SAS Olorunju

Signature 

Department or Unit: Biostatistics, SAMRC, Pretoria Office.

Date 13/08/2019

Tel: 012 339 8553

SA MEDICAL RESEARCH COUNCIL
Biostatistics Unit
P/Bag X385
Pretoria RSA 0001
Tel: 012 339 8523
Official Stamp of
Biostatistician

APPENDIX 7: FOCUS GROUP DISCUSSION CONSENT FORM

Study title: A process evaluation study of health promoting schools in Gauteng, South Africa

Principal Investigator: Nothando Mbatha

Supervisor: Professor McCrindle and Dr Shirinde

Institution: University of Pretoria

DAYTIME AND AFTER-HOURS TELEPHONE NUMBER(S):

Daytime number/s: 0796889582

Afterhours number: 0796889582

Date and time of informed consent discussion:

date	month	year

:
Time

Dear Prospective Participant

Dear Mr. / Mrs.

1) INTRODUCTION

You are invited to volunteer for a research study. I am doing this research for doctoral degree purposes at the University of Pretoria. This document gives you information in this document is provided to help you decide if you would like to participate. Before you agree to take part in this study you should fully understand what is involved. If you have any questions, which are not fully explained in this document, do not hesitate to ask the investigator. You should not agree to take part unless you are completely happy about what we will be discussing during the focus group discussion.

2) THE NATURE AND PURPOSE OF THIS STUDY

The aim of this study is to explore and describe the implementation of the health-promoting school approach.

Part of the study will be a focus group discussion. A focus group is where a few people – usually about 8 or 10 – get together with the researcher to discuss a specific topic. The discussion will be arranged at a time that is convenient to you and will take place in Pretoria.

3) EXPLANATION OF PROCEDURES AND WHAT WILL BE EXPECTED FROM PARTICIPANTS

If you agree to participate, you will be asked to participate in a focus group discussion which will take about 2 hours minutes. You and the other participants will be asked some questions about your opinion about the challenges that affect you as implementers of the health-promoting school approach and to get your suggestions on how the approach can be better implemented.

We will not ask any questions about your personal experience. With your permission, the discussions will be recorded on a recording device to ensure that no information is missed.

4) RISKS AND DISCOMFORTS INVOLVED

We do not think that taking part in the study will cause any physical or emotional discomfort or risk.

You do not have to share any knowledge you are not comfortable with.

If questions feel too personal or make you uncomfortable, you do not have to answer them.

5) POSSIBLE BENEFITS OF THIS STUDY

You will not benefit directly by being part of this study. But your participation is important for us to better understand how the health-promoting school approach is currently being implemented.

The information you give may help the researcher improve the implementation of the health-promoting school approach future.

6) COMPENSATION

You will not be paid to take part in the study. However, any cost you have because of taking part in the study, for example transport costs will be paid back to you (reimbursed).

7) VOLUNTARY PARTICIPATION

The decision to take part in the study is yours and yours alone. You do not have to take part if you do not want to. You can also stop at any time during the interview without giving a reason. If you refuse to take part in the study, this will not affect you in any way.

8) ETHICAL APPROVAL

This study was submitted to the Research Ethics Committee of the Faculty of Health Sciences at the University of Pretoria, Medical Campus, Tswelopele Building, Level 4-59, telephone numbers 012 356 3084 / 012 356 3085 and written approval has been given by that committee. The study will follow the Declaration of Helsinki (last update: October 2013), which guides doctors on how to do research in people. The researcher can give you a copy of the Declaration if you wish to read it.

9) INFORMATION ON WHO TO CONTACT

If you have any questions concerning this study, you should contact:

Nothando Mbatha (0796889582, mbathanothando@yahoo.com)

10) CONFIDENTIALITY

We will not record your name anywhere and no one will be able to connect you to the answers you give. Your answers will be linked to a fictitious code number, or a pseudonym (another name) and we will refer to you in this way in the data, any publication, report or other research output.

All records from this study will be regarded as confidential. Results will be published in medical journals or presented at conferences in such a way that it will not be possible for people to know that you were part of the study.

