



Masters in Marketing (BUS5000W)

THE DECISION-MAKING PROCESS OF YOUNG URBAN SOUTH AFRICAN SINGLE MOTHERS AT THE BOTTOM OF THE PYRAMID WHEN PURCHASING BABY FOOD

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Abstract

This study investigated how young single mothers (YSMs) in South Africa's bottom of the pyramid (BoP) purchase food for their babies. The study focused specifically on mothers with babies between the ages of 6 to 24 months and explored various elements of their child nutrition decision-making. In trying to understand YSM consumer behaviour at the BoP, the objective of the research was to investigate the influence of their vulnerability when making purchasing decisions affecting their baby's nutrition. While many studies exist on the BoP consumer, there is a void in the literature when it comes to specific product category decision-making processes. To explore the research objectives, a qualitative methodology was employed. Semi-structured interviews were used, and the research identified 22 urban interviewees who took part in the study. The results show that the landscape and behaviour of YSMs at the BoP are characterised according to levels of awareness, availability, affordability, and accessibility of a product. This study specifically identified five vulnerabilities, namely, confined financial power, the education gap, entrenched family filters, the proximity trap, and the catalogue constraint. In terms of nutrition, the results show that participants were aware of the importance and benefits of good nutrition for their baby, but mothers rarely prioritised nutrition when purchasing food for their baby. This is due to various reasons, such as not knowing what good nutrition is (how to read the back of the packs of branded baby food) and mainly focusing on being able to afford enough food to survive (as more nutritious food is usually more expensive). This study is an important contribution to gaining a better understanding of choices, priorities, and the decision-making process for YSM consumers at the BoP.

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Chapter 1: Introduction

1.1 Introduction

This study investigated how young single mothers (YSMs) in South Africa's bottom of the pyramid (BoP) purchase food for their babies. The study focused specifically on mothers with babies between the ages of 6 to 24 months and explored various elements of their child nutrition decision-making.

Choudhury et al. (2019) examined what affects BoP consumer decision-making. They developed a conceptual model to determine how vulnerability affects both decision-making and transaction costs. This study builds on this framework by testing how vulnerability specifically impacts YSMs at the BoP and how this affects both purchasing decision processes and transaction costs when purchasing nutrition for their baby. The introductory chapter explored the background to the study and presented the rationale and motivation, the research problem, questions, and objectives of the study.

1.2. Background to this research

In 2020, the BoP comprised 2.7 billion people comprising 40% of global inhabitants (Srivastava et al., 2020). For this study, the BoP was defined as people who earn around US\$2 and \$8 per day and around US\$3000 or less per year (Srivastava et al., 2020). The BoP market mainly dwells in poor rural villages or urban high density informal settlements (Hammond et al., 2008). This population lives in abject poverty, has low literacy levels, poor water and sanitation services resulting in poor quality of life or even access to legal services (Srivastava et al., 2020).

Chikweche and Fletcher (2012) found that immediate family and extended family members play an important role in purchase decisions. They also found that the role of the women in the BoP family is to cook, raise the children, and do the shopping. Generally, women at the BoP are therefore responsible for running the home, therefore have a better understanding of what the family wants and needs. In addition, Chikweche and Fletcher (2012) found that environmental constraints are a factor that influences purchasing decisions of consumers at the BoP. Many families have only a single-parent household, defined as someone who "may be married but not living with a spouse, divorced, widowed, or never married" (Chaudhury & Hyman, 2019: 3). Predominantly, these single mother-headed households have a different dynamic to two parent households, which Chaudhury and Hyman (2019) identified as comprising a married, heterosexual couple.

YSMs are often dependent on their family and friends for guidance and support, particularly at the developmental phase (Jama et al., 2018), to the extent that they are completely dependent on family and friends for financial and emotional support. This often influences important factors affecting young mothers' feeding choices and nutrition understanding (Jama et al., 2018).

The community and close support from family and friends are critical to consumers at the BoP as these are groups that they rely on in times of need. Therefore, communities are very important to the BoP market (Subrahmanyam & Gomez-Arias, 2008). According to Gupta and Pirsch (2015), the BoP consumer is vulnerable because their living conditions dictate no or poor access to information, resources which are often exacerbated by their illiteracy and poverty. The vulnerability factor is amplified and perpetuated for single mothers experiencing poverty and economic hardships, who face considerable financial instability (Kpoor, 2014; Elliot et al., 2015). These hardships and instability are therefore likely to influence their purchasing decisions.

