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**The effect of school feeding programmes among school-going children in Khayelitsha,
Cape Town**

by

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DECLARATION

I declare that *The effect of school feeding programmes among school-going children in Khayelitsha, Cape Town* is my original work submitted at the Institute for Social Development, University of the Western Cape. This work has never been submitted before and will never be submitted to any other University for a similar degree. All the sources, articles and quotes used have been fully referenced and appropriately acknowledged.

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DEDICATION

I would like to dedicate this work to my late parents, Mr Zolani Sindi and Mrs Phathiswa Nonkosithandile Sindi. I am this strong woman because of the words that you have instilled in me at a young age. Your words have kept me going, I did not even have a choice to give up but to keep going and make sure that I make you proud wherever you are. I know how happy you were going to be to see your product striving even in difficult times. Thank you, bazali bam.



ABSTRACT

School feeding programmes (SFPs) are known as a significant form of social protection that seeks to address food insecurity and educational improvement worldwide. This study seeks to evaluate the school feeding programmes in Khayelitsha, Cape Town to examine the potential effects that they have on educational improvement as well as food security among school-going children. In addition, the study determines the general effects of school feeding programmes, including challenges that the programmes encounter; it then provides recommendations on how the identified challenges can be solved. This study used the theory of change to examine the effects of school feeding programmes in Khayelitsha. It employed a qualitative research approach and collected data using semi-structured interviews and observation. The study had 21 participants, including three school principals, six parents, six educators and six food handlers.

The existing literature has shown that school feeding programmes have played a significant role in food security – improving nutritional status and food consumption; reducing short-term hunger; increasing school enrolment and attendance; and enhancing class participation and academic performance. Furthermore, the findings from this study indicate that school feeding programmes have achieved their goals, especially for children from poor backgrounds in Khayelitsha. The educational effects include enhancing parental motivation; increasing school attendance; making school premises an equal space; increasing school enrolment, to name a few. In addition, the food security effects include reduced hunger through in-school and take-home meals; improved nutritional status; saved costs; and increased food consumption.

The study also identified limitations and challenges that the feeding programmes are facing. They include stigma attached to the feeding programme, theft and shortage of resources, quantity of food, using teachers as school food coordinators, providing limited kinds of vegetables and fruit and scarcity of land and water to sustain school food gardens. Furthermore, the study provided suggestions on what can be done to solve the challenges. These include employing food coordinators in each school, providing enough water to maintain school gardens and providing food parcels.

Keywords: food insecurity, Khayelitsha, children, education, school feeding, school feeding programme

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ABBREVIATIONS AND ACRONYMS

AUC:	African Union Commission
BMI:	Body Mass Index
CHH:	Child-headed household
DBE:	Department of Basic Education
ECA:	Economic Commission for Africa
EPWP:	Expanded Public Works Programme
FAO:	Food and Agriculture Organization
IFAD:	International Fund for Agricultural Development
NSNP:	National School Nutrition Programme
SFP:	School Feeding Programme
SSA:	Sub-Saharan Africa
Stats SA:	Statistics South Africa
TOC:	Theory of Change
UNICEF:	United Nations Children's Fund
UWC:	University of the Western Cape
WFP:	World Food Programme
WHO:	World Health Organization



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CHAPTER 1: INTRODUCTION

1.1 Introduction

Food insecurity has been identified as a factor that hinders the success of many children from poor backgrounds (Swartz, 2009). This is because for a child to be able to concentrate in class there must be a meal that the child gets first (Daitai, 2017). However, for many children facing the challenge of food insecurity, that is impossible; hence, many countries have implemented school feeding programmes (SFPs) as one of the forms to address food insecurity. The existing literature has shown that the programmes are playing a vital role in ensuring that children from disadvantaged homes are not left behind in school (Kristjansson et al., 2006). Food insecurity in South Africa has been identified as a social issue that affects several households. For example, Stats SA (2022a) states that 10.1 million people in South Africa were affected by moderate food insecurity while 4.1 million individuals were affected by severe food insecurity in 2019.

Mbatha, Ndimande and Tembe (2021) further argue that during covid-19 purchasing power was low while food prices and food demand increased due to the disruption of the food system. The same study states that this negatively affected food accessibility as the majority of South African citizens lost their jobs and income because people were ordered to stay at home due to the intense lockdown. This indicates that Covid-19 worsened food insecurity in South Africa as the majority of people lost their jobs and were unable to meet their basic needs such as buying food and thus did not have access to food. Therefore, this chapter contextualises food insecurity as a problem in South Africa in general, and in Khayelitsha in particular. It also defines school feeding and describes Khayelitsha as a case study area. In addition, it outlines the significance of the study and the background of the case study area. In conclusion, it presents the problem statement and the chapter outline.

1.2 Background of the case study area

Khayelitsha has been chosen as the study area of this research. Khayelitsha is a township 30km away from Cape Town (Chen et al., 2010). The township was established in 1983 and Dr Piet Koornhof, who was the Minister of Cooperation and Development, announced the plans to build and establish Khayelitsha (Khayelitsha Commission Report, 2014). According to the 2011 census, the population of Khayelitsha was 391,749 with 118,809 households and the

dominating racial makeup is Black Africans with a percentage of 98.6%, followed by 0.6% of Coloureds, 0.1% of Whites, 0.1% of Indians, and 0.6% of others (Stats SA, 2011). The township has a high number of people who are food insecure. In support of this, Battersby (2011) shows that less than 10% of households in Khayelitsha were food secure while 80% of households were either moderately or severely food insecure. Seekings (2013) indicates that half of the population lives in informal houses and another half in informal shacks and the majority of people in Khayelitsha are surviving through social grants. The Khayelitsha Commission Report (2014) further states that according to SASSA, about 10,000 disability grants, 87,000 child grants and 11,000 pension grants were paid out in December 2013 in Khayelitsha.

Furthermore, Stats SA (2011) found that 9.8% of young adults have completed some primary education, and 30.7% completed secondary education while only 4.9% have tertiary education. Due to this, they are negatively affected by unemployment and food insecurity due to lower skills, and those who work are working in unskilled employment such as being cleaners and contract workers (Seekings, 2013). This indicates that for a person to be able to compete in the labour market, they need valuable skills that will assist them to enter the labour market. Seekings (2013) asserts that the crime rate is very high and as a result, streets are very dangerous, during both day and night. This means that people look for other ways – either bad or good – to survive and support their families. This research collected data in this township as it is focused on food security and educational improvement.

1.3 Defining school feeding

Drake et al. (2015) define school feeding as the provision of food, given and served to school-going children. The meals are either provided, to be taken home, or served to be eaten at school, or both, in some countries. In-school feeding is where children are served meals to eat at school while take-home rations are where children who attend school are given food to take home to their households (WFP, 2013).

1.4 Significance of the study

The main aim of this study was to identify and show the role of school feeding programmes in Khayelitsha. Also, the study examined the general effects, limitations and challenges of school meals. Lastly, it provides recommendations that can be implemented to improve the current school feeding programme in progress. According to Seekings (2013), Khayelitsha is one of the townships in the Western Cape with a high poverty rate, widespread unemployment, a high

population rate and a low education rate. These are contributing and causing factors of food insecurity and thus Khayelitsha has been chosen as a study site.

This study allowed school principals, educators, food handlers and parents to raise their views and concerns over school feeding programmes in their schools. This study shows whether SFPs have a significant impact to address food insecurity and educational failure among school-going children in Khayelitsha. Furthermore, the study seeks to inform analysts and policymakers about the role of school feeding programmes and how they can be improved in ensuring that the goals of the programmes are achieved. Also, this study seeks to make policymakers aware of the limitations and challenges faced by SFPs and how the shortcomings can be addressed. Additionally, this research project can be useful to researchers, academics, and students.

Furthermore, this study focuses on high schools rather than primary which many studies on school meals have been conducted on. In addition to that, Araya et al. (2020) state that school feeding programmes were first introduced in primary schools and then later in secondary schools also known as high schools. Also, the effect of school feeding programmes in high schools in Khayelitsha is not known. Therefore, this study shows the effect of school feeding programmes in high schools in Khayelitsha and in general. Moreover, Morgan, Gliner and Harmon (1999) state that research should increase knowledge; therefore, this research will add knowledge to the existing literature on school feeding programmes in the Western Cape in particular and in South Africa in general.

1.5 Problem statement

The South African Human Rights Commission (SAHRC, 2017) states that people have the right to adequate living, food, education, and nutrition. For example, section 27 (1) (b) covers the right to enough and adequate food, section 28 (1) (c) emphasises the right to basic nutrition for children, and section 29 (1) (a) points out the right to basic education (Stats SA, 2019). However, despite the political transition and the stated rights to food, education, and nutrition, the country is still facing challenges, such as food insecurity among children (Labadarios et al., 2011). In support of this view, Dei (2014) argues that poor households are facing the challenge of not having enough food to feed all family members and that negatively affects children.

Stats SA (2011) further revealed that 74% of households were surviving through a monthly income of R3,200 or less. Human (2022) states that the value of child support grants increased

to R480 from R460 in April 2022. On the other hand, the Pietermaritzburg Economic Justice and Dignity Group (2022) argues that in April 2022 the child support grant was 23% below the poverty line and 40% below the average cost to secure a basic nutritious diet for a child. The Pietermaritzburg Economic Justice and Dignity Group (2022) also shows that while the minimum wage is R3,339.36, the subtotal of core food increased from R2,227.18 in April 2021 to R2,414.19 in April 2022. The monthly cost of a basic nutritious diet for a family of four is R3,139.37; it is R3,967.67 for a household size of five members and for a household size of seven members it is R5,485.62. By considering these amounts, it shows that most of the households are still food insecure because the minimum wage is below the total cost of food per household; it is not sufficient for a household to survive.

Moreover, Stats SA (2014) explained that in 2011 poor households spent R8,485 (33.5%) of total household expenditure on food and non-alcoholic beverages while non-poor households only spent R14,020 (10.38%) on food and non-alcoholic beverages. This means that poor households spend more money on food and are forced to buy food of poor quality; they tend to focus on quantity rather than quality because they purchase food that will last for the whole month. Therefore, children from those poor households are significantly affected by hunger and are eating food that is not nutritious enough. May (2014) observes that three out of five children living in poor households are exposed to malnutrition and as a result, those affected fail to attend school regularly. With a lack of sufficient food, children tend to be negatively affected as they are not fully developing, which could lead to irreparable mental stunting (Swartz, 2009).

The poverty headcount by age showed a big difference in poverty between adults and children. Adults between 45-55 years had a percentage of 42.2% while children between 0-17 years had a percentage of 68.8%, confirming that hunger was 26.6% higher amongst children than adults in 2015 (Stats SA, 2017). Stats SA (2019) further reports that in 2017 about 6.8 million South Africans experienced hunger and households that have no children reported 80.8% of high adequate access to food, 14.3% of inadequate access and 4.9% of severe inadequate access, while households with three or more children reported less adequate access to food of 62.8%, 29.6% of inadequate access to food and the high percentage of severe inadequate access of 7.6%. This shows that families that have children are more likely to have challenges in accessing food. Consequently, children go to school with an empty stomach due to lack of food at home as the whole household have to share the food that is already not enough. Thus, it is

obvious that those children will face health issues and cognitive and physical development later in life.

School feeding programmes are therefore regarded as very useful in contributing to improved food security and learning outcomes in South Africa. However, there is a lot that needs to be done in terms of tackling the challenges that are faced by the programmes. The challenges include mismanagement of funds, lack of training of stakeholders (particularly food handlers), delay in feeding, poor quality and quantity of food (Mafugu, 2021). Thus, the officials responsible for the programmes need to revise their menus, fix the problem of mismanagement of funds, improve the quality and quantity of meals served to learners, provide equipment for schools in rural areas, and provide sufficient training to the stakeholders.

It is unclear whether the school feeding programmes have made significant progress in addressing the challenges of food insecurity amongst the targeted population in Khayelitsha. Thus, the researcher investigated whether school feeding programmes play a significant role in food security, educational improvement and whether progress has been made amongst learners who benefit from the programme from the three high schools under review in Khayelitsha. The study assesses the nature and extent of food insecurity amongst the targeted population and identifies challenges limiting the impact of the programme.

1.6 School feeding in Western Cape

Western Cape province has been participating in the school feeding programmes since the programmes were introduced. These programmes are run by different organisations but they have the same goals and serve the same purpose. The main programme is National School Nutrition Programme (NSNP), which is provided and funded by the South African government. According to DBE (2014), Western Cape supported 423 103 learners in Western Cape in 2013. In 2022, Western Cape received a budget allocation of R459 281 000 to support 507 332 learners in 1024 schools (Hlathi, 2023). South African Government (2018) also argues that the Western Cape Government ensures that all the needy learners from the province are fed two meals a day, not one, and many schools support the programme with school food gardens. The same study further notes that the meals include breakfast in the form of maize meal, in different flavours including banana, original and strawberry, and lunch.

The second programme is Peninsula School Feeding Association (PSFA), a non-government organization that started operating since 1958 (Devereux et.al, 2018). The mission of this

organisation is to reduce the prevalence of hunger among school-going children through providing them with food while they are at school (PSFA report, 2022). The same source further argues that the programme's impacts include but are not limited to short-term hunger reduction, improving a child's capacity to learn, increase attendance and academic performance. In addition to that, the programme has achieved significant coverage. In 2017 it managed to support 260 000 learners in 458 NSNP schools, 30 000 learners in 160 PSFA schools, and 26 000 learners in 196 after-school programmes (Devereux et.al, 2018).

The same study continues to say that PFSA provides meals to quintile four and five schools which are not served by NSNP in the Western Cape Metro and Cape Winelands that applied to be part of the programme. Western Cape Education Department monitors the implementation of the programme and also prescribes the programme with a menu even though it is slightly different from the NSNP (Devereux et., 2018). Both of these programmes have a common goal which is to reduce hunger and contribute to educational achievement by serving school meals to learners. However, the focus of this study is only on NSNP.

1.7 Research objectives

The objectives of this research were:

- to examine if there are perceived changes in food security and educational improvement as a result of the school feeding programmes in South Africa, using Khayelitsha as a case study.
- to determine the general effects of school feeding in South Africa, using Khayelitsha as a case study.
- to provide recommendations to policymakers and stakeholders of the school feeding programme on how to improve the school feeding programmes in South Africa, using Khayelitsha as a case study.

1.8 Research questions

This study was guided by the following research questions:

- What are the effects of school feeding programmes on food security and educational improvement among children in Khayelitsha?

- What are the general effects of school feeding programmes in Khayelitsha?
- What can be done to improve the current school feeding programmes in the Western Cape?

1. 9 Chapter outline

Chapter 1: Introduction

This chapter provides the background, history, and a brief discussion of the research problem. It also presents details of the aims, objectives, research questions, and the case study area.

Chapter 2: Literature review

This chapter reviews various empirical and theoretical work previously conducted in the field of study. Furthermore, the empirical review enabled the researcher to identify the gap in the literature and clearly substantiate the significance of and need for the study.

Chapter 3: Theoretical framework

This chapter outlines how the theoretical review led to the development of the theoretical framework for the study.

Chapter 4: Research design and methodology

This chapter discusses the selection of the case study area as well as the tools used in collecting data from the targeted participants. Furthermore, it provides details of the method used in analysing the collected data.

Chapter 5: Data analysis and findings

This chapter presents the overall data analysis and findings in relation to the school-going children impacted by the school feeding programmes in Khayelitsha.

Chapter 6: Conclusion and recommendations

This chapter provides the conclusions of the study as well as recommendations on how to better design the programme to improve its efficacy on food security amongst similar programmes.

1.10 Definition of terms

Food insecurity refers to a state where all people do not have economic, social, and physical access to safe, nutritious and enough food to meet their dietary needs and food preference for a healthy and active life (Fawole, Ilbasmis and Ozkan, 2015).

Khayelitsha is a South African informal township situated in the Cape Flats in the city of Cape Town in the Western Cape province (Seekings, 2013).

Children refer to human beings under the age of 18 years (Meintjes et al., 2009).

Education is the socially and organised continuous process of acquiring and transferring knowledge, skills, beliefs, and values as well as the process of facilitating learning from one generation to the next (Naziev, 2017).

School feeding is the provision of food, served to school-going children.

School feeding programme (SFP) is defined as “a targeted safety net programme designed to provide educational and health benefits to vulnerable children” (Zenebe et al., 2018: 1).

1.11 Conclusion

This chapter discussed the study background and the importance of conducting this research. In addition, the chapter presented the research questions, objectives of the study site – which is Khayelitsha. It also discussed the problem statement, presented the chapter outline and defined the keywords.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The existing literature has shown the significance of school feeding programmes. It has shown that school meals play an important role in keeping children at school, increasing learners' academic performance and attendance while at the same increasing food consumption, reducing short-term hunger and improving nutritional status. This chapter considers food insecurity in Africa, shows the history of school feeding at an international level and in Africa, discusses the global effect on education and food security and provides empirical evidence of school feeding programmes. Additionally, it discusses food insecurity in South Africa, the South African history of school feeding programmes and the effects of school meals.

2.2 Food insecurity in Africa

Sub-Saharan African (SSA) countries have a high prevalence of food insecurity and malnutrition (Drammeh, Hamid and Rohana, 2019). According to the FAO et al. (2021), 282 million people on the African continent are undernourished and all the sub-regions have shown an increase in the prevalence of undernourishment. The prevalence of stunting in 2020 was 41%, with 27% of wasting and 27% of overweight (UNICEF, WHO and World Bank, 2021). However, there are regional differences in food insecurity and malnutrition on the continent. For example, in 2020 middle Africa had the highest prevalence of 36.8% stunted children under 5 years while Northern Africa had a prevalence of 13.0% of overweight and 2.7% of wasting (UNICEF, WHO and World Bank, 2021).

Furthermore, in 2020 Eastern Africa had the highest prevalence of undernourished people of 125.1 million, followed by Western Africa with a prevalence of 75.2 million, Central Africa with 57.1 million and Northern Africa with a prevalence of 17.4 million while Southern Africa has the lowest prevalence of 6.8 million people (FAO, ECA and AUC, 2021). The low prevalence rate in Southern Africa, according to White et al. (2021), is related to the various nutrition and diet improvement programmes enacted by the government. These programmes include fortifying food with necessary nutrients such as vitamin A, iodine, omega and other supplements. The study further comments that one billion people were unable to afford healthy diets in 2019, resulting in child malnutrition steadily increasing in Africa. Food insecurity in developing countries is largely driven by poverty, where people do not have access to sufficient food (Fawole et al., 2015).

2.3 History of global school feeding programmes

According to Tomlinson (2007), the developmental history of school feeding can be traced to European countries. In 1790 two programmes, namely teaching and feeding hungry learners, were introduced in Germany, and France in 1867 (Yendaw and Dayour, 2015). Also, Norway established the Oslo Breakfast in 1897, which provided learners with a loaf of bread, milk, half an orange, and an apple (Kearney, 2010). In the United States, Los Angeles introduced school feeding schemes in 1921, which served unfed children a snack at 10 a.m. or lunch in the afternoon (Gunderson, 2003). According to Kearney (2010), Chicago also introduced a school lunch system in 1921, which served about 31,000 children every day.

In 1929, Mexico started an organisation named the Association for the Protection of Childhood to provide breakfast to poor school-going children (Drake et al., 2015). In the 1940s, Brazil established a programme that targeted needy children and promoted healthy eating habits through educational actions and provided healthy meals to learners (Drake et al., 2015). This programme has since expanded its purpose as it now aims to improve education and biopsychosocial development (Sidaner, Balaban and Burlandy, 2012). Moreover, according to Drake et al. (2015), India also introduced its programme in 1995, with the objective of improving the universalisation of primary education by improving school enrolment and attendance, and improving the nutrition of primary school learners.

2.4 School feeding in Africa

According to the Food and Agriculture Organization (FAO, 2018), African countries such as Kenya, Nigeria, Ethiopia and Malawi also implemented school feeding programmes. Malawi launched a school feeding programme in 1999 with the help of the World Food Programme (WFP) (Nanchukwa and Mphande, 2015). The programme was launched to reduce the effects of seasonal food insecurity and poverty on education (Bundy et al., 2009). In 2005, Nigeria introduced home-grown school feeding and health programmes, which mainly focused on providing school learners with enough meals during the school days to improve the health and nutritional status of school-going children in Nigeria (Taylor and Ogbogu, 2016).

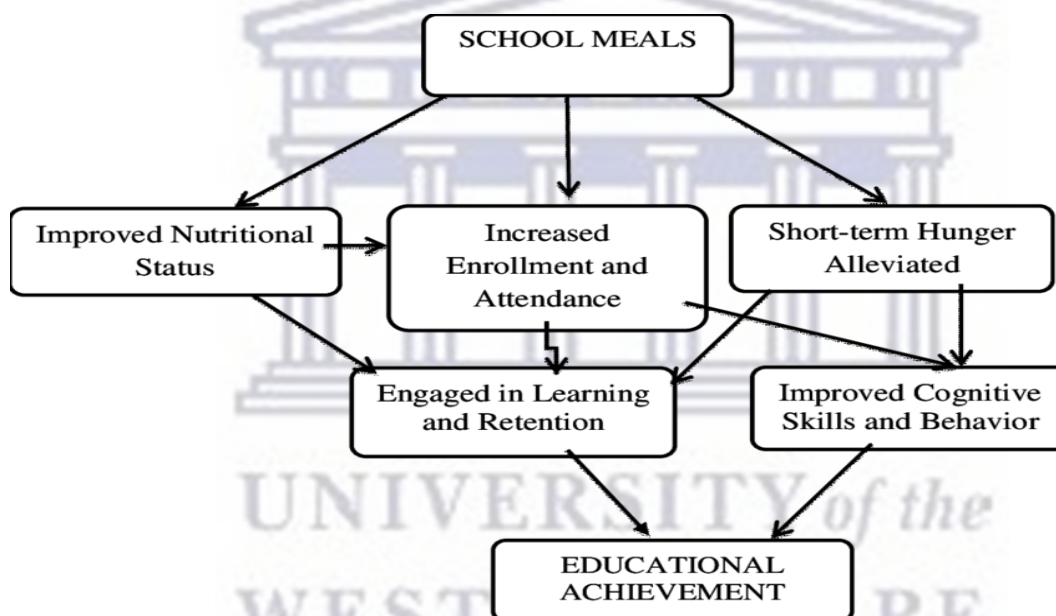
However, the WFP (2013) notes that the quality and coverage of meals vary, depending on the national income. All these programmes share common objectives: to increase school enrolment, performance, and nutritional status by attracting learners to school by using food as

an incentive. It is evident that many countries prioritise food security and as such, try their best to reduce food insecurity among children through school feeding.