The records from your participation may be reviewed by people responsible for making sure that research is done properly, including members of the Research Ethics Committee. All of these people are required to keep your identity confidential. Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records.

All hard copy information will be kept in a locked facility at the Faculty of Health Sciences on the 6th floor at the University of Pretoria, for a minimum of 10 years and only the research team will have access to this information.

Although all participants of the focus group discussion will be requested to keep the discussion confidential, the researcher cannot guarantee that they will do so. I therefore request that you do not disclose any information of a very personal or sensitive nature.

10) CONSENT TO PARTICIPATE IN THIS STUDY

- I confirm that the person requesting my consent to take part in this study has told me about the nature and process, any risks or discomforts, and the benefits of the study.
- I have also received, read, and understood the above written information about the study.
- I have had adequate time to ask questions and I have no objections to participate in this study.
- I am aware that the information obtained in the study, including personal details, will be anonymously processed, and presented in the reporting of results.
- I understand that I will not be penalized in any way should I wish to discontinue with the study and my withdrawal will not affect my treatment and care.
- I am participating willingly.
- I have received a signed copy of this informed consent agreement.

Participant's name (Please print)

Date

Participant's signature

Date

Researcher's name (Please print)

Date

Researcher's signature

Date

I understand that the focus group discussion will be audiotaped. I give consent that it may be audio recorded.

YES

NO

APPENDIX 8: INDIVIDUAL IN-DEPTH INTERVIEW CONSENT FORM

Study title: A process evaluation study of health promoting schools in Gauteng, South Africa

Principal Investigator: Nothando Mbatha

Supervisor: Professor McCrindle and Dr Shirinde

Institution: University of Pretoria

DAYTIME AND AFTER-HOURS TELEPHONE NUMBER(S):

Daytime number/s:

Afterhours number:

DATE AND TIME OF FIRST INFORMED CONSENT DISCUSSION:

date	month	year

:
Time

Dear Prospective Participant

Dear Mr. / Mrs.

1) INTRODUCTION

You are invited to volunteer for a research study. I am doing this research for doctoral degree purposes at the University of Pretoria. This document gives information about the study to help you decide if you would like to participate. Before you agree to take part in this study, you should fully understand what is involved. If you have any questions, which are not fully explained in this document, do not hesitate to ask the investigator. You should not agree to take part unless you are completely happy about what we will be discussing during the interview.

2) THE NATURE AND PURPOSE OF THIS STUDY

The aim of this study is to explore and describe the implementation of the health-promoting school approach. By doing so I wish to learn more about how the approach is implemented at your school and how it can be improved.

You will be interviewed by the researcher in a place that is private and easy for you to reach.

3) EXPLANATION OF PROCEDURES AND WHAT WILL BE EXPECTED FROM THE PARTICIPANTS

If you agree to participate, you will be asked to participate in an individual interview which will take about 45 minutes to 1 hour. The individual interview will be a one-on-one meeting between the two of us. I will ask you several questions about the research topic. This study involves answering some questions such as your daily involvement in implementation the approach, your challenges with the implementation and what you would suggest to improve the implementation.

With your permission, the interview will be recorded on a recording device to ensure that no information is missed.

4) RISKS AND DISCOMFORTS INVOLVED?

We do not think that taking part in the study will cause any physical or emotional discomfort or risk.

5) POSSIBLE BENEFITS OF THE STUDY

You will not benefit directly by being part of this study. But your participation is important for us to better understand how the health-promoting school approach is currently being implemented.

The information you give may help the researcher improve the implementation of the health promoting school approach future.

6) COMPENSATION

You will not be paid to take part in the study. There are no costs involved for you to be part of the study.

7) VOLUNTARY PARTICIPATION

The decision to take part in the study is yours and yours alone. You do not have to take part if you do not want to. You can also stop at any time during the interview without giving a reason. If you refuse to take part in the study, this will not affect you in any way. You will still receive standard care and treatment for your illness.