The planet is burdened by the effects of the food crisis resulting in hunger and malnutrition affecting the economy, social development and national health systems (Thompson & Amoroso, 2014). Thompson and Amoroso (2014) highlight that the great concern is the 2 billion individuals afflicted by hidden hunger worldwide. The need for better nutrition and better access to food is recognised by world bodies such as the World Health Organisation who have set millennial goals to achieve food security with better nutrition at its core.

Despite these international commitments, Collishaw (2017) stated that nearly 800 million people still suffer from hunger and food insecurity. Studies show that around 10% of young children (under 5 years) show signs of muscle wasting, while up to 30% suffer from chronic malnutrition, with ailments such as growth stunting. This is most prevalent in South Asia and Sub-Saharan Africa. This underlines the importance of good nutrition for the child's overall physical and mental development. Vorster (2010) investigated the link between poverty and childhood malnutrition and confirms the direct correlation between improved nutrition for children and future poverty eradication.

This study investigates the decision-making process of YSMs at the BoP with babies between the ages of 6 to 24 months when purchasing baby food. The first few months of motherhood are often characterised by breastfeeding, and so a window of six months to 24 months was chosen as it is a crucial time for development post breast feeding. By understanding this process, a synergy can be created between baby food manufacturers and purchasers (single mothers) to benefit child nutrition. Consequently, this will enhance awareness of the importance of nutrition for early childhood development (ECD). The challenge is to understand the decision-making process that consumers at the BoP go through when choosing to purchase nutrition for their young. This study achieves this by

observing the unique decision-making characteristics and motivations of this market segment. In doing so, the study generates insights into ways that can positively influence and drive decision-making to benefit child nutrition.

1.3 Rationale and motivation

Despite the surge of studies performed on the BoP, the concept is still in its relative infancy and many insights remain undiscovered. Kolk, Rivera-Santos and Ruffin (2014) specifically refer to the need for more research in Sub-Saharan Africa. African developing countries are one of the least studied areas regarding the BoP theory, as most of the focus has been on Asian markets. However, according to Hammond et al. (2008, cited in Chikweche et al., 2012, p. 202), the BoP's population growth in Africa from 2005 to 2050 will be the highest of all the BoP markets. For this reason, specific research on the BoP market within African countries is important as these countries have their own culture and market characteristics. Consequently, a marketing approach different from the one developed for other BoP markets is required. This study will therefore contribute to the knowledge gap in the study of the BoP.

While many studies exist on the BoP consumer, there is not much literature on the decision-making process when the BoP consumer decides to purchase a specific product. According to Barki and Parente (2010), there has not been an in-depth analysis of the decision-making process for the BoP population at the time of their study. Since their call for further research, more studies have been conducted. For example, Chikweche, Stanton and Fletcher (2012) examined role dynamics in a family decision, in which the women were identified by their role as a wife, not as a mother. Choudhury et al. (2019) researched the BoP consumer's decision-making process from a micro or individual perspective and formulated a conceptual framework for consumer decision-making at the BoP. However, Choudhury et al. (2019) state that their study is predominantly based on male participant's feedback. They therefore call for future research that focuses on female participants and their decision-making process.

According to Thorpe and Reed (2016), one of the key problems driving under-nutrition at the BoP is limitations faced due to living in poverty. The BoP consumer has limited access to affordable and nutritious food. Furthermore, many consumers at the BoP are illiterate and struggle to process information on what good nutrition is. Poor education is another challenge which impedes the BOP consumer's understanding of good nutrition (Humphrey, Agnew & Henson, 2015).

The factors above indicate a need to understand the purchasing decisions of consumers at the BoP to motivate such consumers to make healthier choices for good nutrition. Hawkes and Ruel (2011) call

for markets to adapt their value chains by adapting products in terms of affordability, acceptability to the intended consumer, availability (in geographic terms) and appropriateness (for example, safe and with a high nutritional value). The study of Choudhury et al. (2019) is important as it assists in gaining a better understanding of choices, priorities, and the decision-making process for consumers at the BoP and, in this case, of young single mothers. This understanding will contribute to effective marketing-mix designs for BoP consumers, based on factors that affect each stage of consumer decision-making at the BoP. Table 1.1 is a summary of key research on decision-making at the BoP.