2.5 Effects of school feeding programmes on food insecurity and educational failure

According to the WFP (2019), in low- and middle-income countries 310 million children receive daily school meals. For example, the same study continues to say that in India, 100 million children receive daily school meals; in Brazil, the figure is 48 million, and in China, it is 44 million. South Africa and Nigeria feed 9 million children each, on a daily basis (WFP, 2019). Worldwide, 370 million children receive school meals every day (Borkowski et al., 2021).

Figure 1: Potential contribution of feeding schemes to education and food security



Source: Yendaw and Dayour (2015: 345).

Figure 1 shows the potential contribution of the feeding scheme to education: increased engagement in learning; improved cognitive skills, behaviour and educational achievements; short-term hunger alleviation; increased enrolment and attendance; and improved nutritional status.

2.5.1 Improved nutritional status

According to FAO, IFAD and WFP (2015), hunger remains an everyday challenge for almost 795 million people worldwide, including 780 million in developing regions. Thus, the contribution of the school feeding programmes is very important because insufficient food and

nutrition intake could lead to changes in the body, physical functions, and weight which may cause illness and school dropout (Skipper, 2012). Kristjansson et al. (2006) state that feeding schemes do not only attract children to school, but they also improve their immune systems which may impact positively on school attendance.

Lawson (2012) notes that the meals served at school have additional nutrients, such as iron, vitamins A and E, which may be lacking in meals prepared at home. For example, meals from the five main food groups that are served at schools consist of all nutrients needed for a body to function well. Those food groups include dairy – producing calcium, which is found in milk, cheese and yoghurt; fruit and vegetables (such as apples, oranges, carrots and cabbage); carbohydrates – producing starch from bread, rice and samp; proteins – obtained from dried beans, meat and fish. Furthermore, school meals are likely to be rich in vitamin A (from carrots) and iron (from lentils) (Lawson, 2012).

Evidence from Ghana suggests that “energy, nutrient and micronutrient intake were significantly higher and more adequate among children participating in the school feeding programme” (WFP, 2019: 3). These food nutrients are very important in how the body functions. So, school feeding reduces illness among children from poor homes by giving them healthy balanced diets that influence their level of concentration and thus make school more enjoyable (Kristjansson et al., 2006).

Further, the WFP (2013) also noted that in Guyana, the additional nutrients have contributed to the growth of school-going children. Learners from schools with free school meals grew by 0.8 centimetres more than children in schools without school meals. Similarly, Wang and Fawzi (2020) note that children who receive free school meals in lower-income countries gained an average of 0.39 kg of weight in 19 months. Thus, school feeding programmes are an investment in the world as they play a role in reducing health risks for children from poor homes (WFP, 2010).

2.5.2 Alleviation of short-term hunger

According to Lawson (2012), school feeding programmes alleviate short-term hunger, resulting in improved learners’ concentration in the classroom. Children who are served free meals at school are likely to focus in class and acquire learning with understanding. Additionally, the World Bank (2012) has found the same results as it stated that the school feeding programme is one of the safety nets that reduces hunger among school-going children

through the meals served to them. The WFP (2019) also found that well-implemented school feeding programmes have the potential of promoting micronutrient and macronutrient adequacy in a learner's diet and consequently lead to improved nutrition, health, and enhanced learning capacities. For instance, in Peru, a newly introduced breakfast programme was evaluated, and it showed positive effects where it improved dietary intake of iron by 46%, energy by 25% and protein by 28% (Chepkwony, Kariuki and Kosgei, 2013). Nyakundi (2017) further explains that free school meals reduce short-term hunger of learners for the period they are at school by providing more nutrients.

It is therefore evident that if school feeding programmes were not introduced, children were going to be at higher risk of falling into poor nutrition and poverty, which may negatively affect their health and school attendance due to undernutrition complications.

Thus, school meals are a significant form of ensuring that children receive healthy meals daily and consequently, school dropout declines as the meals attract and keep learners at school. If school meals are discontinued, many children would suffer from hunger. Devereux, Bene and Hoddinott (2020) note that Covid-19 affected the functioning of school feeding programmes in countries where schools were closed. Schools are now unable to provide meals to their learners and most of those children are missing or skipping meals, especially those from food-insecure households. UNICEF (2020) further explains that starting from July 2020, it was estimated that 370 million children missed school meals. This shows that if the programmes are stopped, many children would suffer from hunger; this, therefore, shows the significance of school meals.

2.5.3 Increased school attendance and raised enrolment

School feeding programmes have been recognized as an important incentive to keep children at school. Swartz (2009) argues that hunger might be one of the barriers that keep children from opportunities such as being recognized at school through academic achievements. Thus, one of the benefits is increased school attendance, especially for children from poor families. In Bangladesh, fortified biscuits improved school enrolment by 14.2% and reduced the probability of school dropouts by 7.5% (Ahmed, 2004). In Pakistan, school enrolment increased from 73% to 95% and by 20% in Bangladesh, compared to 2% of non-participating schools (Chepkwony, Kariuki and Kosgei, 2013). The WFP (2019) also suggests that the school feeding programme can enhance school enrolment by an average of 9%. In Madagascar,

school attendance increased by 10% over two years from 88% to 98% after the system of take-home meals was introduced. In Guyana, learners' school enrolment and attendance increased by 16% and 4.3% between 2007 and 2009 respectively in the schools with school meals (WFP, 2013).

The World Bank (2012) further explains that children who receive school meals attend 4-7 days more than those who do not receive school meals at all. Moreover, when children are enrolled at school and regularly attend school, both enrolment and attendance increase. Parents also send their children to school because they know that the children will receive meals, which in turn might improve life opportunities for them (Lawson, 2012). Moreover, Bundy et al. (2009) found the same results as they observe that school feeding makes a huge contribution to keeping children at school.

2.5.4 Improved cognitive development

According to Swartz (2009), hunger can lead to irreparable mental stunting. Therefore, increased school attendance as a result of school feeding could result in improved learning and cognitive capacity. The more children are kept at school, the more their learning abilities and cognitive capacity grow, compared to those who do not attend frequently. Thus, their academic performance also improves and consequently, they are exposed to greater opportunities for social networking with peers and adults, and presumably better attitudes towards school (Kristjansson et al., 2006). Better socialised children are more likely to be confident towards everything they do, especially at school – they tend to be energetic and participate in class. By participating in class, the function of cognitive capacity improves, likewise the learning abilities. Therefore, vulnerable children from poor families benefit greatly from school feeding programmes.

2.5.5 Enhanced educational achievements

Various studies have found that there is a relationship between nutrition and academic performance. In this regard, Taylor and Ogbogu (2016) opine that undernutrition negatively impacts growth and mental development in children. Anderson, Gallagher and Ritchie (2018) further argue that nutrition can affect learning through three dimensions, namely behaviour such as hyperactivity, cognition (memory or attentiveness) and physical development such as sight. Lawson (2012) concurs that when children are fed nutritious meals, enrolled at school, and attend school regularly, the improvement in academic results occurs. The change arises

because school-going children become more energetic after being fed, they concentrate more in class, they become motivated and their attitude towards learning changes and improves. They become more encouraged to continue with their studies and that leads to decreased dropout because of the desire to pursue and further their studies.

Ahmed (2004) conducted a study in Bangladesh and notes that there is a positive impact of school feeding on academic performance. The study was conducted using grade 4 results in three subjects, namely Mathematics, Bengali and English. The results showed that due to school meals, test marks increased by 15.7% in the experimental group where English improved by 22.2%, Mathematics by 28.5% and for Bengali, scores improved even though they were not statistically significant.

In Guyana, it was found that learners who receive school meals had higher test scores compared to control learners. According to the WFP (2013), in Mathematics, learners benefitting from school meals had an average of 8.1 and in English 4.2 points higher than comparison learners. This means that there is a strong positive relationship between school feeding programmes and educational achievement (test and examination scores) for Mathematics, cognitive and language scores.

2.5.6 Improved gender equality

School feeding programmes can promote gender equality. However, this is not mentioned in Figure 1. The FAO (2019) maintains that gender inequality roles have negative impacts on women in many countries. The FAO also notes that gender inequality negatively affects women's productivity capacity and restricts their abilities to access labour market opportunities. In most countries, women have burdens of taking care of the household activities, such as housekeeping, childcare and agriculture, not forgetting that they are the same group that has limited access to education, income, resources such as capital and land as well as limited decision-making (FAO, 2019).

This implies that the current and the next generation of young girls are likely to bear this burden. Also, some girls from poor families are the victims of child marriage, which restricts them from getting an education as they are not given the opportunity to complete their education. Molinas and de la Mothe (2010), believe that school feeding creates opportunities such as work and education opportunities for both young boys and girls. However, studies show that girls are the ones who benefit more.

Gelli (2015) found that school feeding programmes have increased school enrolment of girls by 12% among 32 sub-Saharan countries. Similarly, in Madagascar, school feeding programmes have decreased school dropouts of adolescent girls by over 40%, Burkina Faso increased school enrolment of girls between the ages of 6-12 years by 6%, and Niger increased the female graduation rate from 32% in 2013–2014 to 68% in 2014–2015 (WFP, 2019). It is therefore evident that the programmes empower women, and as a result, educated females are more likely to have small, healthy households that are food secure (Molinas and de la Mothe, 2010).

2.5.7 Improved human capital investment

School feeding programmes are also regarded as a form of human capital investment. Children receiving free meals at school are more likely to concentrate, leading to academic improvement, higher qualifications, increased chances of getting jobs, improved capabilities, as well as higher earnings (Molinas and de la Mothe, 2010).

The United Nations Children’s Fund (UNICEF) and the Global Coalition to End Child Poverty (2017) assert that fighting childhood poverty by focusing on children affected by poverty – the root cause of food insecurity – can help to break the chain of generational poverty. This means that the best strategy to avoid the spread of poverty is to focus on children. This is because children who grew up poor are more likely to become poor as adults and parents. UNICEF (2020) suggests that children should eat food from at least five food groups out of eight for them to grow, develop and learn. Thus, having good nutrition could lead to reduced short-term hunger, improved nutrition and cognition in children. (Jomaa, McDonell & Probart, 2011).

2.6 Food insecurity in South Africa

Statistics South Africa (Stats SA, 2019) shows that South Africa is food secure at a national level; however, it has a higher level of food insecurity at the household level. The estimated population in South Africa for 2021 was 60.14 million (Stats SA, 2022b). In addition, Stats SA (2019) reports that in 2017, out of 16.2 million households, 15.8% (2.5 million) households had inadequate and 5.5% (0.9 million) households had severe inadequate access to food. Spaul and Tomlinson (2021) revealed that 600,000 children were experiencing frequent hunger almost every day in 2021. This indicates that children are also affected. In South Africa, access to food is everyone’s right; this is enshrined in the country’s constitution.

2.7 School feeding programmes in South Africa

In South Africa, hunger remains a challenge and due to food insecurity, the state has played a significant role by introducing school feeding programmes as a form of social protection. This helped millions of children to stay at school, improve grades and increase school enrolment.

South African schools are ranked into quintiles, ranging from the poorest – known as quintile one, to quintile five – known as the least poor schools (Spaull, 2013). Schools are ranked based on the school's resources and the community in which school is located. Furthermore, the Department of Basic Education (DBE, 2014) states that in 2004 NSNP included all secondary schools from quintiles 1 to 3, which are the poorest schools due to lack of resources. In this regard, Munje and Jita (2019) note that the new target of the NSNP includes quintiles 1-3 primary and secondary schools and under quintiles 4 and 5 provision is only made to needy learners identified.

Iversen et al. (2012) further state that in South Africa, school feeding programmes serve as a form of social protection and food security with the intention of reducing hunger and poverty and improving educational achievements. This is aligned with section 27 (1) (b) of the constitution on the right to enough and adequate food, with section 28 (1) (c) on the right to basic nutrition for children, and lastly with section 29 (1) (a) on the right to basic education. Furthermore, school feeding has been recognized as one of the best forms of social protection in the country, after social grants (DBE, 2008). Devereux et.al (2018) further argue that school feeding is an important social protection in South Africa, however, it does not receive much attention as other social protection instruments such as social grants.

The DBE (2014) further notes that school feeding in South Africa has a long history that can be traced back to 1916. In the same vein, Swartz (2009) concurs that the school feeding programmes were introduced in early 1916 where the Transvaal Provisional Council's Executive Committee saw the need to raise and provide funds to feed needy children. Subsequently, Kallaway (1996) reports that between 1937 and 1939 three feeding schemes, known as the Dried Fruit Scheme, the Citrus Fruit Scheme and the Milk and Cheese Scheme, were established under this initiative. In other words, the benefits were universal to White and Coloured schools at first but later targeted poor White and Coloured children only (Kearney, 2010). However, Kallaway, (1996) states that in the apartheid era, the national opposition party supported the provision of school meals to poor White children but was opposing the same provision for African children.

In 1943, the United Party officials introduced school feeding in primary schools, which provided all children with free meals, regardless of their race (DBE, 2014). Devereux et al. (2018) comment that in 1958 the Peninsula School Feeding Association (PSFA) was introduced in the Western Cape. The programme provided meals to Coloured schools situated in the Cape flats. The current South African school feeding programme was introduced in 1994 as the Primary School Nutritional Programme (PSNP). It was introduced as one of President Nelson Mandela's 100-days projects under the Reconstruction and Development Plan (RDP) (Devereux et al, 2018). However, the programme was later renamed in 2004 to National School Nutrition Programme (DBE, 2013).

NSNP refers to a nationally funded scheme that serves daily nutritious meals to poor learners during school terms (LRC, 2017). Post-1994, the programme has been housed by the Department of Health (Munje and Jita, 2019). During that period, the programme had two sets of objectives that mainly focused on food security and education. Objectives on food security were to improve health and nutritional status while the educational objectives were to increase attendance, attentiveness, and performance. In 2004, it was transferred from the Department of Health to the Department of Education, placing the emphasis on education (Kallman, 2005).

Aliya, Gelli and Hamdani (2015) explain that the Department of Health assists in drafting school food menus and food is cooked based on the menu for the day. Furthermore, under the Department of Education, the programme has three pillars: feeding, nutrition education and food gardens. The main objective of the feeding pillar is to provide daily nutritious food to learners, while the nutrition education pillar focuses on promoting nutritional knowledge and food choices. The third pillar's concern is to improve food production knowledge and skills, natural resource protection and food for school meals (Devereux et al., 2018).

School feeding programmes involve two models, namely centralised and decentralised models. The centralised model operates in KwaZulu-Natal, Limpopo, Mpumalanga, Gauteng, and Western Cape. The decentralised model operates in Eastern Cape, North West, Free State and Northern Cape (Daitai, 2017). The centralised model has managed to reach three million children and the decentralised model has reached 6.1 million children (DBE, 2016). According to the DBE (2016), under decentralised procurement, the schools are responsible for the appointment of local service providers and enter into agreements with them.

This model allows the provincial education departments to be responsible for transferring the funds to the schools. On the other hand, in the centralised model, the provincial education department is accountable for appointing service providers for the whole province and entering into an agreement with them to deliver food to schools (Daitai, 2017). Therefore, the two models differ in the payment of funds and how they operate, but both models aim to provide nutritious school meals to learners (DBE, 2016).

For effectiveness, it would be better for the country to implement a centralised system for all provinces. This is because a decentralised model is associated with higher risks of fraud since funds are directly transferred to the schools (Daitai, 2017). Provinces that have implemented the decentralised model have faced the challenge of misuse and mismanagement of funds by school principals. For instance, in the Eastern Cape province, there is a challenge reported of funds not being used for what they were designed for, which is the provision of school meals, by school principals (Graham et al., 2015). Therefore, for the programme to be more effective and to avoid the misuse of funds, which causes other challenges, such as poor quality and quantity of school meals served to learners, a centralised model needs to be chosen and implemented for all provinces of the country.

The NSNP has added hot meals to the menu, which includes pap, samp and rice as a starch, butternut and cabbage as vegetables, soup, tinned fish and dried beans as proteins, sour milk (*amasi*) as calcium and fruit – either apples, oranges, or pears (DBE, 2016). The same study indicates that previously it provided fortified biscuits or peanut butter sandwiches. Moreover, school food gardens are one of the strategies used by the NSNP to reduce hunger, while at the same time motivating and making learners aware of healthy diets and eating habits. Laurie, Faber and Maduna (2017) observe that the introduction of school food gardens encourages learners to learn about healthy eating and nutrition, a healthy lifestyle, participating in school food gardens and motivate learners to start their own food gardens.

School food gardens are implemented in all South African provinces. The DBE (2014) shows that between 2013 and 2014 there were 380 food gardens in the Western Cape, 840 in North West, 226 in Northern Cape, 835 in Mpumalanga, 1,709 in Limpopo, 1,469 in KwaZulu-Natal, 144 in Gauteng, 812 in Free State, and 2,322 in the Eastern Cape. The number of school food gardens in the country is 8,737 and, in that number, the Western Cape owns 4.35% of school

gardens, North West 9.61%, Northern Cape 2.59%, Mpumalanga 9.56%, Limpopo 1.56%, KwaZulu-Natal 16.81%, Gauteng 1.65%, Free State 9.29%, and Eastern Cape 26.58%.

When observing the numbers and percentages of school gardens in each province, it appears that the poorest provinces have more school gardens than the less poor provinces. For instance, the Eastern Cape has 2,322 gardens and Limpopo has 1,709 school gardens while Gauteng has only 144 gardens and the Western Cape has 380 gardens. Laurie et al. (2017) explain that Limpopo, Eastern Cape and Mpumalanga have larger school gardens compared to other provinces. The reason for this might be the lack of land in urban areas, as Ncube and Ncube (2016) observed that land in the urban areas is owned by the authorities of the city council and thereby the city laws restrict the free use of land.

2.8 Effects of school feeding programmes in South Africa

Although school feeding receives less attention than other social protection programmes such as social grants, the school feeding programme does play a significant role in addressing food insecurity and educational failure (Devereux et al., 2018). The literature shows that South African school-going children have benefitted in many ways from the school feeding programmes. According to Rendall-Mkosi, Wenhold and Sibanda (2013), the effect of SFPs includes improved learning, attendance, school enrolment, alleviation of short-term hunger, health and nutrition of school-going children.

2.8.1 Educational effects

2.8.1.1 Increased school enrolment and attendance

School feeding programmes in South Africa are playing an important role in increasing enrolment and attendance. For example, a study conducted in the Eastern Cape shows a positive response to attendance from the participating school principals, due to the NSNP intervention. In the interviews, the principals reported that "The numbers of children coming to school regularly have increased since the introduction of the food programme" (Graham et al., 2015: 38). Another principal from a study conducted in Limpopo has a similar view that "Learners are coming to school in numbers since the inception of the SFP" (Muvhango, 2016: 96). This indicates a positive role and the importance that school feeding plays in enhancing school attendance and eliminating school dropouts. Thus, school feeding enables children from different backgrounds to attend school regularly and therefore reduces the gap between those from disadvantaged and less privileged backgrounds and those from privileged backgrounds.

2.8.1.2 Educational achievement

School feeding programmes enable learners to concentrate in class because they eat before going to class. For example, in a study conducted by Graham et al. (2015: 36) in the Eastern Cape, a learner who was asked if they liked the food, replied, “Yes, because it gives me energy.” Another learner from the Limpopo study commented that, “I become strong when I eat the food” (Muvhango, 2016: 98). Thus, once learners are energetic, it is much easier for them to focus, participate at school and get good marks.

2.8.1.3 Nutritional education through school food gardens

School food gardens contribute to making learners aware of healthy eating while at the same time improving their knowledge of a healthy diet. Laurie et al. (2017) found that in Mpumalanga, Eastern Cape and Limpopo, learners who are involved in the school food gardens spend an average of one to four hours per week doing gardening, and the learners have shown an interest in working in the school gardens. Laurie et al. (2017) report that 54% of the learners were involved in food gardens; of these, 48% considered gardening activities as fun and 39% considered the gardening activities as an achievement.

The same study found that learners were happy to see and eat the produce, enjoyed being outside and were strongly willing to learn the new skills empowering them to make gardens and plant food in their gardens at home. As a result, the attitude of learners towards eating vegetables and fruit changed – 84.1% of learners agreed that vegetables taste good; 89.9% agreed that fruit tastes good; 76.1% of learners reported that it is good to eat vegetables of various colours; 68.6% liked to eat vegetables daily; and 84.5% liked to eat fruit every day.

According to the DBE (2014), the importance of school food gardens has been noticed by the big businesses or brands such as Food and Trees for Africa, Fort Cox College of Agriculture, and the Expanded Public Works Programme (EPWP), which partnered with provinces such as the Eastern Cape Provincial Education Department. The same study indicates that the EPWP assisted the school gardens by providing funds for the gardens, while Food and Trees for Africa conducted workshops for educators, learners and gardeners. On the other hand, Fort Cox College of Africa assisted by establishing food gardens. In the Northern Cape province, school food gardens are sustained and encouraged by establishing gardening competitions for schools to enter, where winning schools receive funds between R1,000 and R25,000 that enable the schools to maintain the gardens and buy resources (DBE, 2014). Thus, only schools that have

school food gardens benefit from the school food garden initiative or programme. However, the schools encounter challenges such as poor soil quality, lack of resources and lack of knowledge and skills to manage the gardens (Araya et al., 2020). This affects the maintenance and success of the school food gardens.

2.8.2 Effects of food insecurity

2.8.2.1 Alleviation of short-term hunger and improved nutritional status

School feeding programmes have the potential of reducing short-term hunger. Empirical evidence from a quantitative study conducted in the Eastern Cape (Graham et al., 2015) highlights the impact of school feeding on food consumption and educational improvement.

Forms of hunger alleviation used by school feeding programmes include school food gardens, that provide fresh food to learners. Laurie et al. (2017) conducted a study in one district in all nine South African provinces and found that food produced in school gardens potentially enhances the amount of fruit and vegetables used in school meals served to learners. School food gardens produced 48% of the food that was included in school meals. Additionally, the school and the learners were given seeds to plant at home as an incentive. The same study found that spinach, onions, carrots, cabbage and beetroot were planted in more than 80% of the gardens. This was followed by tomatoes (in more than 67% of the school gardens); beans (59%); lettuce (42%); maize (36%); butternut (20–29%); and peaches (21%). This shows the importance of school gardens contributing to alleviating hunger among school-going children in South Africa.