8) ETHICAL APPROVAL

This study was submitted to the Research Ethics Committee of the Faculty of Health Sciences at the University of Pretoria, Medical Campus, Tswelopele Building, Level 4-59, telephone numbers 012 356 3084 / 012 356 3085 and written approval has been given by that committee. The study will follow the Declaration of Helsinki (last update: October 2013), which guides doctors on how to do research in people. The researcher can give you a copy of the Declaration if you wish to read it.

9) INFORMATION ON WHO TO CONTACT

If you have any questions about this study, you should contact: Nothando Mbatha (0682228450) mbathanothando@yahoo.com)

10) CONFIDENTIALITY

We will not record your name anywhere and no one will be able to connect you to the answers you give. Your answers will be linked to a fictitious code number, or a pseudonym (another name) and we will refer to you in this way in the data, any publication, report, or other research output.

All records from this study will be regarded as confidential. Results will be published in medical journals or presented at conferences in such a way that it will not be possible for people to know that you were part of the study.

The records from your participation may be reviewed by people responsible for making sure that research is done properly, including members of the Research Ethics Committee. All of these people are required to keep your identity confidential. Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records.

All hard copy information will be kept in a locked facility at the Faculty of Health Sciences on the 6th floor at the University of Pretoria, for a minimum of 10 years and only the research team will have access to this information.

11) CONSENT TO PARTICIPATE IN THIS STUDY

- I confirm that the person requesting my consent to take part in this study has told me about the nature and process, any risks or discomforts, and the benefits of the study.
- I have also received, read, and understood the above written information about the study.
- I have had adequate time to ask questions and I have no objections to participate in this study.
- I am aware that the information obtained in the study, including personal details, will be anonymously processed, and presented in the reporting of results.

APPENDIX 9: FOCUS GROUP DISCUSSION GUIDE

Demographics

Demographics		
Date:	Time:	Place:
How long have you been working as a health promoter? <ul style="list-style-type: none"> <input type="radio"/> Less than 2 years <input type="radio"/> 2 years to 5 <input type="radio"/> More than 5 years 	How long have you been working as a health promoter with health promoting schools? <ul style="list-style-type: none"> <input type="radio"/> Less than 2 years <input type="radio"/> 2 years to 5 <input type="radio"/> more than 5 years 	How many schools are you servicing in the district? <ul style="list-style-type: none"> <input type="radio"/> 1 school <input type="radio"/> 2 schools <input type="radio"/> More than 2
In which district do you work: <ul style="list-style-type: none"> <input type="radio"/> Sub-district 1 <input type="radio"/> Sub-district 2 <input type="radio"/> Sub-district 3 	Your age: <ul style="list-style-type: none"> <input type="radio"/> 30-40 <input type="radio"/> 41-50 <input type="radio"/> 51-60 <input type="radio"/> Over 60 	Gender: <ul style="list-style-type: none"> <input type="radio"/> Male <input type="radio"/> Female

Discussion Script

Question 1	How long have you been working with HPS in Tshwane?
Question 2	What are the responsibilities/functions of a health promoter within HPS?
Question 3	Did you get any training specific to HPS?
	<ul style="list-style-type: none"> ○ If so, is it continuous? ○ Do you think it was adequate?
Question 4	What is your view of HPS?
	<ul style="list-style-type: none"> ○ Is it something that schools need?
Question 5	What has been your experience so far, the challenges and strengths?
Question 6	Do you think environmental and social contexts of your particular school/s have an impact on the success of HPS?
Question 7	What is your relationship with the school community and management in the schools and the district (in health and education)?
Question 8	How in your opinion can HPS implementation be improved?

APPENDIX 10: SEMI-STRUCTURED INTERVIEW STUDY GUIDE/PRINCIPAL

TOPIC: A process evaluation study of health promoting schools in Gauteng, South Africa

SEMISTRUCTURED INTERVIEW GUIDE used on PRINCIPALS

Date of interview	
School identification	
Respondent identification	
Number of years involved with HPS	
Gender	<input type="radio"/> Male <input type="radio"/> Female
Name of interviewer	