Table 1.1: Summary of Key Research on Decision-Making at the BoP

Author	Date	Journal	Article Title	Location	Method	Sample Size	Call for Future Research
Chikweche and Fletcher	April 2010	Journal of Business Research	Understanding factors that influence purchases in subsistence markets	Zimbabwe	Qualitative research, interviews, focus groups and ethnographic observations, random purposeful sampling	65 interviews	The study is on food and personal hygiene products. They call for further research- "could expand categories range for product investigated."
Chikweche and Fletcher	April 2010	Marketing Intelligence and Planning (Emerald)	Branding at the base of the pyramid, a Zimbabwean perspective	Zimbabwe	Qualitative consumer interviews, focus group, ethnographic observations and case studies, random purposeful sampling	65 interviews	Calls for "further research in other markets in Africa with large BoP markets."
Chikweche, Stanton and Fletcher	March 2012	Journal of Consumer Marketing	Family purchase decision-making at the Bottom of the Pyramid	Zimbabwe	A mixed research methods approach: qualitative consumer interviews, focus group, ethnographic observations and case studies	65 interviews and 4 focus groups	"The heterogeneity of family purchase decision-making models revealed by this contextual, qualitative study provides a basis for further BOP consumer research, especially in other African countries."
Ulgerand and Ulger	September 2012	Journal of Marketing Communications	Children in family purchase decision-making: Children's role in food product purchases from mothers' point of view	Istanbul and Tekirdag	Quantitative, Questionnaires	293 mothers, of children attending elementary school (6-12-year-old children)	Future investigations could expand on this study, for example, by exploring parental communication patterns, sex differences, children's birth order, and the type of product (personal or family).

Table 1.1: Summary of Key Research on Decision-Making at the BoP

Author	Date	Journal	Article Title	Location	Method	Sample Size	Call for Future Research
Singh and Kathuria	March 2016	School of Business Studies	Understanding drivers of branded food choice among low-income consumers	Across two states of Northern India	Face-to-face inhouse interviews, structural equation modelling	600 respondents	“Future research may re-look into these relationships by considering sample from other subsistence markets of the world. Future studies may also be undertaken to identify food characteristics like quality, portion size and sensory attributes that may also influence food choice among low-income consumers.”
Choudhury, Mukherjee and Datta	October 2019	Journal of Consumer Marketing	Constrained purchase decision-making process at the base of the pyramid	Kharagpur and Kolkata, India	Qualitative consumer interviews, purposive sampling	48 in-depth interviews	“Future studies could focus more on female respondents and examine the constructs from their perspective.”
Panda, Masani and Dasgupta	June 2022	Asia Pacific Management Review	Packaging-influenced-purchase decision segment the bottom of the pyramid consumer marketplace? Evidence from West Bengal, India	West Bengal, a state of India	Quantitative design, followed by Qualitative. Clustering techniques and self-organising map applied for validation and visualisation	1530 respondents	“More studies can be conducted in the future by considering all the aspects of visual and informational elements of packaging, separately or in a combined manner.”

The summary of BoP decision-making research above calls for further research on female participants and for further BoP consumer research in African countries. These gaps in the literature highlight the need to develop a more sophisticated examination of BoP decision-making at a category and situational level. The fact that Africa is such an under researched continent (Kolk et al., 2014) and that marginalised population groups like single mothers need more research means that this study contributed to filling this gap and provides new insights into BoP decision-making in general and specifically decisions around childhood nutrition. The next section further unpacks the research problem before the research questions and objectives are explained.

1.4 Research problem

A number of studies contend that low-income consumers need marketplace literacy (Viswanathan et al., 2008) to benefit from available products and services (Viswanathan et al., 2021). Consumers at the BoP usually have a high intake of calories, saturated fats, animal proteins, sugar and salt (Vorster et al., 2011). They generally have poor access to health education and promotional material and have low levels of nutritional literacy (Hildreth et al., 2020). This has negative implications for food choice, preparation, and portion size, all due to their vulnerability. Furthermore, low-income areas often lack large retailers with a wide selection of healthy food. There is limited availability of healthier food choices, with higher prices in smaller food stores and foods available being high in sugar and fat. To access fresh, healthier foods, consumers at the BoP must travel outside of their community or local area, which is costly (Temple et al., 2011). To minimise this cost, they frequent their local independent retailers, which affects the product options available to them and pricing within the BoP decision-making process (Choudhury et al., 2019).

Purchasing from independent retailers often results in:

- Many BoP consumers paying higher prices for the same product than if they had purchased at larger retailers.
- Purchasing products or brands which are sub-optimal, due to bounded rationality decisions (Choudhury et al., 2019).
- Many BoP consumers being exploited by independent retailers due to their limitations. For example, retailers may sell expired stock or fake food to exploit a lack of literacy among BoP consumers (Choudhury et al., 2019).
- Many BoP consumers and independent retailers being reliant on one another as they face the same struggles and circumstances (Choudhury et al., 2019).