2.8.3 General effects

2.8.3.1 Relieve the pressure on learners from asking for food from peers

Asking for food from peers is an everyday source of food for some learners and that might reduce the learners' dignity among peers. In such cases, a school feeding programme plays an important role as a form of social protection. Legal Resources Centre (LRC, 2017) conducted a study in nine schools situated in rural areas in the Eastern Cape province and found that school meals alleviate the pressure on learners from asking for food from peers. The food served at school bridges the gap and enables children without lunch boxes to eat without asking from peers.

2.8.3.2 Reliable source of food for low-income learners including child-headed households

Child-headed households (CHHs) have become a widespread phenomenon in South Africa. The death of parents from HIV/AIDS has been recognised as the major cause of this problem. The KwaZulu-Natal (KZN) Department of Human Settlements (2010) conducted research on CHHs and found that there are 37,000 CHHs in the Eastern Cape, 57,000 in Limpopo and 24,000 in KwaZulu-Natal. The high number of CHHs has a negative effect on those affected by food insecurity and by extension, on their education. Langsford (2012) argues that children from child-headed households are more likely to suffer from poor nutrition due to lack of income and nutrition education and as a result, the children's capacity to perform well at school becomes negatively affected. Thankfully, the school feeding programme comes to their rescue.

The Legal Resources Centre (LRC, 2017) conducted research on CHHs in the Eastern Cape in nine schools. A Grade 8 learner from Lutholi Secondary School reported that her parents died, leaving her, her younger sister and her brother – who is a drug addict – to fend for themselves. This learner looked after her sister, who was in Grade 4; they do not receive any social grants and have no household income. The school feeding programme is their source of food when they are at school. Meintjes et al. (2009) found that children from child-headed households attend school regularly and have the same attendance rate of 95%, which has been reported for children in mixed-generational households. The high school attendance rate of children from child-headed households makes it easier for the programme to target and benefit those children.

Tomlinson (2007) observes that school feeding programmes are regarded as an effective tool to reduce the spread of HIV/AIDS infections among school-going children. Burgoyne and Drummond (2008) further argue that the level of education is linked to the lower prevalence of HIV/AIDS, meaning that the more people are educated, the more knowledge they have about HIV/AIDS. Stats SA (2019) reports that the spread of HIV/AIDS among the youth has remained stable from 2002 to 2019. Thus, one may argue that school feeding does not contribute only to food security but also to other factors such as health awareness.

2.8.3.3 Job creation and gender equality

School feeding programmes create jobs while at the same time reducing poverty and gender equality. Devereux et al. (2018) maintain that school feeding programmes create jobs for food handlers and caterers who prepare school meals. They argue that school feeding jobs reduce poverty if jobs are given to poor unskilled people. This plays a major role in reducing poverty

in female-headed households while at the same time reducing gender inequality. For instance, more than 50,000 food handlers work within the NSNP, and the jobs are female dominated (Devereux et al., 2018). Thus, one may argue that the impact of the school feeding programmes transcends the primary benefits to learners, namely education, food security and nutrition. It also presents indirect benefits, such as the creation of job opportunities for caterers and food handlers who get employment from school feeding programmes.

2.9 Challenges to the school feeding programme

According to the Public Service Commission (PSC, 2008), there are several challenges faced by the country's school feeding programmes. These challenges include storage infrastructure, food preparation, poor safety of the food, quantity and quality of food, misappropriation of funds, mismanagement, delayed delivery, and the scarcity of water to sustain the school food gardens.

2.9.1 Challenges with infrastructure

Oosthuizen et al. (2011) highlight that inferior infrastructure, such as not having proper storage facilities, is one of the challenges faced by South African school feeding programmes. Some schools do not have specific rooms allocated for keeping food. Moreover, the PSC (2008) reported that there are no funds specifically allocated for schools to buy refrigerators and that results in wastage of food as food gets rotten. Apart from infrastructure, food also gets stolen (DBE, 2014). Additionally, due to shortages of kitchens, food handlers end up cooking under uncomfortable conditions. For example, one of the interviewed school principals in the Eastern Cape commented: "Um ... our storage is very small. We need to expand that place" (Graham et al., 2015: 44). This is not only a challenge to the school but also to the food handlers who have bad working conditions.

2.9.2 Quantity and quality of food

Small quantities of food have become an obstacle to children who do not have food at home. For example, one of the teachers in Lady Frere, Eastern Cape, reported: "They say one spoon per child and that is too small, especially if they have no food at home" (Graham et al., 2015: 44). Also, the quality of the food is not good. Vegetables need to be diversified, as one of the educators commented: "It's not about saying learners should not be eating at our schools, but we need to improve the quality so that they eat more vegetables. That's why we mentioned that more funds are needed" (Graham et al., 2015: 44). The DBE (2016) also found similar results,

as a report revealed that 42.4% of the schools that they visited showed that among the three food group of meals, namely vegetables, starch and proteins, schools tend to provide meals with a higher quantity of starch and a lower quantity of proteins and vegetables than they should.

2.9.3 Misappropriation, poor use and mismanagement of funds

The misuse of funds is reported as another problem faced by South African SFPs, specifically in the Eastern Cape, as the funds are not used for what they are intended. The principals use these funds for personal reasons even though they know from the budget that the funds are for nutrition (Graham et al., 2015). This can be associated with corruption and is a distraction to the effectiveness of school feeding programmes. Iversen et al. (2012) found a lack of appropriate implementation of the programmes as a contributing factor to the misuse of nutrition funds; the authors argue that if the programmes are not properly implemented, it is easier for people to misuse funds reserved for the programme.

2.9.4 Shortages of water for school food gardens

The DBE (2014) reported that they are facing a challenge of scarcity of water to sustain school food gardens. The shortage of water affects the sustainability of school food gardens. If the challenge can be resolved, school gardens could benefit many children and improve the amount of food they produce.

2.10 Conclusion

This chapter discussed food insecurity in Africa in general and in South Africa in particular. It also considered the history of school feeding in South Africa, Africa and globally. Furthermore, it discussed the expected outcomes of school feeding globally and in South Africa. Additionally, it presented empirical evidence of the role of school meals from various regions of the world and discussed the challenges in this regard.

The next chapter discusses the theory of change, to show the expected outcomes and potential effects of school feeding programmes. The theory is used in this study because it shows how school feeding affects the food security and education of school-going children's lives.

CHAPTER 3: THEORETICAL FRAMEWORK

3.1 Introduction

This chapter discusses the theory of change (TOC) in relation to school feeding programmes. It discusses how the theory can be used to evaluate the effect of school feeding programmes to see if it meets the expected outcomes on food security and educational improvement. It also shows how it can be used to examine the gap between the expected goals and outcomes and how to identify the gaps.

3.2 Theory of change

The study chose a theory of change instead of a theoretical framework. It comes from Devereux and Roelen's work on the theory of change. It has not been tested but there is evidence from literature that supports it. It argues that school meals contribute to increased food security and educational improvement, and literature on this topic also supports that argument. Therefore, considering its relevance and importance, the researcher has decided to use the theory of change. Devereux and Roelen (2015) argue that the aim and purpose of any development intervention is to attain a set of positive improvements in the lives of the programme beneficiaries.

According to Stein and Valters (2012), the theory of change emerged in the 1990s in the United States. Stein and Valters (2012) further explain that the theory of change is described as the blueprint, engine of change, roadmap and theory of action, as it identifies specific goals of an organisation or a programme that need to be achieved. The same study further discusses that it also assists to identify and demonstrate the types of interferences that are going to be implemented. This means that this theory helps an organisation and programme planners to identify interventions they are going to implement and to see the gap between the goals and the actual outcomes. Thus, the TOC is seen as a driver of change; hence, it is a tool for planning, participation, and evaluation of programmes or organisations and therefore helps an organisation and programmes to facilitate and generate knowledge on how effective their programmes are (Stein and Valters, 2012: 3).

Stein and Valters (2012) further state that the TOC purpose is grouped into four categories, namely learning, description, strategic planning and monitoring and evaluation. Learning purpose assists programme planners and people to clarify and develop a theory behind their

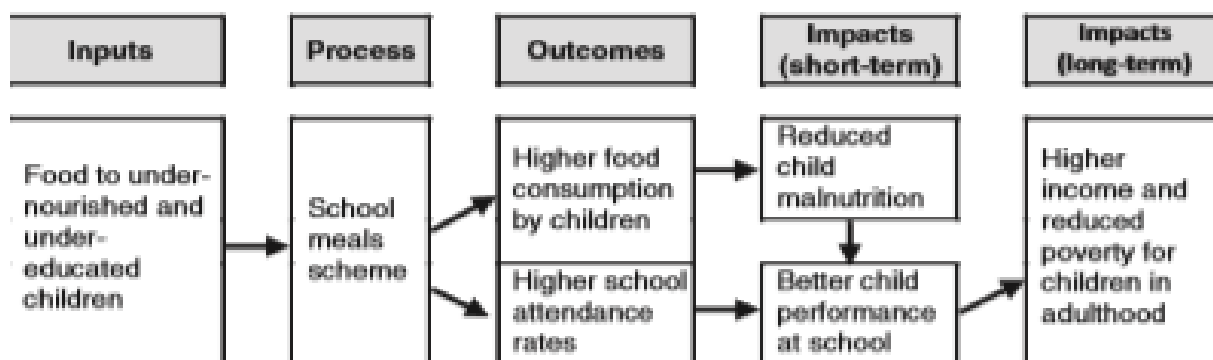
programmes and thus, Stein and Valters (2012) believe that the theory of change is used as a thinking tool that helps organisations to know what they are doing, the expected outcomes and why it is done.

Furthermore, the description purpose helps and allows organisations to share their chosen change in process to external and internal individuals. Thus, "a simple description of an organisation's theory of change can be understood as a minimal way of engaging with the theory of change" (Stein and Valters, 2012: 6). Further, another purpose is monitoring and evaluation which refers to articulating the outcomes and processes that are expected (Stein and Valters, 2012). That means that it allows the programme planners to facilitate their role to change and revise their theory of change if there are gaps identified. Lastly, strategic planning helps organisations to set the change process, its expected outcomes and evaluate implementation (Stein and Valters, 2012: 6).

Thus, for this research, a theory of change was used to evaluate the changes that the school feeding has made in food security and educational improvement among school-going children in Khayelitsha. The theory of change for school feeding is based on four questions. The first question is: Does a school feeding scheme reach undernourished and under-educated children? Secondly, are school meals an addition to food consumed at home? Thirdly, do free school meals improve the nutritional status of children, and did children who received free meals at school perform better in examinations? Lastly, do children who benefitted from school meals at school earn higher earnings and escape in adult life? (Devereux and Roelen, 2015). All these questions help to evaluate the change that has occurred due to school feeding programmes and the gap that still needs to be bridged.

Furthermore, Bundy et al. (2009) state that to find out if the goals of the school feeding programmes are attained, the evaluation and examination of the educational (enhanced attendance, cognitive development and examination performance) and food consumption must be done. Thus, if the examination of the indicators shows improvement, then the intervention of the programmes is useful and it validates the theory of change (Bundy et al., 2009).

Figure 2: Theory of change – food security and school feeding



Source: Devereux and Roelen (2015: 152).

Figure 2 shows the expected outcomes of the school feeding programme. The figure depicts how providing food at school for learners contributes to education and food security. The inputs and process of giving food to undernourished and under-educated children are expected to have an effect on those children. From Figure 2, it can be observed that the short-term effect of school meals generates two immediate outcomes, namely higher food consumption and increased school attendance. Among these two outcomes, there is also a direct link between having improved food consumption and increased school attendance. Higher food consumption by learners results in a reduction of short-term hunger during the period they are at school. Also, giving them food motivates parents to send their children to school while at the same time attracting learners to attend school regularly. Once children are at school, they receive daily meals, which makes it easier for them to fully concentrate during school lessons.

Additionally, attending school regularly and receiving daily school meals reduce the child's chances of being affected by malnutrition and raise the possibility of learners to perform well academically. In addition, having short-term hunger alleviated has a positive effect on improved cognitive and behavioural functioning. This in particular, when combined with enhanced learning and retention leads to higher academic performance. The short-term effects are linked to long-term effects, which are higher income through education and reduced poverty for children in adulthood (Devereux and Roelen, 2015).

Therefore, the theory of change shows the expected outcomes of school feeding programmes and it claims that giving food to children should contribute to hunger reduction, school absenteeism, improved nutritional status, school attendance, participation in class, academic

performance and higher earnings in future. Thus, in this study, the theory of change has been used to answer the research questions of the study by examining the link between analysis and findings. The theory was used to examine the gap or link between the goals of the programme and the actual outcomes of the SFPs in Khayelitsha. To find the link, the research questions were used to determine if school feeding programmes contribute to food security and educational improvement in Khayelitsha. Therefore, the theory of change has been employed as a guiding tool to see how effective the school feeding programmes are in Khayelitsha. The findings and analysis were compared to see the effectiveness of school feeding programmes.

Furthermore, the TOC has been applied to identify the gaps and to provide recommendations on what can be done to improve the current school feeding programmes. This was examined by looking at the limitations and challenges that the programme encounters as well. This will make it easier to see the gap and the solution to that gap that has been discovered.

3.3 Conclusion

This chapter showed and discussed the theory of change in relation to school feeding programmes. It demonstrated how the study applied the theory to examine the effect of school feeding programmes in Khayelitsha. Thus, this theory makes it easier for policymakers to examine the expected impact of a programme.



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CHAPTER 4: RESEARCH METHODOLOGY

4.1 Introduction

Various studies adopt different research designs depending on their topic of choice. Each study employs a research design that is convenient for its topic. Therefore, this chapter shows, explains and discusses the research design and methodology that were used to collect data. It also discusses the benefits for selecting the research design and methodology that were used. In addition, it explains data tools, namely semi-structured interviews and observations that are involved in this study. Further, purposive sampling, ethical considerations, limitations and challenges that the study encountered are also demonstrated in this chapter.

Research design is defined as the advanced plan, structure and strategy of different stages of the research, how the researcher intends to conduct a study and how the results are going to be analysed and presented (Akhtar and Islamia, 2016; Khothari, 2004). In other words, it is the procedure that assists researchers to select relevant data collection methods and the data analysis tools to be employed to answer the research questions of the study. Therefore, in this study research design has been used to show and select relevant data collection methods and data analysis tools on the school feeding programmes' impact on food security and educational improvement in Khayelitsha.

4.2 Research methodology

The research methodology is defined as a significant guide that assists researchers to select the relevant approaches for their studies (Jonker and Pennink, 2010). According to Khothari (2004), there are typically various research methodology approaches a researcher can choose from to gather information that seeks to answer the research questions. Therefore, in this study, a qualitative research approach was chosen as a research methodology. The qualitative research methodology is defined as the research approach that explains or understands a problem by observing or interacting with the respondents (Hammarberg, Kirkman and de Lacey, 2016).

According to Rahman (2017), qualitative research is more interested in analysing subjective meanings, such as people's lived experiences, behaviour and organisational functioning, rather than statistics. Therefore, the qualitative research method refers to a research approach that collects data by interacting with the participants with the intention of analysing and

understanding things in their subjective meaning. It is used by researchers who are more interested in studying, explaining and making the meaning of things in their natural setting.

Haradhan (2018) further explains that qualitative research gives a thick meaning, the detailed description of the opinions, feelings and interpretative meanings of the participant's behaviour. Secondly, qualitative research is helpful as it seeks to discover and explain how and why a specific social problem operates the way it does in a particular context (Mohajan, 2018). Therefore, this study has employed qualitative research and an explanatory qualitative approach because it has enabled the researcher to get in-depth information on how the school feeding programmes affect learners in addressing food insecurity and educational improvement amongst school-going children in Khayelitsha. Also, by using this method, the researcher has been able to explore the beliefs, feelings and perceptions of educators, parents, food handlers, and principals on the school feeding programme. Both qualitative and quantitative research allows the researcher to ask questions.

4.3 Data collection tools

Data for this study was collected through primary data. Primary data was employed through face-to-face interviews. Data was collected from May 2021 to September 2021.

4.3.1 Semi-structured interviews

Semi-structured interviews refer to a technique that involves verbal communication between the participant and the researcher (Mathers, Fox and Hunn, 1998). DeJonckheere and Vaughn (2019) also define semi-structured interviews as the dialogue between two or more people where the researcher engages with the key informants who have beliefs, experiences, perceptions, and attitudes about a topic related to the investigator's topic of interest. Harrell and Bradley (2009) suggest that this approach enables the researcher to collect detailed information. In addition, the open-ended questions allow or provide opportunities for both the researcher and respondent to discuss the topic in more detail (Mathers et al., 1998). Additionally, in a semi-structured interview, there is freedom for the researcher to comment and ask follow-up questions (DeJonckheere and Vaughn, 2019).

This approach has been very helpful in this study as it has allowed the researcher to discuss the topic in more detail. Also, it provided the researcher with opportunities and freedom to ask participants to elaborate more on the original response. The participants were asked about attendance, the participation of learners in class and examination performance (do the school

feeding programmes affect these factors) and more detailed information was collected. In addition, their views on how school feeding programmes can be improved were asked and satisfactory responses were provided as the researcher had an opportunity to comment and to ask follow-up questions. Further, the researcher explored the attitudes, beliefs, thoughts, and perceptions of the participants on how they serve food to learners and if the food is adequate.

4.3.2 Observation

Observation is defined as the data collection method where the researcher watches human behaviour or nature within a specific field (Cowie, 2009). Additionally, observation is where the researcher watches how people do things and operate. Researchers can use either direct or indirect observation. Direct observation is where the researcher watches and interacts with the participants of the research, while indirect observation is where the researcher watches the results of the interaction and behaviour of the participants (Muvhango, 2016). Given this, direct observation was used in this study where the researcher watched how food handlers prepare food, while at the same time interacting with them. Also, it provided the researcher with the opportunities and freedom to find out how food is served, the types, quantity, quality of food served to learners and the behaviour of learners when they are dished food. One of the reasons for using this technique is that it allows or helps the researcher to learn how things are organised and how people behave and communicate in a particular setting.

4.4 Sampling

According to Alvi (2016), sampling is defined as the process of examining a particular population or group of people by selecting a small sample to represent the entire group. The selected sample provides in-depth information about the entire population. Among various techniques of sampling, this study employed stratified purposive sampling. The reason is that Alvi (2016) mentioned that this technique enabled the researcher to select a sample that was directly relevant to the research topic of the researcher. Therefore, the researcher selected three schools in Khayelitsha, with 21 participants across the three schools: three school principals, six educators, six parents, and six food handlers.

Khayelitsha as a study site was selected because this study considers the effect of the school feeding programmes on food security and educational improvement in high schools. So Khayelitsha was perfectly fit for the study, as it has been shown in chapter 1, section 1.2 that less than 10% of households were food secure (Battersby, 2011) and Stats SA (2011) reports

that 30.7% of adults managed to complete secondary education in Khayelitsha. Thus, it is evident that 90% of households in Khayelitsha are food insecure and therefore children from these households are food insecure; then the researcher purposely chose the schools because the study is based in Khayelitsha. Therefore, data collected in Khayelitsha has shown the exact effect of the SFP on both food security and educational improvement among children in Khayelitsha.

In this study, the researcher selected and visited three high schools, namely X, Y and Z schools. The key informants, namely school principals, educators, parents and food handlers who have experiences, beliefs and thoughts on the school feeding programmes were interviewed. These participants were selected because they had significant information to provide to the researcher as they directly work with the school feeding programmes. However, the study planned to interview any parent, food handler and teacher but it turned out that there are teachers who are also food coordinators and then the study mixed the coordinators with normal teachers. Also, each school only employs the parents of the learners from their schools and that made it easier for the study to get parents because they were already working at the school, some as cleaners and others as food handlers. Then, the study used both stratified and convenience sampling in the case of teachers who are also food coordinators.

The schools were purposely selected based on the quintiles that each school falls in. Muvhango (2016) mentioned that NSNP targeting is based on a quintiles system where schools are ranked into 5 quintiles starting from poorest, which is quintile 1, to least poor (quintile 5) depending on the facilities, physical conditions and relative poverty in the communities that the schools are in. School Y falls under quintile 3 and the school is in a township area (Modern Classroom, 2022). School Z is also in quintile 3 but in a suburban area (WCED, 2022). On the other hand, School X is a township school and falls under quintile 2 (Schools Digest, 2022). Muvhango's (2016) description of school quintile rankings and the Department of Education's (2004) explanation of quintile 3 shows that quintile 3 is less poor than quintile 2 and Schools Y and Z are better off in terms of facilities or physical conditions compared to School X. Therefore, the study selected the schools from different quintiles to also see if school feeding programmes play the same role to all schools selected and it turned out that all the schools benefit the same from the programmes.

4.5 Data analysis

Qualitative data analysis is defined as the “process of the description, classification and interconnection of phenomena with the researcher’s concepts” (Graue, 2015: 5). In other words, it refers to an interpretation of the results that have been obtained in the study. The data analysis shows the meaning of what is presented in the results of the study.

This research used qualitative data analysis tools to analyse data. Also, the study used inductive reasoning because it started by collecting information and doing observation then the data was grouped, themes were created and data was analysed into a meaningful presentation. To analyse data, it applied thematic and coding tools using Braun and Clarke’s six steps of thematic analysis. According to Braun and Clarke (2006), the six steps include (1) familiarizing yourself with data (2) generating initial codes (3) searching for themes (4) reviewing themes (5) defining and naming themes (6) providing a report.

Braun and Clarke (2006) define familiarizing yourself with the data phase as the process of reading the data to get to know it. Then the second step is when the researcher is familiar with the data and then starts creating codes. After generating codes then the researcher searches for similar data to create themes. In the following phase, the researcher checks if the codes work in relation to create themes. Then after themes are named and defined in a meaningful way, the last phase is to report the findings by explaining what the data mean. This study familiarised itself with data then codes were created using Atlas. ti, after they were combined into themes. Then themes were reviewed and presented in the form of diagrams and texts.