As the principal/deputy/HOD you are part of implementing the health promotion activities by teaching health education.
General experience
-Did you know that your school is a health promoting school?
-Does your school have a health promoting school committee or a committee that organizes health promotion activities? <ul style="list-style-type: none"> -Who are the members -Are you a member?
-Which school health policies do you use to promote health at your school? <ul style="list-style-type: none"> -What are your feelings on the practicality of these policies?
Curriculum
-Are you aware of the health education provided during LS class? - What is your opinion on the topics taught in LS to promote health? <ul style="list-style-type: none"> -What topics do you think are the most important/priority in your school community -Do LS teachers know their roles and responsibilities with regards to health promotion or health promoting schools? -What challenges as a principal/deputy have you encountered with the teaching of LS <ul style="list-style-type: none"> -How would you suggest improving these challenges -What support do LS teachers need (training, material)
Health promotion activities
-Are you involved in any way in implementing the health promotion activities? <ul style="list-style-type: none"> -What has been your role in these activities -Do you think that the activities are effective? -What challenges does your school face? <ul style="list-style-type: none"> -What would you suggest to improve them?
-What do think about the role of leadership in health education and health promotion activities in your school? <ul style="list-style-type: none"> -You as the principal, -SGB,

-The district office and DBE
The social, physical, and environmental factors
-What challenges are in the community around the school that affect the school and learners and teaching? -crime, poverty, theft, abuse
-Is the food sold by vendors a problem to learners healthy eating? -What can be done to deal with this problem? -Do you think food gardens are important for schools? -What are the challenges with schools starting food gardens? -Do you think your school needs to have physical activities? -How can physical activity be incorporated into the school plans and who should be responsible for it? -How do you think the physical conditions of your school affect the health of learners? -Toilets, condition of playgrounds, lack of departmental transport?
Families, community, and interdepartmental engagement
-What are the challenges regarding building relationships with the parents and communities? -If relationship is good, what is the advantage of these relationships -Any suggestions on improving this relationship -How can relationships with private partners be improved? -Business, NGOs,
Health services

- Do you think that the services provided by DOH and DSD are adequate?
 - Which health workers visit the schools?
 - What would you suggest regarding DOH and DSD for improved health?
(Frequency of visits, involvement with the school activities)
- Are the health needs of teachers taken into consideration within the school services?
 - What type of services would teachers appreciate?
- What are the most prevalent/common health problems that learners need help with?
- Do you have a relationship with a health promoter?

Evaluation and sustainability
-Do you know anything about how your school was accredited as a health promoting school?
-What do you think of the accreditation process? -recruiting of the school, planning, resources, support from district
-Have you received any feedback on how your health promotion activities have improved the learners and the school? -Would you appreciate the feedback?

Thank you... I will be in touch with you to give you a full report.

APPENDIX 11: SEMI-STRUCTURED INTERVIEW STUDY GUIDE/SGB

TOPIC: A process evaluation study of health promoting schools in Gauteng, South Africa

SEMISTRUCTURED INTERVIEW GUIDE used on SGB members

Date of interview	
School identification	
Respondent identification	
Number of years involved with HPS	
Gender	<input type="radio"/> Male <input type="radio"/> Female
Name of interviewer	

General experience

Did you know that your school is a health promoting school?

Does your school have a health promoting school committee or a committee that organises health promotion activities?

Who are the members

Are you a member?

Which school health policy are you aware of?

Curriculum

As an SGB member do you have any understanding of how health topics should be taught in the LO class?

Were you have made aware of any challenges that the teachers experienced in the LO class?

-teacher training, skills, time, resources (material to teach)

<p>What health topics would you suggest as important for learners in your particular school?</p>
<p>Health promotion activities (as the SGB body)</p>
<p>Have you been involved as the SGB in implementing health promotion activities? -Please explain your role and the activities you are involved in as the SGB. Or if not, why?</p>
<p>Do you think that the activities are effective? Please explain</p>
<p>What would you suggest to improve them?</p>
<p>Leadership/management role</p>
<p>What do think about the role of leadership in health education and health promotion activities in your school? -Principal, district office, DBE and DOH</p>
<p>Do you get enough support from DBE and DOH for health promotion activities? -Please explain</p>
<p>What is your role as the SGB in the school? -leadership, funding, forming relationships with other stakeholders, implementing school policies</p>
<p>What are the most important challenges that you face in working with and in schools regarding the implementation of school health policies?</p>
<p>The social, physical, and environmental factors</p>
<p>What challenges in the community around the school that affect the school, learners, and teaching? -Crime, poverty, theft, abuse, drugs -Do these challenges affect the health of the learners and the community?</p>
<p>Is the food sold by vendors a problem to learners healthy eating? - What can be done to deal with this problem?</p>
<p>Do you think food gardens are important for schools?</p>