The information above provides insights into the limitations and characteristics of consumers at the BoP. These limitations and challenges play a significant role in the decision-making process of the consumer at the BoP. This decision-making process results in generally constrained retail and brand selection. This study will investigate whether these limitations and characteristics result in the same decision-making process for BoP YSMs when it comes to purchasing for their babies between the ages of 6 to 24 months. The study assumes that YSMs act in the best interests of their children's health and well-being and explores vulnerability and other constraints on their decision-making. The next section unpacks the research questions and objectives.

1.5 Research questions and objectives

In trying to understand YSMs at the BoP and why they buy what they buy, the objective of the research was to investigate the influence of their vulnerability when making purchasing decisions affecting their baby's nutrition. These findings shed light on the factors that amplify the vulnerability of YSMs at the BoP. The following questions were articulated to help achieve the objective of the research.

Research Questions:

Primary Research Question

How do young, urban, South African, BoP, single mothers make their decisions for their babies (between the ages of 6 to 24 months) when purchasing baby food?

Secondary Research Questions

1. What are the factors amplifying and perpetuating the vulnerability of YSMs that impact their decision-making?
2. What are the effects of young single mothers' vulnerability on their food selection for their babies?

Research Objectives:

Primary Research Objective

To understand young, urban, South African, BoP, single mothers' (of babies between the ages of 6 to 24 months) decision-making process when purchasing baby food.

Secondary Research Objective

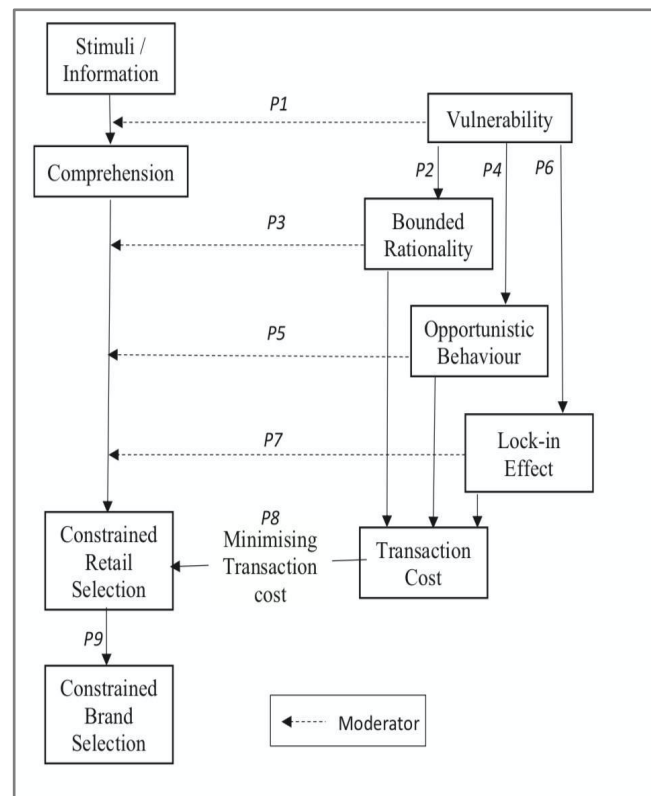
1. To identify the factors that amplify and perpetuate the vulnerability of YSMs when purchasing baby food.
2. To understand what the effects of young single mother's vulnerability are on their food selection for their babies.

With these objectives in mind, the next section explores the theoretical departure point for the study, after which the methodology is explained.

1.5 Theoretical foundation

Choudhury et al. (2019) identified that consumer vulnerability affects the decision-making process and the transaction cost at the BoP level. This is driven by the characteristics of a lack of literacy (Venugopal & Viswanathan, 2017), uncertainty in decision-making, and restricted movement (Dinica & Motteau, 2012). Consumers at the BoP are vulnerable and make constrained decisions to try and minimise their transaction costs when deciding on a retailer. The constrained retail choice leads to a limited selection of products and brands. The model of Choudhury et al. (2019) formed the theoretical foundation for this study, as depicted in Figure 1.1. In their study, Choudhury et al. (2019) qualitatively explored BoP decision making and focused on aspects like constraint and vulnerability. This is one of only a few models that directly address the question of how BoP decision making differs from other segments.

Figure 1.1: Consumer Decision-Making Framework at the BoP (Choudhury et al., 2019).



While the framework has limitations like not including other influences on purchasing decisions, the model provides a useful departure point from which to explore YSMs' decision-making for their babies. To explore the research objectives, a qualitative methodology was employed, as summarised in the next section. This methodology is unpacked in more detail in Chapter 3.