4.6 Data verification and trustworthiness

4. 6.1 Ethical conduct

Authors such as Harrel and Bradley (2009) stipulate that researchers must ensure that no harm is done to the participants by ensuring that participants are made aware of the purpose of the study, and confidentiality is maintained. Therefore, in this study, diligence was considered and taken into account to make sure that no threat and harm or other related problems arose as a result of this study. Additionally, children were not interviewed in this study. Thus, this project obeyed these ethical considerations as the respondents were not forced to participate and the consent form was provided to those who were willing to participate.

The participants were made aware that they were free to withdraw should they wish to. The names and responses of the respondents were treated with confidentiality and will be not disclosed. No respondents were harmed in this research. The purpose of the study was thoroughly explained to the respondents and any questions they posed were answered clearly and in full before proceeding with the interviews. Permission to conduct the study at schools was received from the Western Cape Education Department (WCED). Also, the researcher requested and received ethical clearance from the Humanities and Social Sciences Research Ethics Committee (HSSREC) at the University of the Western Cape. Moreover, the researcher obtained participants' informed consents before proceeding with the study.

4.6.2 Credibility, transferability, dependability and Conformability

According to Stahli and King (2020), credibility refers to the accuracy of research findings and is used to measure the truth value in qualitative research. For this study to achieve credibility, data were transcribed and translated using the exact words from the participants. Even when analysing data, the study used direct quotes from the participants, meaning that every word from participants was used exactly as it is. Also, the study took enough time to engage with the participants as a result everything was clear and that made it easier for the study to transcribe data.

In addition to that, having prolonged time with the participants assisted the researcher to understand each participant, adjust to the behaviour and build a strong relationship with the participants. For example, some participants were shy to engage but the researcher found ways to make them comfortable and relaxed. The strategies used included making participants aware that there is no wrong or right answer. Also, the researcher assured them that they are the ones who know more about what was going to be asked. Lastly, the researcher made sure that she throws jokes here and there to make participants more relaxed and comfortable. The strategies all worked as the participants engaged more freely as the interviews were going forward.

Transferability refers to the ability where the results of a study can be transferred to various contexts, from one context to another (Korstjens & Moser, 2018). For example, to achieve transferability this study used the same data collection tools to collect data from different schools and participants and the results from this study reflect the perceptions of the participants about school feeding programmes in Khayelitsha.

Dependability refers to the degree where a research study can be repeated by another researcher and get the same results (Noble & Smith, 2015). The study applied dependability as the purpose of the study was thoroughly explained to the participants and participating schools. Also, the results took into consideration the rules of qualitative research. Korstjens & Moser (2018) define conformability as the degree where other researchers could be able to confirm the results and findings of a study. Thus, this study achieved conformability by taking notes regarding personal feelings after the interviews were conducted and completed. Also, the researcher ensured to follow rather than leading. This was done by probing and asking for clarification where something was not clear.

4.7 Limitations and challenges of the study

This study has not encountered limitations that affected the nature of the data. However, there are other various challenges, primarily related to ethics and the fieldwork process. The first challenge the study encountered was that the research proposal of this study was provisionally approved subject to minor corrections. The researcher had to fix corrections from the HSSREC for the proposal to be approved. In August 2020, the proposal was approved; however, the researcher could not proceed with data collection due to Covid-19, which caused more delays in the study. University of the Western Cape (UWC) also imposed a ban on conducting face-to-face interviews and thus researchers had to wait until UWC allowed students and staff to collect primary data. The researcher tried to switch to telephone interviews, but the study faced difficulties in getting cooperation from the schools since this project is about school meals.

The WCED gave the researcher a data collection timeline starting from 03 August 2020 to 30 September 2020, but unfortunately, the schools were too busy preparing for matric exams and could not participate in this study through telephone interviews at that time. One of the schools preferred face-to-face interviews over telephone interviews, but the researcher could not do them since UWC had imposed a ban against them. The second school did not respond to the emails; the school was called but the investigator could not speak to the school principal as she was busy with matric learners and was unable to visit the school due to lockdown regulations, so the timeline expired for 2020. Thus, the researcher could not collect data in 2020; then the data collection timeline expired as the researcher was only allowed to collect data from 03 August to 30 September 2020. That forced the researcher to wait until February 2021 to continue with this research.

Therefore, Covid-19 was the significant challenge that delayed the completion of this study. For instance, UWC would not have banned primary data collection and therefore, if Covid-19 did not happen, this project would have been completed in 2020. Also, district coordinators were identified as participants; however, they did not cooperate. As a result, they are not part of the study.

4.8 Conclusion

This chapter discussed the research design, research approach and tools that were used to collect data for this study. It showed the reasons for the choice of research design, research approach, tools, and research sampling. It also discussed data analysis, ethics, limitations and challenges.



CHAPTER 5: DATA ANALYSIS AND FINDINGS

5.1 Introduction

In this study, three schools and a total of 21 respondents participated. Each participant was considered to be a case. In accordance to research ethics, the schools were anonymised and information that could make the readers to easily identify the participants was anonymised such as the names of the schools and the names of the participants. Schools were anonymised as School X, Y and Z, and the participants were anonymised as parent, food handler, principal, and educator from each school. The researcher selected a total of nine educators, including three principals, as well as six parents and six food handlers.

In addition, as mentioned in the methodology chapter, data was analysed using thematic analysis from Braun and Clarke's work. For educational improvement, Braun and Clarke's six steps were employed to analyse data. Firstly, the researcher transcribed data while reading it and then got familiar with it. After the researcher created codes by looking at similar information then they were grouped. For example, participants mentioned that school meals motivate parents to register their children to school while at time the meals ease the pressure for parents as they know that children get food at school, then a code "parent motivation and reduced pressure" was created. Another example, participants also noted that school meals attract learners to go to school daily. Then from this, a code "learner motivation and increased attendance" was created. Then all the codes were grouped to generate a theme which is educational improvement. After the theme was reviewed and then data was interpreted and the combination of the codes to create a theme showed that SFPs contribute to educational improvement.

Also, for food security, the six steps were used. For example, data was read and transcribed then from the data participants demonstrated that school feeding saves money and food for them as their children eat at school then they do not have to cook and buy bread during the day. They also noted that learners no longer faint at school as they get porridge, a hot meal for the day and food parcels on Fridays. Then from this, the researcher created the codes "saved costs" and "reduced hunger through in school and take-home rations" to name a few. The same process was also applied for general effect.

5.2 Description of the schools and participants

School X

In school X, three educators were selected, all of whom were females and Xhosa speakers. One of the three educators was the school principal, the second educator was the food coordinator of the school and the third one was a normal educator. In addition to the three educators, two Xhosa parents and two food handlers participated in the study. Both food handlers were females and of the two parent participants, one was a female and the other a male. This school is a quintile 2 school and is located in a township.

School Y

In school Y, a total of three educators were selected and interviewed, two of whom were females and the other one was a male. All of them were Xhosa speakers. One of the three teachers was the school principal, the second one was a normal educator and the third teacher was the food coordinator of the school. Two Xhosa parents and two food handlers were selected and participated in this study. Furthermore, school Y is located in a township area and is a quintile 3 school.

School Z

School Z is a quintile 3 school, located in a suburban area. In this school, two Xhosa parents and two food handlers participated and all of them were females. In addition, three educators (all females) participated, one of whom was an English speaker while the other two educators were Xhosa speakers. One educator was the food coordinator of the school, another was the school principal and the third educator was a normal teacher.

5.3 Cross-case analysis

The first research question sought to assess the effects of the school feeding programmes on both food security and educational improvement. The sections below interpret results on the effects of school feeding programmes on these two aspects.

5.3.1 Effects of school feeding programmes on educational improvement among children in Khayelitsha

The interviewed participants highlighted that the effects of school feeding programmes on educational improvement among children in Khayelitsha include: (a) parental motivation and reduced pressure; (b) improved school premises as an equal space; (c) increased school enrolment and reduced school dropout rate; (d) improved learner punctuality; (e) increased learner motivation and school attendance; (f) increased class concentration and participation; (g) enhanced nutrition education; (h) heightened nutrition education through school food gardens; (i) improved learner academic performance; (j) improved human capital.

5.3.1.1 Parental motivation and reduced pressure

Parental motivation and reduced pressure on parents have surfaced as new effects of school feeding programmes in Khayelitsha. The finding is that school feeding programmes motivate parents to register their children at school with the hope that they will get food. This was shown by comments from the participants, who were asked if school feeding programmes motivate parents to register their children at school.

A parent commented: “So, now parents can register their children at school knowing that they will get something to eat” (*Participant 21; Quote 2*).

This point was also emphasised by another parent from a different school, who said:

Yes, it increases it. For example, I stay in informal settlements with my child. So, if maybe at home I do not have food, porridge in the morning, right, my child can rush to school to eat, you see? Because we are not the same as parents (*Participant 14; Quote 1*).

The above statements demonstrate that school feeding programmes play an important role in motivating the parents to register their children at school. Additionally, the fact that parents know that if they send their children to school, they get food, which eases the pressure on the parents because they do not have to worry about pocket money for their children. They know that their children will receive two plates of food a day and will be able to concentrate and get education, as that is the wish for all parents. Therefore, the programme is regarded as an important initiative in ensuring that parents do not keep their children out of school.

5.3.1.2 Improved school premises as an equal space

Another new finding is that the feeding programme makes school premises an equal setting. This is because the food provided to learners makes them equal in a classroom and at school; learners are therefore motivated to study because the pressure is eased and that increases concentration. Different participants were asked different questions and the responses show that school meals make learners feel equal at school.

An educator was asked if school meals improved school enrolment and she commented: “Think about other children – if at break/lunchtime you have to stand against the wall watching other learners eating and you do not have anything to eat” (*Participant 17; Quote 4*).

A school principal from the same school was asked what she regarded as the purpose of introducing school feeding programmes and she explained:

So, what we do in order to just make this an equal space so that there is no discrimination between those who have and those who do not have, we just give [food to] everybody who wants [it]. It is for all the learners; they are free to get [the food] (*Participant 15; Quote 6*).

One may argue that the school feeding programme makes schools equal spaces for all children because they are served the same food, the same portions, and all children are free to participate in the feeding programme, regardless of their backgrounds. In addition, since they all get access, there is no discrimination and bullying and that results in improved concentration because they do not worry about food, they only have schoolwork, not food. Thus, school feeding programmes close the gap between those who carry lunch boxes and those who do not. Further, it is important for children to feel welcome and equal at school, as the school is the first institution they are exposed to for building social networks and social skills. Further, being equal at school motivates learners to help and socialise with their peers in a classroom and among themselves because they are free around each other. In other words, the school feeding programmes create a sense of equality among learners.

5.3.1.3 Increased school enrolment and reduced dropout rate

The study revealed an increase in school enrolment and a reduction in the school dropout rate due to the feeding programme in Khayelitsha. The WFP (2019) claims that school feeding programmes can improve school enrolment by an average of 9% in Africa. Bundy et al. (2009) concur that SFPs play a significant role in keeping children at school. In this study, different

participants were asked about the effects of school meals on school enrolment and school dropout and the excerpts below show the responses from participants.

A school principal from one of the schools responded:

So, enrolment is not really affected. But on the other hand, it can be because even if a learner or parent is not keen about nutrition, the fact that one is sure that there is a meal that one is going to get, that learner will stay longer at school. He or she will not drop out easily at school because there is that food the learner gets. So, it does have an impact on improving school enrolment, I believe so (*Participant 1; Quote 3*).

A similar view was emphasised by another principal, who said:

Yes, if we're talking of children who are really in need, surely because they are motivated to stay longer, especially those who have the purpose of going to school. Now there are no deterrents, there is nothing like saying, "I am hungry, I cannot stay." So, it assists in ensuring that learners are kept at school as long as possible" (*Participant 8; Quote 8*).

Therefore, it could be argued that participants believe that school feeding programmes play a role in increasing school enrolment and reducing the learner school dropout rate at the same time. The school feeding programme motivates learners to stay at school longer and therefore they are more likely to further their studies. It also reduces their excuses for leaving school. Furthermore, it reduces the pressure on learners and enables them to focus on their studies by staying at school rather than looking for jobs. The more learners are kept at school, the more they learn basic life skills such as being early. Kristjansson et al. (2006) maintain that children who remain at school are exposed to greater opportunities for social networking with peers and adults.

This code appeared 20 times on Atlas. However, Weyghbright et.al (2017) argues that school drop-out is still a persisting issue in South Africa as it has reached a national crisis, where about 60% of first graders tend to drop out before completing grade 12. Therefore, this indicates that school feeding programmes play their part but other factors are still needed to reduce school drop-out.

5.3.1.4 Improved learner punctuality

The findings show that breakfast, in the form of porridge served at school as part of the feeding programme, improves the punctuality of learners. The participants explained that learners rush to school for the porridge in the morning, especially those from food insecure families. The learners ensure that they do not miss the porridge, which is served between 07h30 and 08h00 before the classes start. Due to that, they stick to school times and arrive at school on time.

A participant commented:

It helps them a lot, because a child rushes as it is served from 07h00. So, at least they need to be there at that time and then at 08h00 start with their classes. There is no child that arrives late. Children rush to school (*Participant 12; Quote 11*).

A food handler agreed:

Most learners arrive early because they are rushing for it [the breakfast]. So, there is a difference that it makes on late comers. I do not think it is the same as before, because every child is rushing because we have time to dish and after that time, we stop dishing porridge. So, each child rushes for that time before the bell rings for classes to start. So, they come early in that way, because a child leaves home, rushing for the porridge, so he arrives early at school (*Participant 4; Quote 9*).

Improved punctuality code appeared 17 times on Atlas. ti and this indicate that the majority of the participants believe that the porridge provided at schools as part of the feeding programme serves as an incentive for learners to arrive at school on time. They rush for the porridge and that is a plus factor in encouraging learners to arrive at school punctually. By the time the bell rings, they are already on the school premises and ready for the first period. This proves the point that learners go to school on time and do not attend classes on empty stomachs. Thus, it can be argued that this programme prepares the learners for the world out there in terms of punctuality.

However, in some cases, the school feeding programmes do not have an impact on punctuality, especially regarding those learners from food secure families. This was highlighted by an educator who was asked if the feeding programme reduces late coming:

Yes, it does, for those who come from poor backgrounds, and bad socio-economic conditions, it does a lot, I do not want to lie. But for those who are not hungry, it does

not make any difference to them because they do come late because they have nothing to rush for at school, like porridge. But for those who get porridge [at school] every day, it makes a lot of difference, they arrive early and they attend regularly (*Participant 3; Quote 6*).

The opposing view from this participant indicates that the feeding programmes only play a part where there is a real challenge of food insecurity. This means that it does not make a difference if a child comes from a food secure household, because the learner does not have to rush for the porridge that is available at home. Therefore, it can be argued that the introduction of breakfast in the form of porridge only makes a difference in punctuality for learners who are really in need of food.

5.3.1.5 Increased learner motivation and school attendance

School feeding programmes have been an important factor in increasing school attendance and it has been recognised as a strategy to attract children to school. The fact that children receive meals at school motivates them to attend school regularly because they know that they will receive two meals a day. Consequently, they are motivated to go to school because there is something that attracts them, and the more they are motivated, the more school attendance increases. The WFP (2019) found that children who receive school meals attend 4–7 days higher in a year than children whose schools do not provide free school meals.

This study's participants confirmed the effects of school meals on school attendance when they were asked if the feeding programme increases school attendance. According to one of the school principals:

Yes, for sure, most definitely, because there are families where children do not have anything to eat. Now at least when they get to school, they are going to find something to eat. They are therefore motivated to go to school. Remember, before these programmes were happening, learners were solely dependent on pocket money (*Participant 8; Quote 7*).

A different principal agreed:

A big yes. We have noticed that even during exam time when they finish writing, we no longer need them to come to school because we are busy marking, and there is no

teaching which is taking place. Yhoo, there are those who will come, coming only for the school meal. So, it improves school attendance (*Participant 4; Quote 4*).

Another school principal concurred:

It does help with improving the attendance of learners, especially from people who are from poor backgrounds, because they know they will get a meal, even if it is [their] only meal for the day, yes (*Participant 17; Quote 9*).

This shows that school feeding programmes motivate learners to go to school regularly and the participants mentioned this even when they were answering other questions as a result it appeared 40 times on Atlas. ti. This is because, as previously mentioned, the food served at school attracts them to attend regularly. The fact that learners know that they will never go hungry when they are at school, motivates them to go to school. The participants reported that learners go to school even if it is raining or when they feel lazy. The theory of change also supports this argument as it claims that school meals are expected to contribute to increasing school attendance among school-going children (Devereux & Roelen, 2015). Therefore, once children are served food at school that attracts them to attend school regularly.

However, some participants believe that even though there are free meals provided at school, some learners still do not attend. A school food coordinator lamented: “But some learners do not regularly attend school, even though the situation is difficult at home. He does not attend school” (*Participant 16; Quote 22*). This could be due to various factors – financial or individual (Mboweni, 2014). The financial factors could include child-headed households where some children whose parents have died are forced to look for jobs to support their younger siblings. It could also be as a result of individual factors such as substance abuse – some learners use drugs and then end up not attending school. Yet others are lured away from school by gangsterism.

5.3.1.6 Improved concentration and class participation

Various studies have gained an interest to study the effect of school feeding on educational improvement. Kristjansson et al. (2006), for example, found that school meals play a role in improving concentration and class participation. This is because once learners are well fed, they tend to be more alert and attentive, making school more enjoyable.

This study's participants were asked about the effects of school feeding programmes on learner concentration and class participation. Their responses largely corroborated the findings of the above studies, as expressed by a school principal:

Owww, okay! After lunch, they are more energetic than before. But we only observed it on a negative view that some smoke and get hyper after lunch. So possibly some of them it is not because they have smoked; it is maybe that meal they have received. At least [it] makes them energetic and participation increases (*Participant 1; Quote 6*).

Similarly, a school food coordinator commented:

Okay, since they get porridge in the morning, at least they are effective in class, you do not see a sign of a hungry learner. At least they are active in class because they get something to eat. And even after lunch, they become active, even though they become more hyper after lunch because they are well fed. So, some of them even lose focus; I do not know. But on a positive note, it really assists them, especially those whose families do not have any food to eat. It really helps them (*Participant 2; Quote 4*).

It could therefore be argued that the feeding programmes assist learners to participate in class while at the same time makes them lazy, which will be discussed later. When children are at school and well fed, it is easier for them to focus and participate in class. This could be because the food gives learners energy and makes them feel refreshed. It is not easy for anyone to focus when the person has not eaten and therefore, it is the same for learners. The statements from the participants show that the food served, starting from the breakfast – which is porridge – contributes to helping learners to focus fully and to participate in class. Therefore, the feeding programme serves the purpose for learners who are serious about their studies, because those learners take school very seriously and they cannot be lazy in class.

On the other hand, the same participants also believe that for some learners, SPFs do not serve their purpose because they have observed that it makes some learners more energetic and lose focus. In addition to that, different participants had the same views as they believe that some learners tend to be lazy when they are full. This was shown by the comment from a schoolteacher:

It is tricky because some learners participate fully because their stomachs are full, but some, because their stomachs are full, tend to be lazy. So, it serves the purpose, but for some, it does not (*Participant 3; Quote 4*).

One principal did not beat about the bush: “When they are full, they get lazy” (*Participant 1; Quote 24*).

This shows that for some learners it serves the purpose, but for some, it does not. It is evident that the feeding programme has both positive and negative effects when it comes to concentration and participation. Based on inputs from the participants, some learners become lazy because they are well fed, while others participate fully and concentrate in class because they are well nourished; the food gives some learners more energy, while others become drowsy and lazy.

5.3.1.7 Enhanced nutrition education

Nutrition education is another component of school feeding programmes. Devereux et al. (2018) argue that school feeding is a vehicle to create knowledge about good nutrition, for learners and society as a whole. The participants also believe that sending children to school benefits the learners, as they are also taught about healthy eating habits. For example, a Life Sciences teacher explained:

In Grade 11 Life Sciences, yes, it deals with nutrition. Also, in Grade 12 when we are doing homeostasis like regulation of glucose, right? So, we talk about nutrition, like, if you eat too much of these and then you see, we look at how glucose is being regulated. So, we are compelled now to talk about nutrition, so we address it in Natural Sciences, also in Life Sciences. Also, in Life Orientation, like when I talk to the Life Orientation teacher, you find that he is talking about the Body Mass Index (BMI) and then when you talk about BMI, there is no way that you can leave out how to eat a balanced diet. And also, in Natural Sciences when we talk about the circulatory system, the function of the heart and then heart diseases, those that are related to what we eat, like what is causing too much cholesterol, you see, so we address it as part of the curriculum (*Participant 17; Quote 31*).

A principal further elaborated:

Well, I think as part of the Life Orientation syllabus there is a section on nutrition and what is a healthy meal, and so on, so that they can make the right choices. Because if they eat sweets every day, later on in life they are probably going to suffer from hypertension or diabetes or you know whatever these chronic lifestyle diseases are. So,

yes, I think it is very important for them to be able to make the right choices when it comes to choosing what they want to eat” (*Participant 15; Quote 28*).

It can be argued that educating learners about good nutrition contributes to healthy eating and lifestyles, as this is also about food security.

5.3.1.8 Heightened nutrition education through school food gardens

School food gardens form one of the strategies used by the feeding programme to eliminate hunger, while at the same time promoting healthy eating. In other words, school food gardens are associated with nutrition education because they motivate and create awareness among learners about healthy eating and diets, especially for the learners who participate in the school food gardens. Laurie et al. (2017) found that learners showed interest in the school gardens and considered the activities in the garden as fun. The study further explains that their attitudes towards eating vegetables and fruits changed more positively as well.

Kekana et al. (2020) suggest that school food gardens can be used as a vehicle to create and spread knowledge about food production and nutrition and thus promote healthy eating. This study’s participants similarly commented that school food gardens encourage learners to participate in the school gardens and make them aware of healthy diets. This was illustrated by the participants’ comments after they were asked about the effects of school food gardens on nutrition education.

A parent responded:

Yes, it could have an effect if the school has a school food garden because food from the garden is organic/healthy and children will grow up knowing, for instance, that they have to eat spinach (*Participant 7; Quote 6*).

Another parent working in the school garden expressed similar sentiments:

Yes, there is a big role, because you will find that there is a child from a home that does not have a garden. But I can tell them, ‘No, take a bathtub or a crate. You can plant there and then there will be an onion in your home, there will be spinach in your home.’ Now the child learns things that are being done in the garden and we are being supported because we have gardening workshops. I attend the workshops with children, and they

learn a lot from them. It is very helpful for children's food in the kitchen (*Participant 20; Quote 8*).