- What are the challenges for schools to start and maintain food gardens?
Do you think your school needs to have physical activities? - How can physical activity be incorporated into the school plans and who should be responsible for it?
How do you think the physical conditions of your school affect the health of learners? - Toilets, condition of playgrounds, lack of departmental transport?
Why have these issues no been addressed?
Families, community, and interdepartmental engagement
What are the challenges regarding building relationships with the parents and communities? -If the relationship is good between schools and parents and the community, what would the advantage of this? -Any suggestions on improving this relationship
Does the school have a relationship with private partners? How can this relationship be improved? -Local business, NGOs
Health services
Which healthcare workers visit the school?
Do you think that the services provided by DOH and DSD are adequate?
What would you suggest regarding DOH and DSD to help improve health services? -frequency of visits, involvement with the school activities
What are the most prevalent/common health problems that learners need help with?
Do you as the SGB have a relationship with a health promoter?
Evaluation and sustainability

Do you know anything about how your school was accredited as a health promoting school?

Have you received any feedback on how your health promotion activities have improved the learners and the school?

- Would you appreciate the feedback?

Thank you... I will be in touch with you to give you a full report.

APPENDIX 12: SEMI-STRUCTURED INTERVIEW STUDY GUIDE/EDUCATORS

TOPIC: A process evaluation study of health promoting schools in Gauteng, South Africa

SEMISTRUCTURED INTERVIEW GUIDE used on LIFE SKILLS EDUCATORS

Date of interview	
School identification	
Respondent identification	
Number of years involved withHPS	
Gender	<input type="radio"/> Male <input type="radio"/> Female
Name of interviewer	

As an LS teacher you are part of implementing the health promotionactivities by teaching health education.

General experience

Did you know that your school is a health promoting school?

Does your school have a health promoting school committee or a committee that organizes health promotion activities?

Who are the members

Are you a member?
Which school health policy are you aware of?
Curriculum
As an LO teacher were your roles and responsibilities explained with regards to health promotion or health promoting schools?
How do you implement health promotion activities as an LO teacher?
What have been your experience with teaching health education? -Challenges, teacher training, skills, time allocation, resources (material to teach)
What topics have you found challenging and you need training on?
What would you suggest to improve health education?
What topics would you suggest as important for your learners?
Health promotion activities
Outside of the LS class, are you involved in any way in implementing health promotion activities? -Please explain what activities you are involved in. Or if not, why?
Do you think that the activities are effective? Please explain
What would you suggest to improve them?
What do think about the role of leadership in health education and health promotion activities in your school? -Principal, SGB, district office, DOE,
The social, physical, and environmental factors
What challenges are in the community around the school that affect the school and learners and teaching? -Crime, poverty, theft, abuse)
Is the food sold by vendors a problem to learners healthy eating? - What can be done to deal with this problem?
Do you think food gardens are important for schools? - What are the challenges with schools starting food gardens?
Do you think your school needs to have physical activities? - How can physical activity be incorporated into the school plans and who should be responsible for it?

APPENDIX 13: DELPHI STUDY INVITATION LETTER

Re: Invitation to participate in Delphi expert panel

Topic: Process evaluation of health promoting schools in Tshwane, South Africa

I am a PhD student with the University of Pretoria, Faculty of Health Sciences and Public Health Systems in Gauteng, South Africa. I am conducting my study on “Process evaluation of health promoting schools in Tshwane, South Africa” under the supervision of Professor C. McCrindle and Dr J. Shirinde.