1.6 Research design and methodology

This study followed a qualitative research method. A qualitative method uses non-numerical data like narrative and visuals to gain insights into a phenomenon of interest (Gay et al., 2012). For this study, an interview collection method was used, in the form of semi-structured interviews. A non-probability sampling technique, purposive sampling, was used. The target population for this study was BoP single urban mothers of babies between the ages of 6 to 24 months in one identified urban informal settlement in Cape Town. The research identified 22 urban interviewees who took part in the study. The research design and sample were based on other studies of this nature (Chikweche et al., 2012, Chikweche et al., 2010, Hunter-Adams et al., 2016a; Hunter-Adams et al., 2016b). More detail on the sample and methodology are found in Chapter 3.

1.7 Ethical considerations

Before starting with this research, permission to conduct the study was sought from the UCT Ethics Committee, and permission was granted to proceed with the study (see Appendix A for the ethical clearance letter).

All participants who took part in the study were voluntary, and participant consent was obtained before starting with any research processes. Participants were not exposed to any harm or risk by taking part in this study, and they were informed that, if at any time they wished to withdraw, they could do so. All participants were given adequate information and assurances, so that they were aware of the implications of participating and could therefore make an informed decision on whether to participate or not. Participants' privacy and anonymity have been kept confidential.

1.8 Limitations

Although the study tested the consumer decision-making framework on South African BoP Mothers, it is crucial to understand that these results and perceptions are likely to change over time, especially in different BoP contexts. Hence, these results may not necessarily generalise to other BoP markets with different environments to those of South Africa. Especially the differences in culture, beliefs, languages and education levels. Furthermore, this study focuses on mothers in one urban area within the Western Cape only, which may make generalisation difficult, due to its own unique environmental factors. This could skew the view on the whole of South Africa. The language and vernacular barrier could affect the interpretation of the answers and data, despite using an interpreter.

1.9 Conclusion

Nutrition at the BoP in South Africa is challenged by disease and malnutrition due to the food advertised and made affordable to this market. There is a great need for firms and marketers to change this situation by educating the BoP market on the importance of nutrition, especially to those with babies between the ages of 6 to 24 months. This study suggests that understanding YSMs' purchasing decisions for baby food can influence and improve the decision-making process and YSMs' understanding of nutrition for ECD. This could influence the quality of the baby food purchased and be a great step towards improving the child's future and ultimately poverty alleviation.

With this in mind, if marketers achieve the same dynamic and aggressive strategy to drive good nutrition (good corporate citizenship), then not only will they achieve a breakthrough into this tough market segment, but they could also improve the socio-economic situation of the BoP. Marketers can

influence the decisions and tailor their approach to the cultural differences of the BoP market, reference what is already understood and show product usage and benefits. This can be achieved via relationships with existing businesses and social networks at the BoP. Firms need to tap into what makes the BoP tick and adapt, and move from a product-centric approach to a consumer-centric approach.

In Chapter 2, the literature review explores decision-making at the BoP, YSMs at the BoP and their vulnerability, nutrition for ECD, and the theoretical foundation. In Chapter 3, the qualitative methodology used for the study is discussed and the sampling approach, data collection and data analysis are unpacked.

Chapter 2: Literature Review

2.1 Introduction

Chapter one focused on the background to the study, the scope and motivation for the study, and the importance of understanding the factors that influence the purchasing decisions of YSMs at the BoP. Chapter 2 focuses on the BoP theory, followed by literature on YSMs, and a synopsis of vulnerability faced by YSMs at the BoP. After this is the synthesis of the literature on nutrition for early childhood development and childhood nutrition in BoP households in South Africa. Chapter 2 concludes with the effects of vulnerability for YSMs' purchasing decisions for nutrition and ECD. The study then refines and investigates decision-making theory constructs that focus on the BoP and the components of the model that make up the theoretical foundation that this study is based on.

2.2. Decision-making at the bottom of the pyramid

In this section, the bottom of the pyramid is defined, from a local and global perspective, and the landscape and consumer behaviour of those at the BoP is explained. It summarises BoP behaviour and decision-making literature to highlight the key factors that drive and influence purchasing decisions.

2.2.1 Definition of the global BoP

The BoP is the bottom tier of the socio-economic pyramid based on per capita income and purchasing power. According to Prahalad and Hart (2002), the pyramid is a four-level economic pyramid used to represent global wealth distribution and income-generating ability. At the top of the pyramid are wealthy people with substantial incomes (Level 1). Levels 2 and 3 include people whose annual per capita income is between US\$1,500 and \$20,000, while more than 4 billion people live on less than \$2 a day at the bottom of the pyramid. While these numbers have changed in relevance over time (Makherjee et al., 2020; Patnaik & Bhowmick, 2020), the global nature of the BoP means that no single definition is sufficient (Lappeman et al., 2019).