It is evident that the school food gardens play a role in making learners aware of healthy eating habits, especially those who participate in the gardening. In addition, increased attendance of learners due to the attraction of food, makes it easier to target the participants in the school food gardens. Then it becomes easier for teachers to target and transfer the knowledge to learners. Thus, they get knowledge on nutrition education from both the classroom as well as by participating in the school food gardens. Consequently, increased knowledge creates awareness in learners about healthy eating and lifestyle habits and therefore enables the learners to make good choices regarding the kinds of food they eat. Learners who eat healthily and who follow a healthy lifestyle are more likely to attend school regularly and be attentive in class because they are not sick and they pass the knowledge to the next generation.

5.3.1.9 Improved learner performance

Improved learner performance was mentioned as one of the effects of school feeding programmes on educational improvement in Khayelitsha. Lawson (2012) states that when children are well fed, enrolled at school and go to school daily, they are more likely to do well at school. This study's participants highlighted that the feeding programmes motivate learners to go to school regularly and for the learners to be able to concentrate in class, they need to be at school and participate. This was shown by the comments from the participants responding to the question of what they think is the impact of school meals on academic performance.

A school principal commented:

I think if one is forced to come to school, the feeding scheme will have an impact on academic performance because learners will be at school regularly. Learners will participate because for one to improve [one's] academic performance, firstly he has to be at school, he has to participate. So, because of those two things, the feeding programme has a positive impact on academic performance (*Participant 1; Quote 12*).

Another participant explained:

I think it is very good because learners come to school with the hope that they will get food, so that gives them enough reason to do better in their studies, so they perform well. They know that if they can get food, they can do better. So that hope of having food at

school gives others that zeal to do better in their performance academically (*Participant 3; Quote 5*).

In the same vein, a school principal from another school commented:

Obviously, the effect will be there, but we cannot really measure the effect because most of the time we do not understand the kinds of backgrounds that the learners are coming from, as we are ensuring that at least we feed them here. So at least we know that automatically if there was any gap of a meal at home, at least that space is going to be covered and is going to be eliminated. So, for sure, when we are speaking of food and studying there has to be a balanced effect then. You cannot teach a hungry child – obviously, there will be no focus, no concentration. As we are saying, we cannot argue the fact that many of our learners are coming from homes where they only survive with social grants in terms of survival (*Participant 8; Quote 15*).

The comments highlighted by the participants show that school feeding programmes play a positive role in increasing academic performance. This is because, as previously mentioned by the participants, school meals motivate parents to register their children at school. In addition, the participants explained that for learners to do well academically, they first have to attend regularly, be at school on time, concentrate and participate and then school feeding programmes ensure that all of those things happen because learners are provided with food. On the other hand, food is not the only factor that contributes to improved academic performance. There are other factors that play a role in ensuring that learners do well at school. Mahlangu (2015) states that student attitude and behaviour – such as study habits – also affect academic performance.

Furthermore, the schoolteacher who is also a food coordinator, believes that food does not really contribute to academic performance. This participant commented:

This one is difficult because whether they are hungry or well fed, there is no difference, there are good ones, I mean, it does not have an effect. You know, our children do not study whether hungry or well fed, it is the same; that is why I am saying that it is difficult but let us answer it. They do, it is in-between...they perform, they do not perform, it depends on the children; it has nothing to do with food, yes (*Participant 10; Quote 13*).

The school principal observed:

It is difficult to compare academic performance, I mean, to check the impact of school feeding on academic performance because one would maybe look at academic performance before the feeding programmes were introduced and after they were introduced. So, it is not easy to compare academic performance. Even then, if you would compare academic performance, let us say before there was a feeding scheme and now, there are other factors that might affect the improvement of academic performance that are not necessarily food (*Participant 1; Quote 25*).

This comment shows that food is not the only factor that contributes to improved academic performance. Rather it can be regarded as one of the factors but not the main or standalone factor and therefore contributes when combined with other factors such as time spent studying, psychological and environmental factors, to name a few. The Department of Monitoring and Evaluation (2018) further argue that if the school feeding programmes are well implemented and the schools have a high quality of teaching then it is more likely for academic performance to improve. Moreover, this is one examples on how the Theory of Change for school feeding programmes narrow its focus to an extent that it overlooks other important contextual factors that affect learning.

A school principal from another school added: “But at least they are able to cope at school; food is not necessary. It is not about food, that you eat enough, then you can be clever” (*Participant 8; Quote 12*).

This shows that for learners to get good results, they have to work hard by spending hours studying. This means that getting food alone does not automatically improve performance at school. In other words, being well fed without studying does not lead to improved academic results. For learners to get good marks, they must study and then food will help them to concentrate because, as previously mentioned, for learners to concentrate and do well, they must be fed well first. So, the feeding programme plays a role when learners are also serious about their studies.

5.3.1.10 Improved human capital

School feeding programmes play a role in bettering the lives of those who benefit from it. This is because it attracts learners to attend school regularly and keeps them at school for longer,

which exposes the learners to better opportunities in future. This was also shown by the comments highlighted by the participants. For example, a school principal reported:

Well, we can think of a couple of things here, the fact that they are the recipients of the generosity of the department will hopefully allow them to give back when they are in a position to share, you see? when they have nice jobs, then they will think of how generous the department was or the school to give them a meal every day and they will give back to the communities; so that is one aspect of it. The other thing is that with the nutrition that they get, they will be able to focus on their studies, they will get good results and then they will be able to go to tertiary education and then provide meaningful contribution to the society as a whole and to the economy (*Participant 15; Quote 27*).

In addition, a school educator from the same school commented:

I think for some learners, like when I look at good performing learners here at school and then when you discover that this learner at home there is nothing, you see, they depend on...then that is the case when you can say, that really is true that if maybe this feeding scheme was not there, some of our learners would have dropped [out a] long time ago” (*Participant 17; Quote 30*).

This is an indication that the school participants in this study believe that school feeding programmes play an important role in ensuring that children are exposed to higher opportunities, especially poor children. When a participant was asked about the effect of the closure of the schools during the Covid-19 lockdown, she responded:

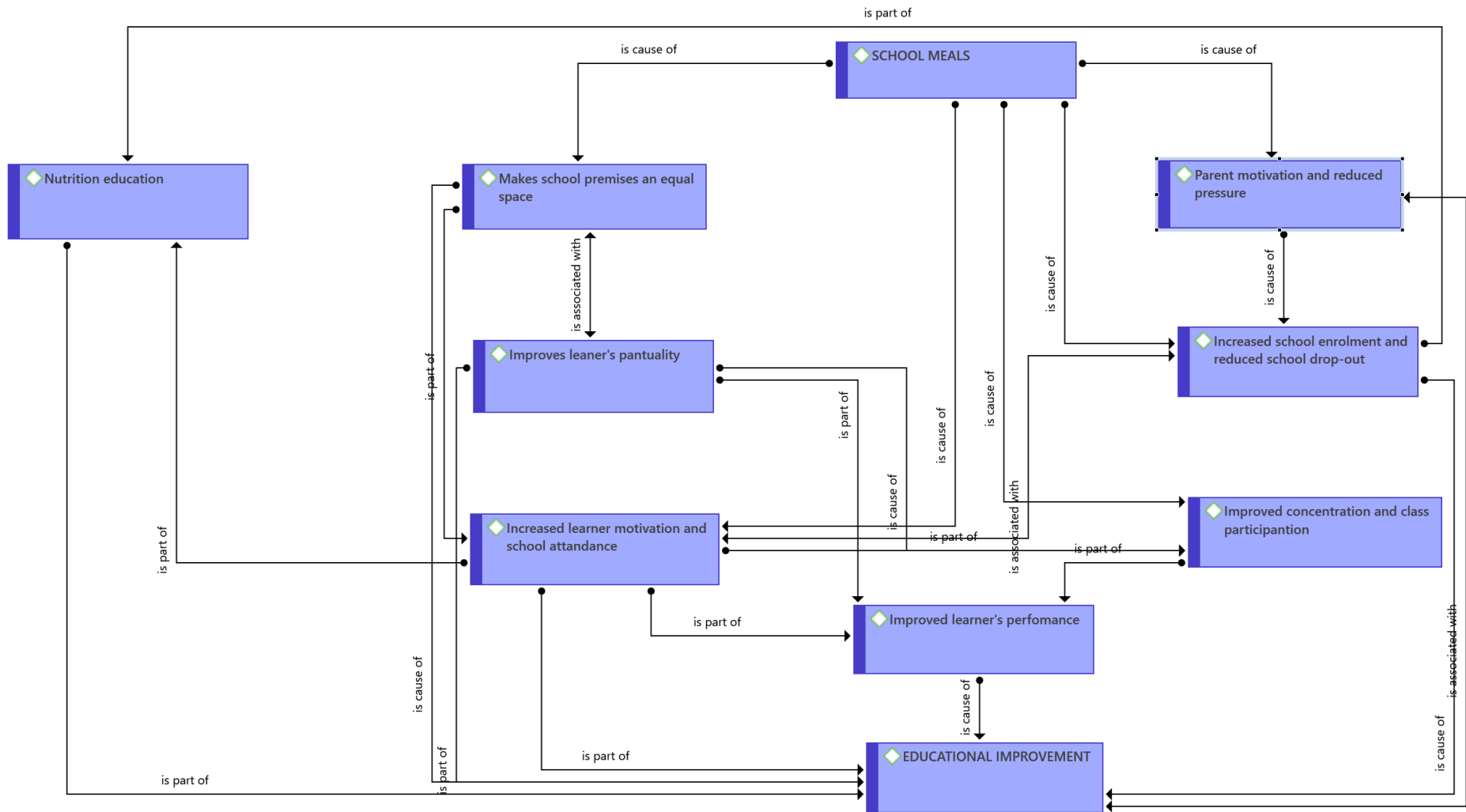
We cannot say it built them; it had a negative impact because imagine a home where there is no food and the school in which the learner used to get food from is closed and the learner has to eat. So, it has caused bad behaviour for learners because a child that does not eat will come up with a plan in order to eat and at that time their behaviour changed because maybe they hustled in the wrong ways (*Participant 9; Quote 21*).

This is an indication that the feeding programme contributes to the future of the learners. The comment also shows that should the programme stop operating, many children would take the wrong paths. Therefore, the closure of the schools during the Covid-19 lockdown showed what would happen if the programme did not exist. It was a typical example of what can happen if the feeding programme stops operating. Figure 3 below shows the effect of school feeding

programmes on educational improvement. It was formulated on Atlas. ti software to show the perspectives of participants on the feeding programme.



Figure 3: Effects of school feeding programmes on educational improvement



Source: Author (research data, 2021).

Figure 3 mainly shows the effects of the school feeding programmes on food security and educational improvement that the study found in Khayelitsha. According to the figure above school feeding programmes motivate parents to register and send their children to school. At the same time, it reduces pressure on parents because they send their children to school knowing that they will get food which is sometimes not always available at home. Consequently, school enrolment improves because learners are registered at schools and concentration in class improves for those that are serious about their studies. This is because learners are well fed at school and not worried about food.

Additionally, school meals attract learners to attend school regularly knowing that they will get two meals a day, porridge and a hot meal. Once children are always at school nutrition education increases because teachers easily target them. The porridge also improves learners' punctuality as it is served in the morning before classes start and therefore it makes learners rush and be at school before classes start. In addition, figure 3 also shows that serving food to all learners makes schools equal premises. This is because children are served the same food of the same portions and there is no discrimination, they all get and therefore that automatically closes the gap between those that have food for lunch and those that do not. Furthermore, school feeding programmes are one of the factors that contribute to academic performance and therefore when combined with other factors it works well to improve academic performance.

5.3.2 Effects of school feeding programmes on food security among children in Khayelitsha

In Khayelitsha, school meals are provided as in-school and take-home rations, as it was mentioned in chapter two that school meals are either provided as in-school meals or take-home rations or both. However, take-home rations are only given to learners whose families experience food insecurity. The statements from interviewed participants highlighted that these meals make a difference in addressing food insecurity among school-going children in Khayelitsha. The effects of school feeding on food security include the following: (a) reduced hunger through in-school and take-home rations; (b) balanced meals and maintained/improved nutritional status; (c) saved costs; (d) increased food consumption; (e) shortage of resources; (f) school food gardens complement the feeding programme; and (g) quantity of food.

5.3.2.1 Reduced hunger through in-school meals and take-home rations

Reduced hunger was mentioned as one of the effects of school feeding programmes on food security in Khayelitsha. In addition, Kristjansson et al. (2006), Lawson (2012), and Nyakundi (2017) argue that school meals contribute to the alleviation of short-term hunger. The participants were asked about the importance of school meals and they explained that school meals assist learners from poor backgrounds who face the challenge of food insecurity. They further highlighted that the meals are provided as both in-school meals and take-home rations.

(a) In-school feeding in the form of hot meals

In-school rations are served to be eaten at school in the form of hot meals. They include breakfast – as a form of porridge, and a meal provided during the lunch break. Additionally, one of the questions asked from the theory of change to examine the effect of the school feeding programmes is “does a school feeding scheme reach undernourished and under-educated children”? (Devereux & Roelen, 2015).

Further, the respondents were asked if there were learners who reported coming to school hungry; most of them believe that there are many learners who come to school hungry. One schoolteacher estimated that “many of them, more than 90% of them” come to school hungry. When asked if the learners report their hunger, she replied:

They do not report per se, but when you get into class in the morning and expect to start in the first period, you will hear some of them saying that “the porridge was served late today, and we did not eat; so, ma’am may we please go and dish the porridge during the period?” Also, some of them come late to morning classes because they were still waiting in the queues for the porridge (*Participant 9; Quote 12*).

A teacher commented:

Yes, there are few learners who come to school hungry; hence, we have porridge in the morning so that they may have a first meal, and they do eat from Grade 8 to 12 (*Participant 3; Quote 8*).

A similar view was expressed by a school principal: “Yes, we do have a couple of them, but we do give them breakfast in the morning as well (*Participant 15; Quote 20*).

Furthermore, the participants were asked how important school meals are and whether they believe that the meals are important. A parent from the same school explained:

It plays a big role because children no longer faint at school because at least they start lessons with something in the stomach because sometimes some children go to bed on an empty stomach. The porridge at least has a role it plays in them, a lot (*Participant 21; Quote 4*).

This point was also emphasised by a school principal from a different school, who commented that “I think it is very important, just the sheer numbers that go and collect the food, that is an indication that this is a service that is really needed in the school and in our community” (*Participant 15; Quote 15*).

Moreover, the respondents were asked about the effect of the closure of schools during the Covid-19 pandemic and their explanations showed that they believe that it had a negative effect because learners were not getting enough food. The teacher observed:

It had a negative impact, especially on those that sleep on empty stomachs. I think they were really struggling and were sleeping on empty stomachs now that they were not receiving that plate [of food] they used to get at school. It was very difficult for those that had nothing, and whose family members are unemployed (*Participant 2; Quote 13*).

The school principal added that “they were really left in poverty during that time; so, food consumption definitely decreased per learner during that time” (*Participant 1; Quote 22*).

From the participants’ perspectives, it could therefore be argued that school feeding programmes play an important role in addressing food insecurity. This is because learners who are struggling to get food at home, get it at school as a free meal. In this way, the schools automatically cover the gap for the learners who leave their homes without having a meal. They get a solid nutritious meal that will sustain them throughout the whole day while they are at school. Devereux, Bene and Hoddinott (2020) observe that Covid-19 has affected the functioning of school feeding programmes in countries forced to close their schools due to Covid-19. The explanations from the participants responding to the question related to the closure of schools show that children were subjected to poverty, confirming the importance of school feeding. Therefore, the comments from the participants show that school feeding

programmes reach under-nourished children and this answers the question from the theory of change and thus shows that the programme is contributing to fight against food insecurity.

(b) Take-home rations in the form of food parcels

Mafugu (2021) explains that take-home rations involve the process whereby learners are given food to take home and share with the whole family after school. In Khayelitsha, it was found that learners who are really in need of food are given food parcels to take home and share with their families. This was shown by the comments from the participants. For example, the school food coordinator, who is an educator at the school, was asked if there are learners who came to school hungry. She responded:

Many of them come, the learner is hungry and there is no food at home. So, what we usually do in those cases, we give them food parcels so that the learners may not only eat here at school, but take the food parcel and eat at home also (*Participant 2; Quote 7*).

A similar view was expressed by a different teacher:

They get, and sometimes they are given rice, tins of pilchard and maybe cooking oil. We also give them cabbage and butternut on Fridays because even if it has been delivered you will find that cabbage quickens to rot so they get it. But cabbage and butternut are scarce, so they get them sometimes but they get carrots almost every Friday (*Participant 9; Quote 23*).

The participants were asked if they thought the food parcels made a difference for the beneficiaries and they offered positive responses. One of the educators responded:

They do make a difference. I mean, some learners would come and talk to the feeding scheme coordinator, you know, like, “Ma’am do you still have more, it is about to run out.” So, those food parcels are great, and we checked the quality that is being provided, the brands, right, is it not just ... like, you will find that there will be *Black Cat* [branded peanut butter], like, I mean, everything that is there, it is something that any person can use at home. So, yes, it helps a lot if they can continue to provide those special packages for those learners because sometimes you find out that, like learners, even if the parents maybe are affording but just from part of the family, someone is really struggling, you see? The close relatives like aunts and others, so, definitely, they also benefit” (*Participant 17; Quote 23*).

The intention of the schools to provide food parcels to identified learners is for them to have something to eat after school and over the weekend and to share the food with their families. Additionally, the comments from the participants demonstrate that the food parcels provided to learners play a role in assisting learners from food insecure families. In this way, it shows that the feeding programmes make a wider difference, not only when they are at school. The system of take-home rations ensures that learners are well fed, even at home after school hours. Thus, it assists the learners' families, thereby addressing food insecurity in broader society.

5.3.2.2 Balanced meals and maintained/improved nutritional status

School meals have been used as a strategy to ensure that children are fed nutritious meals every day at school, especially those from struggling families. Having a balanced meal automatically maintains or improves their nutritional status. Lawson (2012) argues that meals provided at school have additional nutrients that are sometimes not available for some learners. Kristjansson et al. (2006) assert that school meals improve learners' immune systems and therefore make them healthy. The comments highlighted by the participants show that school feeding programmes contribute to ensuring that learners are served nutritious meals in Khayelitsha.

The respondents were asked about the kinds of food that are served to learners. One teacher explained:

It is starch, vegetables, fruit and milk. Starch is rice and samp and then vegetables, it is cabbage, carrots, beans and lentils. Then fruit, it is apples and then there is a sachet of milk (*Participant 3; Quote 9*).

Similarly, a food handler elaborated:

On Monday, it is rice, butternut; before, it used to be fish but now it is baked beans and lentils. On Tuesday, it is samp with beans and apples. On Wednesday, it is rice, soup, carrots and milk. On Thursday, it is rice, beans, carrots, lentils and apples. And then on Friday, it is samp without beans, cabbage and carrots (*Participant 5; Quote 9*).

A different educator was asked about the purpose of introducing school feeding programmes. She responded:

Also, you will find that others eat chips, not because they want to, but because they are hungry and that is the only thing they can afford because they usually cost R1 (*Participant 9; Quote 1*).

When a food handler was asked about the importance of the school meals at her school, she said:

It is very important because the majority of the learners that are here in the school stay with their grandmothers and some with unemployed parents. As they are living with unemployed parents, you will find that they leave home without even eating porridge. He starts eating here at school and he also eats lunch here. Fruit is also not always available in our households; also, vegetables are not always available in our families. Things like milk are also not easy to get in our homes. So, by receiving this food, there is something they are gaining (*Participant 12; Quote 1*).

The participants further explained that school meals play an important role in maintaining and improving nutritional status of learners from food insecure households. This was shown by the comments they made when responding to the question about the effect of school meals on nutritional status. One teacher reported:

I think it is very important for the school to have a feeding programme for nutritional status because some of our children are from very poor backgrounds. So, nutrition is a challenge to them so they need the food. They really need it because it is nutritious for them as they got nothing at home, and it has almost all the vitamins and minerals needed for a human body to function well. Omega3 from pilchard, proteins from lentils and beans; so, they need it (*Participant 3; Quote 12*).

Furthermore, the school principal said:

If there was not a feeding scheme, then maybe they would buy packs of chips or sweets and just eat that to make them full, but because there is a feeding scheme, the quality of meals they are getting is of nutritional value. So, sometimes they would just buy bread, which will fill them but is not really of high nutritional value. So, I think that definitely the feeding scheme plays a role in raising the value of what learners are eating and if they

were left on their devices, they would just mostly eat bread or fat cakes, which are not really that nutritious (*Participant 15; Quote 17*).

Thus, it could be argued that school meals provide learners with nutritious meals and therefore automatically cover the gap for those who do not get a nutritious diet at home. For example, Participant 12, Quote 12 stated that in some families, fruit and milk are not always available. On the other hand, these are very important food types that are required for children to get and to show the importance of SFPs on nutritional status, this code appeared 9 times on Atlas. ti. Thus, it could be argued that school meals play an important role in targeting and assisting children from food insecure families who are struggling to get food groups that are important for the human body. Further, school feeding meals ensure that every learner gets a nutritious meal each day during school hours, as well as on weekends because they are also provided with food parcels. In addition, serving learners balanced meals automatically maintains and improves the nutritional status of those children who are not getting balanced diets at home. Consequently, school feeding programmes have the potential to close the gap between the 'haves' and the 'have nots' in terms of healthy eating.

5.3.2.3 Increased food consumption

Different studies conducted by various scholars have confirmed the importance of feeding programmes on food consumption. In support of this, Graham et al.'s (2015) study conducted in the Eastern Cape found that school meals increase the food consumption of learners. The participants further reported that food served to learners at school serves as an addition to what they get at home.

In this study, a parent reported:

Yes, my child gets additional food because at home she will eat when there is food, depending on the breadwinner. Whereas at school, she knows that definitely there is food, and it is guaranteed that food will be provided. At home, she happens to skip breakfast in the morning and only eats lunch in the afternoon, but at school it is guaranteed that she will eat porridge, lunch and also eat super at home. So, it is guaranteed that she will eat three times a day when she is at school (*Participant 7; quote 14*).