There is a large body of evidence showing the potential benefits of the health promoting school (HPS) program in settings where it is properly implemented, with low-income countries having been shown to have more to benefit from the program. In South Africa, the program has been adopted and included in the school health policy for implementation across the country. However, schools that have been implementing the program in the City of Tshwane (COT) have not evaluated the program since accreditation. Therefore, there is no knowledge of what is being done, to what extent and by whom and there is no understanding of barriers and facilitators to implementation. This means that there can be no advocacy for the expansion of the program. This study aimed to bridge the knowledge gap in HPS implementation processes and provide policy makers with science-based evidence of program implementation in the local context.

The study was conducted in 3 phases, with each phase having its own specific objective and they are:

- Phase1: Assess and describe the extent of implementation of the HPS program across COT health promoting schools, using an audit tool

- Phase 2: Collect and analyze data on the experiences, views, perceptions, and opinions of key stakeholders using grounded theory methods
- Phase 3: Refine the HPS implementation framework for COT schools, using the Delphi technique

Phase 1

To evaluate the schools, the study conducted audits on health promoting schools in COT. The Gauteng Department of Basic Education audit tool based on the 6 action areas of the HPS framework was used in this study to evaluate the current state of implementation. Audit findings showed that implementation of the HPS program was disappointing; implementation fidelity was low in COT schools.

Phase 2

The second phase of the evaluation included grounded theory methods of data collection, to get the perceptions, views, and experiences of the key implementers. The findings of this phase correlated the findings of phase 1, with regards to poor implementation. The main reasons for poor implementation included poor implementer understanding of the school health policy and its associated programs; and poor implementation guidance and support from management within the schools and in government. The findings also showed that program implementation is feasible in COT, if the government improved its capacity to guide and support schools; and schools increased their capacity to implement the program. External stakeholders such as academic institutions and private businesses were also found to be an important factor in implementation success, their involvement with schools should be strengthened. With the findings of the audits, the participants in phase 2 and the reviewed literature, the study developed a conceptual framework to guide government and schools in planning and implementing HPS activities and to improve program monitoring and evaluation.

Phase 3

The third phase of the study aims to refine the proposed conceptual framework by getting consensus of experts in health promoting schools and monitoring and evaluation of school health programs through the use of the Delphi technique.

The proposed framework is based on 3 pillars or outcomes, with accompanying activities to achieve each of the outcomes. The experts are requested to rate the framework and make comments via email correspondence. These ratings and comments will be used to refine the framework.

Two rounds of the technique have been planned for the study; however, if consensus is not reached in two rounds, a third round will be included. The experts are requested to respond to the first round in 1 to 2 weeks. After this round, comments received will be collated and analyzed for further validation in round two. Experts will be sent the feedback and are requested to respond to the second round in 1-2 weeks as well. Any information provided by experts as part of this study will remain confidential in accordance with the University of Pretoria guidelines. A report of the findings will be sent to the participating experts after completion of study.

You are invited to participate in the refinement of the HPS implementation framework. Your expert inputs in this regard will improve the depth of the framework. The Delphi technique was appropriate in this study as it allowed for both local and international experts to give inputs to refine the framework. Twelve to twenty experts from across the globe, in the fields of education, health and in academia are expected to participate in this study.

- Experts who agree to participate in the study will be sent a consent form, the Likert scale for rating the framework and the proposed framework via email.

We look forward to your participation and request that you indicate your willingness to participate, by answering with a YES to this email. Thereafter, all the appropriate paperwork will be emailed to you.

If there are any inquiries regarding the study and/or your participation. Please contact me or my supervisors.

Nothando Mbatha, cell +27682228450 or email
at u15414362@tuks.ca.za or mbathanothando@yahoo.com
Professor McCrindle, email at cheryl.mccrindle@gmail.com
Dr Shirinde, email at joyce.shirinde@up.ac.za

APPENDIX 14: DELPHI TECHNIQUE CONSENT FORM

Study title: A process evaluation study of health promoting schools in Tshwane, South Africa

Principal Investigator: Nothando Mbatha

Supervisor: Professor McCrindle and Dr Shirinde

Institution: University of Pretoria

DAYTIME AND AFTER-HOURS TELEPHONE NUMBER(S):

Daytime number/s: 0682228450

Afterhours number: 068228450

Date and time of informed consent discussion:

date	month	year

:
Time

Dear Prospective Participant

Dear.....