Others maintain that the pyramid includes three levels, the top, middle and the bottom (Grobbelaar, 2022; London & Hart, 2011; Gupta & Khiji, 2013). However, according to Srivastava, Mukherjee and Jebarajakirthy (2020), the daily income of those at the BoP is in the range of \$2 to \$8, with an annual per capita income of US\$3000 or less.

Of all the people in the world, 70% makes up the BoP, earning a low income of under US\$2.50 a day (Conceição, 2022; Khalid & Jespersen, 2014), with limited infrastructure facilities (Prahalad, 2012). Consumers at the BoP are the very poor, many of whom do not have the means to afford even the very basics. However, to live and survive, these consumers still have unmet needs and, though purchasing power per capita is low, collectively they have an estimated untapped purchasing power of five trillion US dollars per year. According to Prahalad (2012), the estimated purchasing power was expected to increase significantly, and this has indeed been the case (Uttam & Rahul, 2023). In both this analysis and the one to follow (on the South African BoP), it is noted that the BoP cannot simply be counted regularly. With disparate definitions and vacuums of data in developing countries, often large-scale analyses are used for long periods of time.

2.2.2 The South African BoP

South Africa is a developing country and, according to StatsSA, has the highest unemployment rate (29.1% in the 3rd quarter of 2019) in over 16 years, with 6.7 million unemployed (BusinessTech, 2019). Average incomes are much lower than highly developed countries. In fact, a large proportion of the population lives in poverty at the BoP.

The poverty benchmarks of the size of the BoP segment are widely debated and, according to Lappeman, Chigada and Pillay (2019), the same goes for the South African BoP benchmarks. For example, according to Hatch, Becker, and Van Zyl (2011), around 34 million South Africans (approximately 70% of the population) form part of the BoP. A year later, Chipp, Corder and Kapelianis (2012) estimated that the BoP is 35.8% of South Africa's population (11.2 million adults), and they earn around R43.73 per day or R1312 per month. The World Bank in 2016 found the South African BoP to be 34.7% of the population, which equates to almost 20 million consumers (Lappeman, Chigada & Pillay, 2019). Simpson (2017) benchmarked the BoP as households earning less than R6000 or approximately US\$460 per month.

Understanding BoP consumer behaviour is crucial in a country like South Africa, where the BoP market represents the majority of the consumer population (Chipp et al., 2013; Simpson & Lappeman, 2017). According to Lappeman et al. (2019), the importance of the BoP market is further emphasised when considering that the BoP has an aggregate recorded expenditure of approximately a third of South Africa's spending power.

2.2.3 BoP consumer behaviour and decision-making

The BoP has been characterised by a lack of literacy (Venugopal & Viswanathan, 2017), uncertainty in decision-making, and restricted movement (Dinica & Motteau, 2012). According to Viswanathan (2008), BoP consumers think differently and have different emotional and social relationships compared to the other levels of the pyramid. Lappeman et al. (2019), however, also noted that not all countries share the same BoP characteristics and need to be assessed independently. Some research contends that low-income consumers need marketplace literacy (Viswanathan et al., 2008) to benefit from available products and services (Viswanathan et al., 2021). The next section explores a framework to help understand decision making.

2.2.3.1. The 4 A's Model at the BoP

The landscape and behaviour of the BoP consumer were characterised by Prahalad (2012) according to levels of Awareness, Availability, Affordability and Accessibility of a product. This is known as the 4 A's Model and is discussed below.

a) Awareness

According to Chikweche and Fletcher (2012), the BoP is a market that, in some instances, does not have access to TV, newspapers or advertising. This challenge is because many of these markets are in areas which are “media dark”.

Therefore, driving awareness is best targeted via an ecosystem of local entrepreneurs and non-governmental organisations (NGOs) with high local BoP knowledge (Pralhad, 2012). Use of social networks as the base of communication has proven to tremendously reduce the cost of communication (Chikweche & Fletcher, 2012).

Word-of-mouth is one of the strongest mediums to increase awareness in the BoP market. Endorsements, local sellers, key opinion leaders (KOLs) (which include experts in a field), or well-known and trusted celebrities help to market products.

b) Availability

According to Prahalad (2011), to build trust and a loyal consumer base at the BoP, firms should ensure an uninterrupted supply of products and services. Firms need to therefore ensure that products are always available. Chikweche and Fletcher (2012) and Prahalad (2012) suggest that, as with awareness, it is important that marketers and firms work with social networks and informal trade structures within the BoP market, to improve their distribution

system to ensure product availability. BoP consumers are exposed to constraints with high inflation, weak legal systems, corruption, unreliable infrastructure, and many other elements, with their purchasing decisions mostly reliant on income and availability (Chikweche & Fletcher, 2012).

c) *Affordability*

The BoP consumer has low disposable income and products must therefore be priced according to what they can afford. This is important because BoP consumers often receive their income daily, as opposed to weekly or monthly.