Furthermore, a parent from another school commented:

Yes, they get additional food. For example, if it happens that I do not have food at home for breakfast and lunch, there are higher chances that they will not eat the two meals and then I will only cook supper for them. But when they are at school, they eat breakfast and lunch and then later they get super at home (*Participant 13; Quote 11*).

Moreover, a different food handler was asked about the effect of the closure of schools due to Covid-19 and she explained:

There was a difference because they were not eating enough, you know, they used to eat at school. They eat and get extra plates and then eat again at home. One would scrape the crust in the pot, but during the lockdown, they were solely dependent on the crust while they used to eat soup at school, they even demanded it. Yhoo, schools are not opening because they get hungry at home (*Participant 18; Quote 20*).

One can therefore argue that school meals play an important role in ensuring that all children who attend school get enough food for the day. This is done by ensuring that breakfast in the morning and lunch during the day are available and served to learners. Also, the feeding programme provides learners with food parcels on Fridays to ensure that they eat during weekends as well. However, the parcels are only provided to identified learners, who are those from the families that are having a challenge of food insecurity.

Further, the participants also explained that their children get additional food when they are at school because there are times when there is no food at home. Therefore, through the feeding programme, learners eat three times a day instead of two, because some parents reported that there are times where they have to skip breakfast because there is not enough food at home. Thus, the participants observed that school meals increase food consumption. In addition, Bundy et al. (2009) mentioned that if the examination of the factors/indicators shows an improvement then the intervention of the programmes is useful, validates the theory of change and serves the purpose of the programme.

5.3.2.4 Saved costs: food and money

In Khayelitsha, the study found that school feeding programmes are associated with saved costs such as food and money. It found that school meals enable households whose children attend

school to save food during school terms. This is because when children are at school, they do not consume food at home, they eat at school. Parents do not buy food during the day because their children receive a free meal for the day. Consequently, not buying or preparing a meal during the day means saving money; it enables parents to save money. The comments by participating parents confirmed this.

(a) **Food:** This study found that school feeding programmes in Khayelitsha are regarded as an important intervention that saves food for many households whose children attend school. This parent explained:

Yes, sending my child to school does save food at home because in the morning he wakes up and goes to school and then comes back after school. Since the schools are open, he only eats super at home on weekdays. So, we do not cook and that enables us to save the food that was supposed to be eaten during lunch and that food assists us for super (*Participant 6; Quote 10*).

Furthermore, another parent observed:

It does have an impact because now they no longer eat much, at school they eat a small portion and now they are used to that. If you dish too much for him, he would say, “No mama, I ate at school,” you know? That time you were thinking that he is hungry but all along he is not hungry. So, at least that saves food at home (*Participant 21; Quote 20*).

Moreover, the comments highlighted by the respondents demonstrate that they believe that school meals also benefit the families of school-going children. The school meals save food for most households because when children are at school, parents do not have to prepare meals for them. They do not have to prepare breakfast because porridge is served at school in the morning. In addition to breakfast, lunch is served in the form of a hot meal, as well as milk and fruit. Thus, parents save money. They do not need to prepare breakfast and lunch because they are provided at school.

(b) **Money:** For most parents, sending children to school plays a role in saving money at school, since children spend the whole day at school. In this regard, the WFP (2019) reports that school meals save up to 10% of family income. The participants of this study explained that sending children to school helps them to save money that would have been used during the day. Most of the interviewed parents had similar experiences. For example, a parent from another school commented:

Yes, I save some [money]. For example, when they are at school, you save money because if you were going to buy bread or had R10 to buy an onion, you do not buy it. Then you can use that money maybe later when they have come back. Because they eat at school, there is food, so there is no need for money. You do not give them pocket money, since you know that they will eat at school (*Participant 13; Quote 15*).

Furthermore, a different parent from a different school added another dimension:

Yes, it saves [money], because I can even open a life insurance, so that if something happens, then I can go and bury them with the cents. But if they were not going to school, I would not have money to do that (*Participant 20; Quote 22*).

While one may argue that parents send their children to school to get an education, the feeding programme also plays a role to motivate parents to send their children to school. This is because sending them to school means that there is no need to prepare a meal during the day. As captured above, a parent explained that she does not buy bread or an onion during the day and instead saves or uses that R10 to do something else. This shows that families are able to do other things, using that money saved from buying bread or an onion.

Thanks to the school feeding programme, there is no need for parents to give their children pocket money because they know that it is guaranteed that the children will get food. In addition, parents' spending on electricity and water reduces during the school terms because children use water at school. The parents reported that children use a lot of electricity and water when they are at home because they regularly cook and flush toilets. Therefore, the spending on these two items is reduced when children are at school. Consequently, parents spend less on electricity and use the money to cover other household expenses, such as life insurance.

5.3.2.5 School food gardens complement the feeding programme

School feeding programmes serve as an addition to what the department provides. This is in accord with Laurie et al. (2017), who acknowledge that food produced from the school gardens enhances the vegetables and fruits served to learners. The same study showed that 48% of the food cooked for learners in its study, is obtained from their school gardens. However, in this study, only one participating school had a food garden. Participants from the school with the food garden believe that their school's food garden plays an important role in addressing food insecurity. Additionally, the other two schools without food gardens also believe that the

gardens would have made a difference if they had them. This was underscored by the respondents' comments when they were asked about the effects of school food gardens. In addition to that, this code appeared 12 times on Atlas. ti.

A school food coordinator, who is also a teacher at the school, explained:

We do have food there, such as spinach, and spring onion; there are many things there – eggplants, green pepper. I forget the other things; there are a lot of things, like cabbage. So, what is happening is that sometimes, since we do not receive onions, the cooks get them from the garden and they also mix cabbage and spinach to make that green (*Participant 16; Quote 12*).

The school principal also commented:

So, all the produce of the garden is extra, right? So, it is an addition to what the department gives; so, we would sometimes take theirs, depending on what we can plant. Some years there were potatoes and onions and we normally have spinach in the garden. We have peas, beans and there are a lot of herbs in the garden that can be used in the cooking, and then beetroot, those are the things that are planted. When we produce things, those things are given to the harvesters and to the kitchen staff and they would use them in the cooking for learners (*Participant 15; Quote 13*).

This is an indication that school food gardens make a difference in what is served to the learners. The school staff believe that the produce from the gardens serves as additional food to what the department provides to the school. Also, it enables the school to diversify, serve fresh and organic vegetables to learners, unlike the schools without food gardens, which rely only on vegetables provided by the department. To make the gardening programme more successful, schools also need to be encouraged to have school gardens as that will enable them to serve their learners fresh, organic and diversified vegetables. As indicated by the school staff, having food gardens will add to what the department provides.

The participants from the schools without food gardens acknowledged that if they have the gardens, they would make a difference in what is served to learners. This was confirmed by a school food coordinator:

I think it would have made a huge difference because our vegetables would be organic as well as we would not have a shortage of vegetables. Also, we would serve fresh

vegetables when we have them inside the school. Variety also, because now we are only limited to certain vegetables from the supply but if we had our own garden, we could serve other types of vegetables to learners other than the ones that we receive from the supplier (*Participant 2; Quote 9*).

Another teacher commented:

If we can have the school garden, I think it can make a difference because we can have all the vegetables that we need and that we think are necessary for children. We can even sell them if they are more so that we can have fundraising of some sort; that would make a difference. We can even do food parcels for learners to take them home – the extra vegetables (*Participant 3; Quote 10*).

The comments from the respondents demonstrate that even though the other schools do not have school food gardens, they view the gardens as an important way of diversifying vegetables. This is because the department provides the school with only a few kinds of vegetables, such as butternut, carrots and cabbage. Thus, having school food gardens will enable the school to plant other kinds of vegetables, such as spinach, turnips, beetroot, or peas. Therefore, if the schools can create school food gardens, they will be able to provide food with a wider variety of vegetables to learners.

However, a school principal from a different school holds an opposing view:

I do not think so. The school food garden is very small, and we have got really [large] numbers here. Planting carrots, planting cabbage – how long will that take to be eaten? Kids are hungry now; they are hungry today. I do not think it can make any difference at all. In fact, for space to do the planting it would not be sufficient, and planting takes time. When you plant carrots now, it takes three months to be ready and every day learners are hungry and want to eat. Also, when you harvest it, you will harvest for how many people at that time you have invested so much money, energy and time and it will only cover only one meal and then it is gone (*Participant 8; Quote 16*).

This demonstrates that the only challenge that demotivates the schools from having school food gardens, is the land. Schools have insufficient land and for schools that have larger numbers of learners, having gardens in such conditions would not make any difference. Thus, it is the responsibility of the department to ensure that schools have a place where they have gardens –

possibly by buying land for the schools. This will encourage even the learners to participate in planting food.

5.3.3 Observation

The researcher conducted observations at all three schools under review. The study observed that all three schools had clean kitchens. However, the gas was inside the kitchen and that is not safe for the food handlers. Furthermore, the main purpose of the observation was to see how learners behave when they are eating. In two schools, food handlers were dishing food for learners in queues and one school gave the learners large containers with food to dish for themselves. In one of the schools dishing for learners in queues, the learners were so organised and calm.

In the second school, learners were pushing each other and impatient. This suggests that they were really in need of food and conscious that food might get finished before they get. However, I was not allowed to directly speak to them as my study did not include interviewing learners. On the other hand, at the school where learners were serving themselves, they were smiling and happy when collecting the food. Some even commented, “Mams, the food is not little today” The behaviour of the learners showed that they were enjoying the food served to them.

The study also observed the emotions of the participants when they were answering the questions. For example, two food coordinators were a bit emotional and sad when asked the following question “are there learners that are dependent on school meals, what is the effect of school feeding on academic performance and nutritional status”. So, their behaviour shows that the programme is making a difference in its beneficiaries. In addition to that, parents and food handlers seemed excited and happy as they were smiling especially when asked questions related to reduced hunger, increased attendance, the effect of school meals on costs and academic performance. Therefore, the emotions shown by participants show that they appreciate the contributions that the feeding programme is making towards their children.

5.4 General effects of school feeding programmes in Khayelitsha

The main purpose of the feeding programme is directed towards addressing food insecurity and educational improvement. However, the study found that the school feeding programmes also have general effects that benefit both the learners and parents in Khayelitsha. The participants

highlighted that these effects include: (a) employment creation; (b) reduced inequality and reduced pressure of asking for food from peers; (c) reliance as a source of food; and (d) gender equality. This section demonstrates how the feeding programme contributes to the factors mentioned above.

5.4.1 Employment creation

This is one of the findings of the study in Khayelitsha. School feeding programmes create jobs for food handlers and they use their stipends to meet households needs, such as buying food and electricity. One food handler commented:

Yes, because we are here, we do not sleep with empty stomachs, we do get some cents from volunteering. So, it has created employment opportunities. For example, the food handlers from all the schools would be sitting in the townships without jobs if the programme was not existing. So, there is a difference (*Participant 4; Quote 22*).

Another food handler explained:

Yes, I would say, because you see, as we are volunteering, that allowance makes a difference at home because I can buy electricity, maize meal at home, can you see? (*Participant 18; Quote 28*).

The food handlers receive a stipend for volunteering and use the money to buy food and electricity at home. That reduces hunger and addresses food insecurity at home because food is available and accessible.

5.4.2 Neutralised gender inequality

A study conducted by Gelli (2015) states that school feeding enhanced girls' school enrolment by 12% among 32 Sub-Saharan African countries. However, in South Africa, the statistics are gender neutral, unlike in many other African countries. The DBE (2018) reports that in 2016 the proportion of boys and girls in schools showed an insignificant difference of 49.3% females and 50.7% males. The participants of this study explained that school meals create equal opportunities for both boys and girls, as articulated by this food handler:

It creates equal opportunities because even boys, most of the times were not attending school, saying that they come back hungry, have nothing to eat and sometimes they would be told to look after cows at home, they had to participate in farming, and to [be]

shepherds and then have no time to go to school. But now, children are focusing on school because they know that they will get what they do not receive at home. It is the same for girls – that thing of forcing a particular child to get married so that we can get money to maintain others, is no longer in practice. She now can go to school and to get successful she has to.... and the boys even say that ‘the reason that I was going to school, is food’ and he will not only get food, but education as well (*Participant 12; Quote 31*).

Another participant voiced this opinion:

No, I cannot really link it, because anyway, in terms of our requirement legislation, any child below school-going age, it is compulsory that is Grade 9, must come to school. So, no girl child must be kept at home in the Southern African context. So, either way, whether you like it or not, your child must be at school at that specific age. And when you are at school at that specific age and above Grade 9, automatically you have been in the system already; so, you are definitely going to stay longer. Whereas there are those few dropouts somewhere there, but at least ... (*Participant 8; Quote 24*).

The comment from this participant shows that parents are forced to send their children to school because the South African legislation requires them to do so. Therefore, in the South African context, school meals have an equal effect on both girls and boys; it is gender neutral, and the feeding scheme does not really affect the issue of gender. So, the study found no evidence that school feeding has a significant effect on gender equality

5.4.3 Reliance as a source of food

It is well known that learners come from different backgrounds. In addition, KZN Human Settlements (2010) found child-headed households to be a common phenomenon in South Africa. More specifically, it has been found that in Khayelitsha there are learners who rely on the food provided at school. Some children come from child-headed households where an older child has to provide for the younger siblings. This was confirmed by this study’s participants, as articulated by a food handler from one of the schools:

These children are outspoken, especially when schools are closed. He would say, ‘Ow, mams, we think of your food when schools are closed because we get hungry.’ It’s children that say that. Also, in the morning, ‘Yhu, mams, we rushed just for the porridge.’ They are really dependent on this food (*Participant 19; Quote 27*).

An educator echoed this sentiment:

There are learners who are dependent on school meals. Also, here in Khayelitsha, we have child-headed households, where you find that they stay alone and one is maybe doing Grade 12 here at school, you know? So, they got nothing other than [the] grant that they receive once a month and which is also not sufficient for their needs. So, they come to the school principal and explain their situations, that they have got nothing [no food] and then they end up being added to that programme of food parcels (*Participant 9; Quote 26*).

Atlas.ti showed this code 21 times but since this is a mini-thesis only a few quotes from the participants are quoted. It could therefore be argued that there are several learners who depend on the school feeding programme for food. Additionally, the participants believe that schools play a significant role, especially for child-headed households because those children receive no support from them financially. Furthermore, children from such situations are more likely to be food insecure and therefore school meals become their rescuer and the participants mentioned that the school helps learners in situations like that.

5.4.4 Reduced inequality and pressure of asking for food from peers

Another finding is that school meals reduce the pressure on learners of asking for food from peers and thus automatically reduce the difference between the ‘haves’ and the ‘have nots’. In support of this, the Legal Resources Centre (LRC, 2017) found that the introduction of school meals relieves the pressure on learners of asking for food from other learners. This was confirmed by the comments of this study’s participants. A school principal observed:

Really, it does, for the fact that one would be required to ask for food from peers when hungry. But now, one can eat food from [the] kitchen without asking for food from peers. So, it relieves the pressure” (*Participant 1; Quote 29*).

Similarly, a food handler commented:

There is a huge difference that it has played because learners no longer crave other learners’ food because they know that there is something they will eat. Even if they did not eat a fat cake, at least there is a plate from mams [food handler] waiting for them in the kitchen. Even if she does not have money for fat cake, she does not stress (*Participant 4: Quote 29*).

Furthermore, interviewed participants believe that providing free food at schools restores the dignity of learners because they do not have to ask for food from peers, as asking might affect their dignity if they always ask. Also, having a free plate of food that one receives at school reduces the stress on the learners. Thus, they no longer ask for food or stress about what they will eat during the lunch break; instead, they go to the kitchen and get a free bowl of porridge for breakfast in the morning and a full meal during the lunch break as well.

5.5 Limitations and challenges of the school feeding programme in Khayelitsha

The school feeding programmes have played an important role in the lives of school-going children in Khayelitsha. However, the programme faces certain identified limitations and challenges. These were raised by the interviewed participants from the three participating schools. These limitations and challenges include: (a) stigma attached to the feeding programme; (b) theft and shortage of resources; (c) quantity of food; (d) using teachers as school food coordinators; (e) providing limited kinds of vegetables and fruit; and (f) scarcity of land and water to sustain school food gardens. The theory of change was very useful in identifying these gaps that still need to be addressed. For instance, the theory of change helps to identify gaps between the goals and outcomes of an intervention programme (Stein and Valters, 2012). Therefore, this study was able to identify school feeding challenges through the use of the theory of change.

5.5.1 Stigma attached to the NSNP

School feeding is associated with stigma. This means that children who are benefitting from the feeding programmes are shy to eat because of the fear of being regarded as poor by their peers. In support of this, Devereux et al. (2018) argue that school feeding programmes can cause problems of stigma and social exclusion if claiming food is associated with poverty. A teacher underscores this stigmatisation:

But at the beginning, I remember, it was around 2000 and something, I was still in one of the schools, when the programme was introduced. You would find that some learners are shy to be part of the programme, as if it is like if you are part of the programme and then your home is poor, all such things (*Participant 17; Quote 24*).

The school principal further explained:

Initially, if you remember, you had pride. By the time or when bread was introduced, people did want to eat. So, learners were shy and did not want to be part of the feeding but later on, they got rid of the pride. So, all of them participate in the feeding programme (*Participant 1; Quote 26*).

These statements from the participants show that there is a stigma attached to school feeding programmes. Learners who are part of the feeding programme are regarded as poor, especially at the time the programme was introduced. In addition, the initiative of providing learners with food parcels seems to be creating stigma among the learners who benefit from the programme. Some learners are reported to be shy and too proud to carry the food parcels that they are given by the school. This was underscored by a school food coordinator

At high school, they do not come and report. As a teacher, you notice that, no, the situation is bad here. You look at their appearance and see the situation that the learner comes from. You notice the appearance and see that the situation is bad at home; so, it is better to give the learner a food parcel, although they are shy to carry them. They do not want to carry them. They eat, get full and leave them. Otherwise, the school is willing to give them something more so that even after school they have food to eat. But then they are older and do not want to carry the food parcel (*Participant 2; Quote 7*).

This comment shows that some learners are shy and feel too proud to carry the food parcels in the presence of their peers. The department and the schools are trying their best to assist learners, but some learners seem to be too shy to carry the parcels provided by the school food coordinators, who are also their teachers. This can be due to the stigma that if you participate in the food parcel initiative, you are regarded as being poor. Therefore, they reject the support that was also going to benefit their families.

However, the schools devised two ways to fight and eliminate the stigma. Firstly, learners from wealthy families were also participating in the feeding programme and that motivated poor learners to also participate. A teacher commented:

But what I liked is the fact that those learners whom you know whose parents can afford [food], right? But those learners were the ones that were going for the food ... it was milkshake then and bread, when it was introduced. So, you find that those learners want

this milkshake. So, I mean, it was a sort of motivation even to others – at least if so and so goes, then I will also go, yes (*Participant 17; Quote 24*).

The second way was that some teachers pretended to be eating the food with learners, with the intention of showing that there is nothing wrong with the food. A teacher recounted:

I stand with them, holding a plate made of plastic. That time I do have food in my car, but I just want to show them that there is nothing wrong with this food. Sometimes I would say, ‘Aunt, please give me carrots,’ and then after they have left, I return the carrot back to the kitchen, you see? Even them, they would be so happy to see ma’am eating the same food as them. So, in a way, it is just to show them that there is nothing wrong with this food; it is the same as the other food (*Participant 10; Quote 15*).

These efforts have contributed to breaking the stigma against the feeding programme and DBE worked very hard to break the stigma by serving food to all learners rather than only those from food insecure households. However, food parcels still cause an issue of stigma and that still needs to be taken into consideration.

5.5.2 Theft and shortage of resources

The participating schools in Khayelitsha have shown that shortage of resources is an issue that affects some of the schools. There are challenges, such as not having refrigerators, theft, and bad condition of cooking pots. Some of the interviewed participants identified theft as a contributing factor to the shortage of resources. A school food coordinator explained:

They [the education department] supply us with everything. Our challenge is theft, and burglary in our communities; otherwise, the department supplies us with everything. Every year they do a top-up of things that we need...they know that things get broken. So, they supply us with everything. The challenge is burglary in the kitchen – children’s food is being stolen and equipment for preparing learners’ food also gets stolen; that is the only challenge we have. This burglary is done by the community which we are helping; it is crime (*Participant 2; Quote 19*).

In the same vein, another educator from the same school lamented:

The main challenge is security and the safety of our food. Burglary is still a concern. The schools are being burglarised, the food and the utensils that are used there in the kitchen

[are stolen]. The society does not fully support the schools, concerning security and safety (*Participant 3; Quote 23*).

It is evident that the school feeding programmes are plagued by the problem of theft. Utensils that are used in the kitchens are being stolen, which contributes to the shortage of resources. For example, in one of the schools, the participants explained that they had three pots and one was stolen, which left them with only two pots for the entire school. Even though the food handlers strive to ensure that learners are served on time, in some instances the challenges might cause delays because participants have to wait before the food handlers start cooking other meals.

The PSC (2008) points out that there are no funds set aside for refrigerators. The participants complained that food perishes due to the lack of refrigerators. A food handler expressed this frustration:

Yes, there are resources that we need, like a refrigerator, because fruit gets rotten. So, it could be much better if it can be kept in a cool place. Also, milk gets rotten and sometimes you will find that the whole box of milk is damaged. In some cases, we do give learners milk and they bring it back because it is rotten/damaged. So, now we need those resources” (*Participant 11; Quote 14*).

In the same vein, a second food handler from the same school commented:

We do have a stove, but only 2 out of 3 sides are working properly, so we would like for it to be fixed so that we can cook at once. We now have to cook the porridge and wait until it is cooked and then cook another batch. We have to wait for the porridge to get ready first and then cook another batch. Also, pots are not sufficient; we do have them, but they are not enough – one was stolen. We also do not have a refrigerator and we do need it in the kitchen (*Participant 5; Quote 10*).

A food handler from a different school highlighted safety concerns:

The kitchen is small, you see. The gas is inside, in the kitchen instead of being outside, you see, while the kitchen is small. So, anything can happen – like accidents – because the gas is inside and near our stove. But we force [ourselves] because we do not want children from the school to suffer; they have to eat like others from other schools (*Participant 18; Quote 12*).