1) INTRODUCTION

You are invited to volunteer for a research study. I am doing this research for doctoral degree purposes at the University of Pretoria. This document gives you information to help you decide if you would like to participate. Before you agree to take part in this study you should fully understand what is involved. If you have any questions, which are not fully explained in this document, do not hesitate to ask the investigator. You should not agree to take part unless you are completely happy about what we will be discussing in the expert panel correspondence.

2) THE NATURE AND PURPOSE OF THIS STUDY

The aim of this phase is to refine the HPS implementation framework for the health-promoting school program in Tshwane, South Africa. The study was conducted in three phases; the third phase of the study is the Delphi technique. The Delphi technique seeks expert consensus on a specific topic. Participating experts will be sent questionnaires via email, to which they will respond to and send their correspondence back to the researcher via email.

3) EXPLANATION OF PROCEDURES AND WHAT WILL BE EXPECTED FROM PARTICIPANTS

If you agree to participate, you will be asked to participate as an expert in a series of two rounds of questionnaires, which will take about 4 weeks overall. You and the other experts will be asked to assist in refining the health promoting school implementation framework developed for this study. We will not ask any questions about your personal experience.

4) RISKS AND DISCOMFORTS INVOLVED

We do not think that taking part in the study will cause any physical or emotional discomfort or risk.

You do not have to share any knowledge you are not comfortable with. If questions feel too personal or make you uncomfortable, you do not have to answer them.

5) POSSIBLE BENEFITS OF THIS STUDY

You will not benefit directly by being part of this study, however your participation is important for us to refine the health-promoting school program.

6) COMPENSATION

You will not be paid to take part in the study.

7) VOLUNTARY PARTICIPATION

The decision to take part in the study is yours and yours alone. You do not have to take part if you do not want to. You can also stop at any time during the interview without giving a reason. If you refuse to take part in the study, this will not affect you in any way. You will still receive standard care and treatment for your illness.

8) ETHICAL APPROVAL

This study was submitted to the Research Ethics Committee of the Faculty of Health Sciences at the University of Pretoria, Medical Campus, Tswelopele Building, Level 4-59, telephone numbers 012 356 3084 / 012 356 3085 and written approval has been given by that committee.

9) INFORMATION ON WHO TO CONTACT

If you have any questions concerning this study, you should contact:

Nothando Mbatha (0682228450, u15414362@tuks.ca.za)

10) CONFIDENTIALITY

We will not record your name anywhere and no one will be able to connect you to the answers you give. All records from this study will be regarded as confidential. Results

will be published in medical journals or presented at conferences in such a way that it will not be possible for people to know that you were part of the study.

The records from your participation may be reviewed by people responsible for making sure that research is done properly, including members of the Research Ethics Committee. All of these people are required to keep your identity confidential. Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records.

All hard copy information will be kept in a locked facility at the Faculty of Health Sciences on the 6th floor at the University of Pretoria, for a minimum of 10 years and only the research team will have access to this information.

10) CONSENT TO PARTICIPATE IN THIS STUDY

- I confirm that the person requesting my consent to take part in this study has told me about the nature and process, any risks or discomforts, and the benefits of the study.
- I have also received, read, and understood the above written information about the study.
- I have had adequate time to ask questions and I have no objections to participate in this study.
- I am aware that the information obtained in the study, including personal details, will be anonymously processed, and presented in the reporting of results.
- I understand that I will not be penalized in any way should I wish to discontinue with the study and my withdrawal will not affect my treatment and care.
- I am participating willingly.
- I have received a signed copy of this informed consent agreement.

Participant's name (Please print)

Date

Participant's signature

Date

Researcher's name (Please print)

Date

Researcher's signature

Date

APPENDIX 15: DELPHI STUDY DEMOGRAPHIC DETAILS

1. Professional qualification	
2. Occupation	
3. Employer	
4. Experience in: The health promoting schools program OR school health programs OR monitoring and evaluation (Please indicate years and field)	