Chikweche and Fletcher (2012) recommend that unconventional and innovative financial techniques are needed, for instance, paying for usage in instalments as opposed to paying cash (this usually inflates an already inflated price). Prahalad (2012) suggests companies must consider BoP consumers' disposable income and their lack of steady income. For example, in India, firms adapt to the local environment by implementing affordability marketing strategies such as reducing product package size and using unit packaging (ie, incorporating the use of small sachets which are affordable to low-income consumers).

d) *Accessibility*

Accessibility is based on location and proximity to products and services which are available. It is therefore important that consumers in informal settlements can reach their desired products and services. Products and services must be geographically distributed and available within walking distance for BoP consumers, due to their inability to travel long distances. This is a challenge, given that BoP consumers are largely located in informal areas, which are typically isolated regions and difficult for firms to access. This makes it difficult to manage distribution and logistics (Prahalad, 2012).

Chikweche and Fletcher (2012) believed that distribution challenges indicate that innovative distribution channels are needed in order to tap into BoP markets. They propose that firms should include local entrepreneurs, social clubs and existing buying groups in the distribution channel, to tap into existing relationships in the BoP market.

To create these channels, micro-financing institutions are needed to facilitate loans for local entrepreneurs to start businesses (Prahalad, 2012). Collaboration between firms and local micro-finance institutions, non-governmental firms and local entrepreneurs is vital to access the BoP, due to knowledge of the market and contacts (Shah, 2012).

2.2.3.2. Consumer behaviour influenced by emotional connections at the BoP

Barki and Parente (2010) identified distinctive characteristics of Brazilian low-income shopping and consumer behaviour. According to Barki et al. (2010), the perception of value was not determined solely by lower prices but also by a stronger need to compensate for a dignity deficit and low self-esteem, a stronger preference for personalised relationships, a high level of aspiration to feel socially included in society, and a preference for abundance.

a) Dignity and Self-esteem

The study found that the BoP consumers want to maintain their self-respect and dignity despite their circumstances. Low-income consumers have a need to affirm their honesty in Brazil (where honesty was highly regarded). Barki and Parente (2010) found that consumers were discontent with stores that have surveillance to prevent shop lifting, and low-income consumers even found it offensive when retailers requested identification for payments made on credit.

BoP consumers are used to experiencing inadequate public services, with hardly any choice over the quality of the services offered. This means that whenever they are allowed to choose, their aspirations lead their decision.

Based on the information above, BoP consumers' purchasing decisions are influenced by fulfilling their aspirational needs or to safeguard their dignity.

Their decision is not rational or influenced by pricing (despite limited funds). Instead, their decision is driven by the need to satisfy their economic, social, and psychological desires. They do this for the need to feel respected (Barkie & Parente, 2010).

b) Personalised Relationship

Low-income consumers value community and their social network, realising the role it plays in surviving a hostile environment. BoP consumers want a more personal service. The big organisations are seen to not understand or care about the reality of living at the BoP. Low-income consumers see these organisations as far removed in all aspects- proximity, relevance, relationship and trust. Face-to-face contact is highly valued. Consumers have a high reliance on the vendors of the community or word of mouth as sources of information, as many are

illiterate and thus cannot read store signs and product labels. Their unlearned status makes them very suspicious and slow to trust.

c) Value proposition configuration

Purchasing decisions made by consumers at the BoP are based on the value proposition – the relationship between benefits and costs. Baker et al. (2002) adjusted this relationship by recognising that the consumer's subjective perceptions are the determinants of behaviour and not rational reality. This means that the value proposition became the relation between the perception of benefits over the perception of cost. Therefore, many times we see that lower-income consumers purchase trusted brands despite the higher prices. This is because the benefit of higher quality and higher yield (i.e., a higher value proposition) or status as an aspirational brand makes it worth what it costs.

2.2.3.3 Family Purchase Decision-Making at BoP

Chikweche, Stanton, and Fletcher (2012) used family structure as a demographic variable to segment the BoP (Dahana, Kobayashi & Ebisuya, 2018) and examined the nature of family purchase decision-making at the BOP. Chikweche et al. (2012) identified the purchase approach used, the role of the family in this approach and the types of roles assumed by different family members, given the constraints they face in the dynamic environment that characterises the BOP. They investigated how differences in the family make-up, and the role the family plays in an individual's life, shapes their decision-making.