The participants, especially the food handlers, indicated that they need resources such as stoves and refrigerators because perishable food gets damaged. For example, apples get rotten as they need to be stored in a refrigerator. So, the failure to keep them in cool places damages them, leading to food waste. Another challenge that was reported is the status of the kitchens. They are reported to be small, which can cause an accident because the gas is also inside, near the stove. In addition, the participants reported that the pots are not in a good condition. This makes it hard for the cooks to stir the food, more especially porridge. Therefore, the pots need to be replaced and serious actions need to be taken to address all the challenges identified by participants.

5.5.3 Quantity of food

The school feeding programme is trying its best in ensuring that learners get nutritious meals every day. However, the quantity of food served to learners is not enough. In support of this, Graham et al. (2015), in a study conducted in the Eastern Cape, found that one spoon of dished food per child is insufficient, especially if there is no food at home. Similarly, in Khayelitsha, the study found that food served to learners is not enough, as the learners always complain, as expressed by this food handler:

The food is not enough for the children. They always complain and they fight, and we have to intervene – ‘so and so took my food’; ‘I did not eat’; ‘the food was finished’; ‘they took my food while I was in the bathroom’; and you have to resolve that *(Participant 13; Quote 30)*.

An educator also commented:

Food served to learners, I do not think is enough, concerning the ratio they are using in the kitchen. Quality-wise, I would not say it is not that good, because it has starch, vegetables, fruit and proteins. So, almost everything is there, I cannot say it is not of good quality but the servings, I do not think the quantity is enough, because learners always complain that the food is very little for them *(Participant 3; Quote 11)*.

The respondents from the participating schools believe that the quantity of food served to learners is not enough. As a result, learners are not satiated under the current measures used per learner, leading to their complaints that the food is insufficient. In addition, they even fight among themselves, and that indicates that food insecurity is the challenge they face at home. However, according to the South African Government (2018), Western Cape province provide

learners with two meals a day. This might contribute to learners being served small amount of food. If the province serves its learners two meals using a budget allocated for one meal that is one reason why learners complain about the quantity of food served to them.

5.5.4 Using teachers as school food coordinators

Another finding is that using teachers as school food handlers distract teachers from teaching, as articulated by this participant:

Firstly, the department can have someone responsible for the feeding scheme and not use teachers because teachers are very busy. The seriousness of this nutrition programme needs somebody who will be there 24 hours and focus on that; someone who is fully trained for this programme because it really needs attention. But now, it is just that the department throws it at teachers, while they also have their own responsibilities (*Participant 2; Quote 20*).

This was mentioned by one of the teachers responsible for coordinating food at school. For the other two schools, follow up from food coordinators for this subject was not done due to time as the WCED allowed the study to collect data from the schools only until September 2021. However, the Department of Monitoring and Evaluation (2018) also mentioned a concern that the nutrition programme can eat the learning and teaching time. This demonstrates that, for teachers to do the coordination of the feeding programme while their responsibilities as teachers are also waiting for them, is a lot of work. It interferes with and distracts the teachers from doing their job of teaching. Serious actions need to be taken to address this issue.

5.5.5 Providing limited kinds of vegetables and fruit

Most of the participants indicated that it would be appreciated if the department can diversify the range of vegetables and fruit provided to schools. After they were asked what they think still needs to be done, an educator responded: “In terms of vegetables, it is only the carrots and cabbage that are normally there.” (*Participant 17; Quote 32*).

A parent expressed a similar sentiment:

The thing is, yes, they send food at schools, you know, so that children can be assisted. But you will find that as they are sending these vegetables, sending this fruit, there are other fruits that they could send. Maybe they can send various fruits, because at times they must be given something different (*Participant 20; Quote 40*).

The message from the participants is clear: It would be appreciated if the department could diversify the range of fruits and vegetables provided to schools.

5.5.6 Shortage of land and water for school gardens

The Department of Education encourages schools to have school food gardens. However, not having enough water restricts the schools from producing larger quantities of food. In addition, the DBE (2014) claims that they face a problem of scarcity of water to sustain the school food gardens. In Khayelitsha, this has been found to be a problem for schools that have food gardens. A participant who works in a food garden explained:

The garden needs to be extended, but it cannot be extended because sometimes water is expensive and scarce. But now it is better because there is rain. So, you will find that when there is no water, the school complains about water; so, you will find that it is difficult in the garden. But I would try, because I must produce something for children to eat (*Participant 20; Quote 42*).

The scarcity of water is a challenge that restricts schools from participating in the school food garden initiative. For the gardens to produce more food for the learners, they need to have sufficient water to sustain the gardens, otherwise, there can be no food production.

Another challenge identified as a problem in Khayelitsha, is the issue of land, as articulated by a school principal:

I do not think it can make any difference at all. In fact, for space to do the planting, it would not be sufficient” (*Participant 8; Quote 16*).

One of the reasons for this may be the lack of land. The schools have large numbers of learners and therefore they need enough land to plant sufficient food for the learners. In support of this Araya et al. (2020) notes that lack of land can be another challenge for school food gardens to produce enough food for learners and since schools may use the land for other school projects such as building classrooms. Therefore, this becomes a problem for other schools to participate in the school food garden intervention.

5.6 What can be done to improve the current school feeding programme in the Western Cape?

The previous section highlighted the limitations and challenges that the feeding programme faces. This section provides recommendations on what can be done to address the identified

challenges to improve the current school feeding programme in the Western Cape. The study found that the challenges can be addressed through: providing more resources and improved security to schools; increasing food items provided to schools; employing external food coordinators; revising the menu and diversifying vegetables and fruit; providing enough land and water for school gardens; and distributing food parcels.

5.6.1 Increased resources and enhanced security

Providing schools with full-time security can be an effective strategy to fight against theft in schools. This was shown by the comments from the interviewed participants. For example, a school food coordinator stated:

Maybe theft can be solved by having full-time securities at school day and night, that is the only thing I think can solve the problem because they only provide us with securities during holidays. We do not have securities during the year and burglary often occurs during weekends and after hours. We keep on buying the same things, the department always replaces things, they steal pots and stoves, and the department replaces them again (*Participant 2; Quote 22*).

Another educator explained:

So, I would recommend that the government or the suppliers together with the schools have a talk on how we can improve our safety and security concerning food and the utensils used in our kitchen at our schools related to the feeding scheme (*Participant 3; Quote 24*).

Addressing the theft of resources will solve the problem of shortage of resources such as pots, that are being stolen. The participants recommended that the provision of pots and refrigerators to their schools would make a difference. They believe that food gets damaged because of not being stored in a cool place and therefore providing them with refrigerators would address the wastage of food. A food handler commented:

We would like to have refrigerators in our storeroom where we keep food. The fruit is maybe delivered this week and by next week it is already rotten. So, a refrigerator can assist in such situations (*Participant 4; Quote 10*).

This point was emphasised by another food handler from a different school:

I think maybe if we can be provided with a fridge, pots and additional food, so that there is no shortage of food (*Participant 11; Quote 25*).

The recommendations from the participants indicate that they are really in need of the resources that they have identified, such as pots, stoves, and refrigerators and therefore they would appreciate it if the department can take action. Further, the kitchens also need to be extended to ensure the safety of food handlers when they are preparing the food. A food handler mentioned that, “Our kitchen must be also extended so that you will have a place to run to when you get burnt” (*Participant 19; Quote 33*). These statements capture the opinions of the participants on what can be done to address the shortage of resources.

5.6.2 Increased food supplies

The study found that the food served to learners is not enough and therefore the participants provided recommendations on what can be done to solve the problem. A food handler explained:

I think it would be better if the portion of food served to learners can be increased as my learners are complaining. The department must increase the measurements, that one spoon and a half must be increased (*Participant 18; Quote 31*).

A similar view was expressed by a parent:

Learners do not get full; they complain because the suppliers deliver little food on that truck and the number is high, so we try for them to share so that every child gets food. So, the department should deliver enough food (*Participant 14; Quote 22*).

Providing enough food to each school will have a significant effect on the learners. Also, the participants believe that the portion size per learner should be increased.

5.6.3 External food coordinators

One of the school food coordinators suggested that the department should employ people responsible only for the feeding programme at school. The participant explained:

Firstly, the department can have someone responsible for the feeding scheme and not use teachers because teachers are very busy. The seriousness of this nutrition programme needs somebody who will be there 24 hours and focus on that, someone who is fully trained for this programme because it really needs attention. But now it is just that the

department throws it at teachers while they also have their own responsibilities. Some of the things we as teachers, we just take them for granted, whereas if there was someone who is there, the person would look at everything (*Participant 2; Quote 21*). In support of this, the Department of Monitoring and Evaluation (2018) suggest that a Senior Food Handler should be appointed to manage the administration of the NSNP in schools.

Therefore, for the programme to be effective, the department should employ people who will be responsible only for the feeding programme in each school – people who will thoroughly check everything that concerns the programme.

5.6.4 Revised menu and more diverse ingredients

The interviewed participants suggested that vegetables and fruits must be diversified. For example, in terms of vegetables, the department provides only butternut, carrots and cabbage. When it comes to fruit, there are only apples and pears. One parent said:

No, it must be mixed, you see? Most of the time they send the apples, maybe in another month they can send pears, you see? And then in another month an orange, you see? Because we know that bananas are expensive and they would not all get. But the government should change it, you see? (*Participant 40; Quote 41*).

A food handler suggested:

Also, the menu must be revised and the soup must be replaced with something else in some days. For instance, they can add amasi and replace soup in some days and soups can be served for two days (*Participant 11; Quote 25*).

Serving learners with different kinds of vegetables will enable the learners to receive different nutrients as each vegetable has its own benefit. For example, spinach provides iron. The participants suggested that the menu should be revised to include a wider range of vegetables and fruits. Another suggestion was that soup should be replaced with sour milk on some days.

5.6.5 Access to enough land and water for school gardens

Araya et al. (2020) claim that lack of water negatively affects the success of school food gardens as the schools have to pay for water to their municipalities. Therefore, this needs to be taken into consideration by the education departments. The study then provides recommendations on what can be done to address this problem. This was one of the

suggestions identified by a participant. Furthermore, a parent who works in the garden as well, commented:

I cannot extend it [size of the food garden] because of water. Yes, I have a tank, but it is not enough. So, I would like to have another tank that will add water, because most of the time we use rain water (*Participant 20; Quote 42*).

In terms of land, the school principal observed: “In fact, for space to do the planting, it would not be sufficient” (*Participant 3; Quote 17*).

This shows that water and land are vital, and that the department or anyone responsible for school gardens should come up with a solution to these problems – such as buying land and tanks for the schools to do the gardening.

5.6.6 Distribution of food parcels

Most of the participants advised that the department should continue distributing food parcels. This was shown by the comments by the participants. A school principal explained:

I think to ensure that there are more food parcels we talked about because there are many other learners who are not benefitting from the food parcels, maybe during holidays and stuff. Some of them that we know are very desperate, then they benefit. There are also others who are on the similar scale but unfortunately, they would not benefit because they are not as adverse as others. So, if this can be improved, because during holidays most of them are at home, except those that attend holiday classes. So, they are going to get to the same situation of being hungry at home (*Participant 8; Quote 30*).

Furthermore, an educator explained:

Also, the worry are the weekends, what about Saturday and Sunday? Then yes, there are these packages that are normally sent from the Covid time, if maybe, right, those packages can be there so that at least we know. Maybe, even if we say there are four weekends in a month, you see, then we say at least this package is for one month. So, that a learner at least can get a package for each month, not four packages; at least one food parcel for the weekend, then I think that would make a great difference (*Participant 13; Quote 34*).

Besides the food parcels that are provided to identified learners on Fridays, participants believe that it is important that the parcels are provided to everyone. One of the participants mentioned that some learners do not benefit because they are not as needy as others, even though they are desperate and in a similar situation as those who benefit. Furthermore, participants observed that during holidays some learners do not benefit because they are at home and thus struggle to get food. Hence, they suggest that it is important to provide food parcels even during weekends and holidays to all learners.

5.7 Conclusion

This chapter has identified and showed the effects of feeding programmes among school-going children in Khayelitsha. The findings are that school feeding programmes have different kinds of effects namely educational improvement effects, food security effects and general effects. On educational improvement effects the study found that school meals improve learners' punctuality, concentration, school attendance and academic performance to name a few. However, it was also found that for educational improvement results are quite mixed. For example, the study recognised that some learners tend to get lazy after being fed while others become more attentive and active in class. The second effect is on food security which the study found that school meals reduce short-term hunger, maintain/improve nutritional status and improve learners' food consumption. Thirdly, the general effects namely employment creation and reduced pressure for learners from asking for food from peers. This chapter also discussed the limitations and challenges that the feeding programmes are facing. Firstly, the programme was associated with stigma and also there is a shortage of resources. Therefore, recommendations such as increased resources and enhanced security, distribution of food parcels and increased food suppliers were also demonstrated as strategies to improve the current programme in operation and to address the limitations and challenges. Lastly, the chapter also discussed the observed factors from the schools that participated.

CHAPTER 6: LIMITATIONS, RECOMMENDATIONS AND CONCLUSION

6.1 Introduction

This chapter provides the limitations of the study. It also discusses the recommendations that can be implemented to improve the school feeding programmes currently in operation in the Western Cape. In addition, the chapter puts forward recommendations for future research, followed by the conclusion.

6.2 Limitations

The study consisted of a small sample as the study only covered three schools and interviewed seven participants from each school in Khayelitsha. Thus, that made it difficult for the study to generalise results to the entire Khayelitsha, Cape Town, and at the provincial level. Furthermore, the learners, who are the direct recipients of the school meals, were not part of the study. Only principals, educators, parents and food handlers participated and thus it can be assumed that the qualitative responses might be subjective. This is because the participants might not have reflected the exact effect because they do not have experience and have not benefited from the feeding programmes. Also, the study involved only qualitative research and therefore the study only collected perceptions and views and did not measure enrolment rate, pass rate, school dropout rate, and other indicators such as weight and height to see the exact effects of the feeding programme.

6.3 Recommendations

- ❖ Frequent monitoring of the programme needs to be implemented and put into practice, to ensure that the necessary resources are provided to schools, food is delivered on time, and to revise menus, as the need arises. In support of this, the DBE (2016) suggests that frequent monitoring may help to identify and address problems. Therefore, once problems are identified, it is easier to come up with solutions, to make changes and adjustments where needed.

- ❖ The schools should be provided with enough resources such as kitchens, pots, tin openers, stoves, and refrigerators. The provision of pots, stoves and other important utensils will ensure that food handlers cook quality food. Also, the provision of refrigerators can decrease the waste of perishable food, such as vegetables and fruit.
- ❖ The study recommends that schools should be provided with enough food ingredients that will be sufficient for all learners. In addition, the study believes that providing enough food will ensure the success of the programme, as the main purpose is to address food insecurity among learners.
- ❖ There should be an expansion of food gardens, provision of adequate water and land to sustain the gardens to produce enough food to assist those preparing the meals.
- ❖ The department should employ external food coordinators who will be responsible for running the entire feeding programme. This will relieve the teaching staff of the added burden and allow them to focus on teaching. This will also ensure that the programme runs smoothly and that every aspect concerning the programme is thoroughly taken care of. The Department of Monitoring and Evaluation (2018) further states that Senior Handler should be appointed to manage the administration of the NSNP in schools.
- ❖ Food parcels should be distributed to all learners during weekends and holidays because some homes are affected by food insecurity. Targeting certain learners leaves out other learners who are also desperate, shy and scared to report their socio-economic situation to teachers.
- ❖ There is a need for future researchers studying the effect of school feeding in Khayelitsha, in Cape Town, and in the Western Cape, to involve learners, as they are the direct recipients and will give exact information about their experiences and the effects of the feeding programme. For example, they can be asked questions like: ‘What is the effect of school feeding on your life?’ ‘What is the relationship between academic results and food consumption?’ ‘Do you think it has assisted you in your academic life, preparing for the future?’ ‘What do you think would have happened to you if there was no feeding scheme?’
- ❖ Future studies should focus on evaluating the school feeding programme using a mixed-methods research approach to determine the impact of feeding programmes on educational improvement and food security. Using a mixed-methods approach will allow the researchers to examine the impact in percentages and show the exact effect in numbers, not just the perceptions of the participants.

- ❖ Lastly, there is a need for future studies in Khayelitsha, Cape Town, and the Western Cape, to use different theories, such as the capability approach to see if the feeding programmes contribute to the well-being and development of beneficiaries.

6.4 Conclusion

This study has shown that school feeding programmes aim to address food insecurity and educational improvement. The evaluation of the global, African and South African feeding programmes showed that the feeding programme goals are met. In African countries the school feeding programmes contribute to increased school enrolment, attendance and academic performance, as well as improved nutritional status, and the reduction of short-term hunger among school-going children. In South Africa, school meals were introduced to provide learners with nutritional and balanced meals, to aid their participation in learning, and to support them in doing well academically.

This study used semi-structured interviews, observation and purposive sampling to collect data and the study used thematic analysis to analyse data and interpret the results. The study recognised that the introduction of school meals has played a role in enhancing food security and educational improvement for some learners. This supports the theory of change that was used to examine the effects of school meals in Khayelitsha. The theory states that school meals are expected to contribute toward increased food consumption and improved school attendance, which in turn reduce child malnutrition and improve academic performance in the long run, and enable higher earnings and reduced childhood poverty in future.

However, the results are quite mixed for academic performance, school attendance, and punctuality – some participants observed positive effects while others observed neutral effects. Regarding class concentration and participation, some participants observed negative results that some learners tend to become lazy after being fed. It was also found that there are factors that still need to be improved, such as: the quality of food, scarcity of water and land for school gardens, and shortage of resources, to name a few. This study further revealed that the limitations and challenges can be improved by revising the menu, specifically the size of food portions, and diversifying the range of fruit and vegetables. In conclusion, it could be argued that school feeding programmes serve the purpose for some learners, while for others it does

not. Finally, for the programmes to close the gap between the goals and the outcomes, the limitations and challenges need to be taken into consideration.



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APPENDICES

Appendix A: Ethics clearance letter



UNIVERSITY of the
WESTERN CAPE



03 August 2020

Ms B Sindi
Institute for Social Development
Faculty of Economic and Management Science

Ethics Reference Number: HS20/2/19

Project Title: The effect of school feeding programmes among school-going children in Khayelitsha, Cape Town.

Approval Period: 30 July 2020 - 30 July 2023

I hereby certify that the Humanities and Social Science Research Ethics Committee of the University of the Western Cape approved the methodology and ethics of the above mentioned research project.

Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval.

Please remember to submit a progress report by 30 November each year for the duration of the project.

The permission to conduct the study must be submitted to HSSREC for record keeping purposes.

The Committee must be informed of any serious adverse event and/or termination of the study.

A handwritten signature in black ink, appearing to read 'Patricia Josias'.

*Ms Patricia Josias
Research Ethics Committee Officer
University of the Western Cape*

Director: Research Development
University of the Western Cape
Private Bag X 17
Bellville 7535
Republic of South Africa
Tel: +27 21 959 4111
Email: research-ethics@uwc.ac.za

NHREC Registration Number: HSSREC-130416-049

FROM HOPE TO ACTION THROUGH KNOWLEDGE.

Appendix B: Questionnaire for the school principals and educators

Identifying information

Full name of the respondent:.....

Phone number of the respondent:.....

Residential area – Province:.....

Town:.....

Suburb:.....

Full name of the interviewer:.....

Phone number of the interviewer:.....

Date of the interview:.....

Education impacts

1. When did the school feeding programme start in your school?
2. What was the purpose of the programme to be introduced? Is it education, hunger/nutrition or both?
3. What is the effect of school feeding programmes on school enrolment?
4. Do children attend regularly because of the school feeding programme?
5. Is there any difference that you notice in class participation before and after children receive school meals?
6. What is the effect of school feeding programmes on learners' academic performance?

Food security impacts

1. How many children receive food in your school? Is it all children? If not, who gets and who does not, and why?
2. Is there any learner that has reported coming to school hungry?
3. What kind of food is served to learners?
4. Does your school have a school food garden?
5. If yes, what kind of food do you plant and what role do the school food garden play on food security in your school?

6. If not, do you think a school food garden would have made a difference on food security?
7. Do you think the food served to learners is enough and of good quality?
8. How important are the school meals to learners in your school?
9. Do you think school meals increase the learner's food consumption?
10. What do you think is the role of school feeding programmes on nutritional status?
11. What do you think the closure of the schools due to Covid-19 had on food consumption of those children from food insecure households?
12. Do children receive food parcels at school, if yes, do you think they make a difference at home?
13. Do learners get nutrition education at this school? If yes, what kind of topics are covered?
14. What are the general impacts of school feeding programmes? For instance, on gender inequality, employment, reliance as a source of food, relieve the pressure of learners from asking for food from peers and human capital?

Recommendations

1. What do you think could be done to improve school feeding programmes?



UNIVERSITY *of the*
WESTERN CAPE

Appendix C: Questionnaire for the parents

Inkcukacha zokuzazisa [Identifying information]

Igama lomthathi nxaxheba [Full name of the respondent]:.....

Inombolo yefouni [Phone number of the respondent]:.....

Indawo yokuhlala [Residential area] –Iphondo [Province]:.....

Idolophu [Town]:.....

Ihlomela ledophu [Suburb]:.....

Igama lopmphandi [Full name of the interviewer]:.....

Inombolo yefouni yombhandi [Phone number of the interviewer]:.....

Umhla wondliwano ndlebe [Date of the interview]:.....

Education impacts

1. Ucinga ukuba yeyiphi inxaxheba edlalwa yi nkqubo yengxaso yokutya yaseskolweni ekubhaliswen kwabantwana bakho esikolweni? [What do you think is the effect of school feeding programmes on school enrolment of your children?]
2. Ingaba abantwana bakho bathi baye rhoqo eskolweni ngenxa yenkqubo yenxaso yokutya yaseskolweni [Do your children attend regularly because of the school feeding programmes?]
3. Ingaba ucinga ukuba inxaso yokutya yasesikolweni inayo indima eyidlalayo kwintsebenzo okanye kumamanqaku asesikolweni omtawana wakho? [Do you think school feeding plays a role in your children's school performance?]
4. Uthini umbono wakho kwi gadi zekolo, ucinga ukuba zinalo uxanduva ezilundlalayo ebantwaneni ngokubaluleka kokutya ukutya okunesondlo [Do you think school food gardens play a role in nutrition education-making children aware of healthy eating?]

Food security impacts

- 1.** Ingaba usapho lwakho lwakhe lwangakwazi ukutya isidlo sakusasa okanye sangokuhlwa kuba kungekho kutya kwaneleyo? [Has your household ever skipped meals because there was not enough food?]
- 2.** Ingaba bangaphi abantwana bakho abasesinaleni abaxhamla kulenxaso yokutya kwaseskolweni? [How many children that you have who are still in high school and receive school meals?]
- 3.** Ndicela undichazele ukuba zeziphi izizathu zokuba uthumele abantwana bakho eskolweni, umzekelo ingaba bafumana ukutya okungezelelweyo eskolweni? [Please explain what are the reasons for sending your children to school. For instance, do they receive extra food at school?]
- 4.** Ingaba ibaluleke kangakanani lenxaso yokutya yasesikolweni kubantwana bakho? [How important are the school feeding meals to your children?]
- 5.** Ingaba ukuthumela abantwana bakho esikolweni konga ukutya? [Does sending your children to school save food at home?]
- 6.** Ingaba ikhona inzuzo kwezizimali ngokuthumela abantwana bakho esikolweni, umzekelo ingaba uye ulondoloza imali ngokuba thumela esikolweni? [Is there any financial benefit that you gain by sending them to school, for instance, do you save some cash by sending them to school?]
- 7.** Ingaba ezi pasile zokutya abaziphiwa esikolweni abantwana zinalo ugalelo ekwandiseni ukutya ekhaya [Is there any difference that food parcels given to children at school make at home?]
- 8.** Ingaba ucinga ukuba lenxaso yokutya yasesikolweni inayo indima eyidlalayo kwindlela abantwana bakho abatya ngayo? [Do you think school feeding plays a role in your children's food consumption?]
- 9.** Ingaba ukuvalwa kwezikolo kunyaka ophelileyo ngenxa ye Covid-19 ibenagalelo lini kwindlela abantwana bakho abatya ngayo kuba beqhele ukufumana ukutya kwasesikolweni [Was there any impact of the closure of the schools on your children's food consumption since they used to receive school meals before Covid-19?]
- 10.** Zeziphi ezinye iindima okanye impembelelo ezindlalwa yilenxaso yokutya kwasesikolweni ngokubanzi? umzekelo ukungalingani ngokwesini, intswela-ngqesgo, ukuxhomekeka njengomthombo wokutya, ekunciphise uxinzelelo lwabafundi ekubeni bacele ukutya koontanga nekubutyebi babantu? [What are the general impacts of school feeding

programme? For instance, on gender inequality, employment, reliance as a source of food, relieve pressure on learners from asking food from peers and human capital?]

Recommendations

1. Ucinga ukuba kungenziwa ntoni ukuphucula lenxaso yokutya kwabantwana kwaseskolweni? [What do you think could be done to improve school feeding programmes?]



Appendix D: Questionnaire for the food handlers

Inkcukacha zokuzazisa [Identifying information]

Igama lomthathi nxaxheba [Full name of the respondent]:.....

Inombolo yefouni [Phone number of the respondent]:.....

Indawo yokuhlala [Residential area] –Iphondo [Province]:.....

[Idolophu] Town:.....

Ihlomela ledophu [Suburb]:.....

Igama lopmphandi [Full name of the interviewer]:.....

Inombolo yefouni yombhandi [Phone number of the interviewer]:.....

Umhla wondliwano ndlebe [Date of the interview]:.....

Education impacts

1. Ndicela undichazeele ukuba sibaluleke kangangakani isidlo sesikolo kubafundi besikolo osebenza kuso? [Please explain, how important are school meals to your children and learners in the school you work in?]

2. Ucinga ukuba isidlo sesikolo sidlala indima kubhaliso lwabantwana esikolweni, ukubakho esikolweni nakwi Mpumelelo kwizifundi? [Do you think school meals plays a role in school enrolment, attendance and academic achievement?]

Food security impacts

1. Ingaba unabo abantwana abamkela inxaso yesidlo yasesikolweni? [Do you have children in school that receive school meals?]

2. Ingaba usapho lwakho lwaye lwaphelwa kukutya, ukuba ewe sibaluleke kangakanani isidlo sasesikolweni kubantwana bakho? [Has your household ever run out of food? If yes, how important are the school meals to your children?]

3. Zeziphi iintlobo zokutya eniziphakela abantwana kwesisikolo usebenza kuso? [What kinds of food do you serve to learners in the school that you work in?]

4. Ingaba ninazo zonke izixhobo ezidingekayo zokulungiselela ukutya ezinjenge friji, izitovu nezinye? [Do you have all the resources required to prepare food such as refrigerators, stoves and other?]
5. Ucinga ukutya okuphakelwa abantwana konele futhi kukumgangatho olungileyo? [Do you think the food served to learners is enough and of good quality?]
6. Ingaba ukuvalwa kwezikolo kunyaka ophelileyo ngenxa ye Covid-19 sibenagalelo lini kwindlela abantwana bakho abatya ngayo kuba beqhele ukufumana ukutya kwasesikolweni [Was there any impact of the school's closure on your children's food consumption since they used to receive school meals before Covid-19?]
6. Ingaba uye walufumana uqeqesho phambi kokuba uqale ukusebenzela le nkqubo yenxoso kutya yasesikolweni? [Did you receive training before starting to work for school feeding programmes?]
7. Ingaba leliphi ixesha enithi niphakele ngalo abafundi ukutya? [At what time do you usually serve school meals to learners?]
8. Njengompheki wokutya kwabafundi, yeyiphi imiceli mongeni enijongene nayo? [as food handlers, what are the other challenges you are facing?]
9. Zeziphi ezinye iindima okanye impembelelo ezindlalwa yilenxaso yokutya kwasesikolweni ngokubanzi? umzekelo ukungalingani ngokwesini, intswela-ngqesgo, ukuxhomekeka njengomthombo wokutya, ekunciphise uxinzelelo lwabafundi ekubeni bacele ukutya koontanga nekubutyebi babantu? [What are the general impacts of school feeding programmes? For instance, on gender inequality, employment, reliance as a source of food, relieve the pressure of learners from asking for food from peers and human capital?].

Recommendations

1. Ucinga ukuba kungenziwa ntoni ukuphucula lenxaso yokutya kwabantwana kwaseskolweni? [What do you think could be done to improve the school feeding programme?]

Appendix E: Information sheet for interviews (principal and educators)



Private Bag X17, Bellville 7535, Cape Town, South Africa
Telephone : (021) 959 3858/6 Fax: (021) 959 3865
E-mail: pkippie@uwc.ac.za or mdinbabo@uwc.ac.za

INFORMATION SHEET FOR IN-DEPTH INTERVIEW

Project Title: The effect of school feeding programmes among school-going children in Khayelitsha, Cape Town.

What is this study about?

This research project is being conducted by Babalwa Sindi, a student at the University of the Western Cape. As school principals, educators and district coordinators you are invited to participate in this study. The aim of this project is to investigate the impact of school feeding programmes towards education and food security among school-going children in Khayelitsha. Thus, to explore the impact, the views of the groups mentioned above would be analysed.

What is the interview about?

You will be asked to answer questions on the role of school feeding such as educational impact (enhanced school enrolment, attendance, class participation, attentiveness and academic performance) and food security (improved nutritional status and alleviation of short-term hunger) among school-going children that receive meals at school.

Will my participation in this study be kept anonymous?

In this project, your identity will remain anonymous and all your personal information will be confidential should you wish so. You will be required to sign a consent form to protect your confidentiality and privacy while participating in this study. The investigator shall not reveal the identity of the participant to safeguard confidential information obtained in this project.

What are the risks of this research?

There are no risks involved in participating in this research project as the aims and objectives will be clear from the beginning.

What are the benefits of this research?

There are no benefits for the participant. But the study will create awareness for participants on the contribution of SPF towards education and food security.

Do I have to complete the whole interview proceedings or may I withdraw from the process at any time?

In this study, your participation is voluntary. You may choose to stop and not complete it at any time you want.

How long will it take to complete the whole interview process?

The full interview will take about 25 to 45 minutes to complete and may differ from participant to participant.

Do I need to bring anything to the interview?

You are not requested to bring anything for the research.

What if I have questions?

This research is being conducted by **Babalwa Sindi**, a student at the University of the Western Cape. Her contact number is 063 669 3819.

If you have any questions about the research study itself, please contact Prof Stephen Devereux at The Institute for Social Development (ISD), University of the Western Cape, his telephone number is + 27 21 959 3848.

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Prof Mulugeta Dinbabo

Director

Institute for Social Development

School of Government Building

University of the Western Cape

Phone numbers +27 21 959 3848 / +27 845 102 772.

Private Bag X17

Bellville 7535

This research project has received ethical approval from the Humanities and Social Sciences Research Ethics Committee of the University of the Western Cape, Tel. 021 959 2988, E-mail: research-ethics@uwc.ac.za



Appendix F: information sheet for the interview (parents and food handlers)



Private Bag X17, Bellville 7535, Cape Town, South Africa
Telephone : (021) 959 3858/6 Fax: (021) 959 3865
E-mail: pkippie@uwc.ac.za or mdinbabo@uwc.ac.za

Ulwazi ngo ndliwano ndlebe **[INFORMATION SHEET FOR IN-DEPTH INTERVIEWS]**

Isihloko sophando [Project Title]: Indima endlalwa yinkxaso yokutya kwezikolo kubantwana abangabafundi kwizikolo eKhayelitsha, eKapa [The effect of school feeding programmes among school-going children in Khayelitsha, Cape Town]

Lungantoni oluphando? [What is this study about]

Olushando luphandwa ngu Babalwa Sindi, ongumfundi kwi Dyunivesithi yephondo leNtsonona koloni. Njenga bazali niyamenywa ukuba nithathe inxaxheba kolu phando. Injongo yoluphando kukujonga ukuba ischool feeding sidlala eyiphi indima kwicandelo lezemfundo naseku fumanekeni kokutya ngamaxesha onke kubantwana abahamba isikolo eKhayelitsha. Inxaxheba izokujongwa ngoku jonga imbono zabazali naba pheki kokutya ezikolweni. [This research project is being conducted by Babalwa Sindi, a student at the University of the Western Cape. As parents and food handlers, you are invited to participate in this study. The aim of this project is to investigate the effect of school feeding programmes towards education and food security among school-going children in Khayelitsha. Thus, to explore the effect, the views of the groups mentioned above would be analysed]

Lungantoni olu ndliwano ndlebe? [What is the interview about]

Uzokucelwa ukuba uphendule imibuzo kwindima endlalwa kukutya ekufunyanwa simahla ezikolweni ezinge miphumela yesisondlo kubantwana besikilo ngokugxile (Ukunaka kunye nakwiziphumo zesikolo) [You will be asked to answer questions on the role of school feeding such as educational impact (attentiveness and academic performance)].

Ingaba ukuthathi nxaxheba kulo phando luzakuba yimfihlelo? [Will my participation in this study be kept anonymous]

Kolu phando inkcukachaza zakho zizokuba yimfihlelo futhi ulwazi lwakho lwemfihlelo alukuya kwaziswa mntwini xa unqwenela njalo. Uzocelwa utyikitye incwadi yovumelwano ekhusela imfihlelo yakho ngethuba uthatha inxaxheba kolu phando. Umphandi akayu kuyiveza imfihlelo yakho nolwazi oluthe lwafumaneka kolu phando. [In this project, your identity will remain anonymous and all your personal information will be confidential should you wish so. You will be required to sign a consent form to protect your confidentiality and privacy while participating in this study. The investigator shall not reveal the identity of the participant to safeguard confidential information obtained in this project].

Zithini iingozi zoku thatha inxaxheba kolu phando? [What are the risks of this research]

Akukho bungozi ekuthatheni nxaxheba kulo phando nanjengokuba injongo zithe zavezwa gca kwantlandlolo. [There are no risks involved in participating in this research project as the aims and objectives will be clear from the beginning].

Yintoni amaqithi-qithi afumaneka kolu phando? [What are the benefits of this research]

Akukho maqithi-qithi azukufunyanwa ngumthathi nxaxheba. Kodwa olu phando luzakuvula amehlo ubani othi athathe inxaxheba ngendima ethi idlalwe sisondlo esifumaneka esikolweni kwimfundo nasekutyeni ngokubanzi. [There are no benefits for the participant. But the study will create awareness for participant on the contribution of SPF towards education and food security].

Ingaba kunyanzekile ukuba ndilungqibe olu ndliwano ndlebe okanye ndingayeka nanina [Do I have to complete the whole interview proceedings or may I withdraw from the process at any time].

Kolu phando, inxaxheba yakho yeyokuvolontiya, ungakhetha ukuyeka nanga liphi na ixesha [In this study, your participation is voluntary. You may choose to stop and not to complete at any time you want]

Luzakuthatha ixesha elingakanani undliwano ndlebe? [How long will it take to complete the whole interview process]

Undliwano ndlebe olupheleleyo luzothatha malunga nemizuzu engamashumi mabini anesihlanu amabini ukuya kwimizuzu engamashumi amane anesihlanu, kodwa luzaku kuxhomekeka kuba thathi nxaxheba [The full interview will take about 25 to 45 minutes to complete and may differ from participant to participant].

Ingaba kulindeleke ukuba ndize nento kulo ndliwano ndlebe? [Do I need to bring anything to the interview]

Awulindelekanga ukuba uze nento [You are not requested to bring anything for the research].

Ukuba kuyenzeka ndibenemibuzo? [What if I have questions]

Olu phando luphandwa ngu Babalwa Sindi umfundi kwi Yunivesithi yephondo leNtshona koloni. Umnxeba wakhe ngulo ulandelayo 0636693819. [this research is being conducted by **Babalwa Sindi** a student at the University of the Western Cape. Her contact number is 063 669 3819].

Ukuba unemibuzo malunga nolu phando ungaqhagamshelana no Prof Stephen Devereux eI The Institute for Social Development (ISD), iYunivesithi yephondo leNtshona koloni. ungamfumana kwi nombolo ethi + 27 21 959 3848. [if you have any questions about the research study itself, please contact Prof Stephen Devereux at The Institute for Social Development (ISD), University of the Western Cape, his telephone number is +27 21 959 3848].

Xa une mibuzo malunga noluphando futhi namalungelo akho njengo mthathi nxaxheba okanye ukuba unqwenela ukuxela ingxaki oye wajonagana nayo ngolu phando, wamkelekile ukuba uqhagamshelane no: [should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Prof Mulugeta Dinbabo
Director
Institute for Social Development
School of Government Building
University of the Western Cape
Phone numbers +27 21 959 3848 / +27 845 102 772.
Private Bag X17

Bellville 7535

Olu phando luth e lwamkelwa kwi candelo le Humanities and Sciences Research Ethics yikomiti yeDyunivesithi yaseNtshona Koloni, ungaqhagamshelana nabo kulo mnxeba. 021 959 2988, email: research-ethics@uwc.ac.za

This research project has received ethical approval from the Humanities and Social Sciences Research Ethics Committee of the University of the Western Cape, Tel. 021 959 2988, E-mail: research-ethics@uwc.ac.za



Appendix G: Consent form for principals and educators



INSTITUTE
FOR SOCIAL
DEVELOPMENT

University of the Western Cape

Private Bag X17, Bellville 7535, Cape Town, South Africa
Telephone : (021) 959 3858/6 Fax: (021) 959 3865
E-mail: pkipie@uwc.ac.za or spenderis@uwc.ac.za

Letter of consent: To complete questionnaire

I, have had the opportunity to ask any questions related to this study, and received satisfactory answers to my questions, and any additional details I wanted.

I agree to take part in this research.

I understand that my participation in this study is voluntary. I am free not to participate and have the right to withdraw from the study at any time, without having to explain myself.

I am aware that the information I provide on the questionnaire might result in research which may be published, but my name will not be used.

I understand that my signature on this form indicates that I understand the information on the information sheet regarding the structure of the questions.

I have read the information regarding this research study on the school feeding programmes.

I agree to answer the questions to the best of my ability.

I understand that if I don't want my name to be used that this will be ensured by the researcher.

I may also refuse to answer any questions that I don't want to answer.

By signing this letter, I give free and informed consent to participate in this research study.

Date:.....

Participant Name:.....

Participant Signature:.....

Date.....

Interviewer name:

Interviewer Signature:.....

Appendix H: Consent form for parents and food handlers



Private Bag X17, Bellville 7535, Cape Town, South Africa
Telephone : (021) 959 3858/6 Fax: (021) 959 3865
E-mail: pkippie@uwc.ac.za or spenderis@uwc.ac.za

Letter of consent: To complete questionnaire

Mna....., ndibenenyweba yokuthi ndibuze nawuphi na umbuzo onxulumene nesisifundo, kwaye ndifumane impendulo ezanelisayo neziphendula ncakasana imibuzo yam, kunye nenye inkcaza ethe vetshe endiyifunayo [I....., have had the opportunity to ask any questions related to this study, and received satisfactory answers to my questions, and any additional details I wanted].

Ndiyavuma ukuthatha inxaxheba koluphando [I agree to take part in this research].

Ndiyayiqonda inxaxheba yam kwesisifundo ikuvolontiya. Ndinalo ilungelo lukungathathi nxaxheba kwaye ndingazigabula bucala nanini na ndifuna ndinganikanga nezizathu zoko [I understand that my participation in this study is voluntary. I am free not to participate and have the right to withdraw from the study at any time, without having to explain myself].

Ndiyayiqonda ulwazi endiluvezayo kwimibuzo ebuzwayo ingaphembelela ekupapashweni koluphando, kodwa igama lingasetyenziswa okanye lingasetyenziswa kupapasho olo [I am aware that the information I provide on the questionnaire might result in research which may be published, but my name will not be used].

Ndiyayiqonda ukuba utyikityo lwam kule fom luthetha ukuba ndiyayiqonda imibandela yolwazi yemibuzo ezobuzwa apha [I understand that my signature on this form indicates that I understand the information on the information sheet regarding the structure of the questions].

Ndilufundile ulwazi malunga nofundo loluphando olunge sendlo lwezikolo ngelasemzini [I have read the information regarding this research study on the School Feeding Programmes]

Ndiyavuma ukuphendula imibuzo kangangoko kusemandleni am [I agree to answer the questions to the best of my ability].

Ndiyayiqonda ukuba andifuni igama lam lisetyenziswe umphandi uzondiqinisekisa ukuba uyakwenza oko [I understand that if I do not want my name to be used that this will be ensured by the researcher].

Ndingangavumi ukuyiphendula eminye imibuzo [I may also refuse to answer any questions that I do not want to answer].

Ngokutyikitya lencwadi, ndinikezela ngelungelo ndikwazisa ukuba ndingumthathi nxaxheba koluphando [By signing this letter, I give free and informed consent to participate in this research study].

Umhla [Date]:

Igama lomthathi nxaxheba [Participant Name]:

Utyikityo lomthathi nxaxheba [Participant Signature]:.....

Umhla [Date].....

Igama lomphandi [Interviewer name]:.....

Utyikityo lomphandi [Interviewer Signature].....



UNIVERSITY *of the*
WESTERN CAPE

Appendix I: Letter of permission from Western Cape Education Department



Audrey.wyngaard@westerncape.gov.za

tel: +27 021 467 9272

Fax: 0865902282

Private Bag x9114, Cape Town, 8000

wced.wcape.gov.za

REFERENCE: 20200714-6958

ENQUIRIES: Dr A T Wyngaard

Ms Sindi Babalwa
Tower A Unit 91
Riverpark
Van Riebeeck Road
Kuilsriver
7580

Dear Ms Sindi Babalwa

RESEARCH PROPOSAL: THE EFFECT OF SCHOOL FEEDING PROGRAMMES AMONG SCHOOL-GOING CHILDREN IN KHAYELITSHA, CAPE TOWN

Your application to conduct the above-mentioned research in schools in the Western Cape has been approved subject to the following conditions:

1. Principals, educators and learners are under no obligation to assist you in your investigation.
2. Principals, educators, learners and schools should not be identifiable in any way from the results of the investigation.
3. You make all the arrangements concerning your investigation.
4. Educators' programmes are not to be interrupted.
5. The Study is to be conducted from **03 August 2020 till 30 September 2020**. No research can be conducted during the fourth term as schools are preparing and finalizing syllabi for examinations (October to December).
6. Should you wish to extend the period of your survey, please contact Dr A.T Wyngaard at the contact numbers above quoting the reference number?
7. A photocopy of this letter is submitted to the principal where the intended research is to be conducted.
8. Your research will be limited to the list of schools as forwarded to the Western Cape Education Department.
9. A brief summary of the content, findings and recommendations is provided to the Director: Research Services.
10. The Department receives a copy of the completed report/dissertation/thesis addressed to:

**The Director: Research Services
Western Cape Education Department
Private Bag X9114
CAPE TOWN
8000**

We wish you success in your research.

Kind regards.

Signed: Dr Audrey T Wyngaard

Directorate: Research

DATE: 17 July 2020

Appendix J: Extension of the letter of permission



Audrey.wyngaard@westerncape.gov.za

tel: +27 021 467 9272

Fax: 0865902282

Private Bag x9114, Cape Town, 8000

wced.wcape.gov.za

REFERENCE: 20200714-6958

ENQUIRIES: Dr A T Wyngaard

Ms Sindi Babalwa
46 Nochulu Crescent
ILitha Park
Khayelitsha
7784

Dear Ms Sindi Babalwa

RESEARCH PROPOSAL: THE EFFECT OF SCHOOL FEEDING PROGRAMMES AMONG SCHOOL-GOING CHILDREN IN KHAYELITSHA, CAPE TOWN

Your application to conduct the above-mentioned research in schools in the Western Cape has been approved subject to the following conditions:

1. Principals, educators and learners are under no obligation to assist you in your investigation.
2. Principals, educators, learners and schools should not be identifiable in any way from the results of the investigation.
3. You make all the arrangements concerning your investigation.
4. Educators' programmes are not to be interrupted.
5. The Study is to be conducted from **03 August 2020 till 30 September 2021**.
6. No research can be conducted during the fourth term as schools are preparing and finalizing syllabi for examinations (October to December).
7. Should you wish to extend the period of your survey, please contact Dr A.T Wyngaard at the contact numbers above quoting the reference number?
8. A photocopy of this letter is submitted to the principal where the intended research is to be conducted.
9. Your research will be limited to the list of schools as forwarded to the Western Cape Education Department.
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The Director: Research Services
Western Cape Education Department
Private Bag X9114
CAPE TOWN
8000

We wish you success in your research.

Kind regards.

Signed: Dr Audrey T Wyngaard

Directorate: Research

DATE: 04 March 2021