They found that the decision-making patterns among households differ depending on life stage. Deriving from the family buying decision framework of initiator, influencer, decider, buyer, and user, Engel, Kollat and Blackwell (1973) found that in urban nuclear families, wives and husbands share the same role in each stage of the buying process. Furthermore, wives and husbands in urban nuclear families use dual decision-making, and children hardly play an influential role in decision-making. Chickweche et al. (2012) highlight the heterogeneity of the BoP market and the dynamics of the family purchase-decision process that takes place. The different models suggest marketing strategies need to acknowledge the different roles played by men, women and working children.

2.2.3.4 Share-of-wallet (SoW) trade-offs and decision-making at the BoP

Lappeman, Chigada and Pillay (2019) explored monthly BoP share-of-wallet (SoW) trade-offs. This is particularly revealing because, in BoP markets, scarcity is a defining quality and, unlike wealthier segments, income is generally more inconsistent (Simpson & Lappeman, 2017). Technically, SoW is defined as the share of a customer's total spend across categories. According to Lappeman et al. (2019), the SoW concept proves that consumers can make trade-offs between product/service categories and not just between brands. Their research analysed how much of a consumer's total expenditure is allocated to specific product or service categories. The results allowed marketers to observe how expenditure patterns fluctuate, how dynamic BoP household conditions influence consumption behaviour and consistent inter-category budgetary trade-offs.

2.2.3.5 BoP decision-making model (Choudhury et al., 2019)

The key theoretical model that this study will focus on was based on a study by Choudhury et al. (2019), who formulated a conceptual framework for consumer decision-making at the BoP, to determine how consumer vulnerability affects both decision-making and transaction cost. The details of this model are expanded in Section 2.5 of this chapter, where the theoretical foundation is unpacked in detail.

In this section, the BoP market and decision-making models were discussed to provide a better understanding of the marketing landscape at the BoP, both locally and globally. In the next section, the subject of young single mothers is explored.

2.3. YSM at the BOP: Exploring vulnerability

In the previous section, the BoP consumer behaviour and decision-making models were explained. In the next section, the literature on YSMs at the BOP and their vulnerability is discussed.

2.3.1 YSMs at the BoP and their vulnerability

Single motherhood in Sub-Saharan Africa has received little attention, although it is widespread and has critical implications for children's well-being (Clark et al., 2019). Low-income single mothers face multiple disadvantages related to their gender, income, marital status, and parental status (Radey et al., 2022).

Single Mothers are particularly vulnerable, due to considerable unemployment and extreme poverty that place them in difficult positions as they struggle to pay for food, shelter, and other necessities critical for the health and well-being of their children (Madhavan et al., 2021). However, there is

notable variation among single mothers in terms of employment and income (Clark et al., 2019) that makes some women more vulnerable than others (Madhavan et al., 2021). The vulnerability factor is amplified and perpetuates YSMs' poverty and economic hardships, as they face considerable financial instability (Kpoor, 2014; Elliot et al., 2015). This is because a considerable number of YSMs have not finished school and cannot find work. This study has therefore focused on YSMs because (1) YSMs are among the most disadvantaged; (2) young children are in need of the most care; and (3) resource constraints are especially limiting for YSMs (Madhavan et al., 2021).

According to Jama et al. (2018), pregnancy often occurs among teenagers when they are still at school. Often childbirth is followed by mothers returning to education environments, leaving the responsibility of childcare to their own parents, aunts, grandmothers and other family members. On the other hand, many YSMs do not return to school and are unemployed. They remain heavily dependent on their parents or extended family. Extensive evidence suggests low-income single mothers depend upon their families and friends for emotional, practical, and economic support in times of need (Radey et al., 2022).

The information above indicates that, once the baby is born, family members take on the role of a parent and influence the most important factors affecting young mothers' feeding choices. Vulnerability is exacerbated for YSMs, as they are financially dependent on their parents and more susceptible to the views of their family members, friends, the media and society as a whole. This is due to the lack of parenting readiness and dependence on social support systems, their personal views and behaviours (Jama et al., 2018).

Given the lack of knowledge about their decision processes, the consumption behaviours of single-mother families warrant further research (Flurry, 2007; Thomson et al., 2007; Tinson et al., 2008; Ray et al., 2019).

2.3.2 Research gaps in studying YSMs

Previous decision-making research calls for future research on YSMs, where little focus has been placed.

Chikweche, Stanton and Fletcher (2012) identified and explored the decision-making of different family members and their roles, in which the women were identified by their role as a wife, not as a mother. Also, the influence of children (aged 6 -12) at BoP on decision-making was explored and compared to the extensive western research on this topic. There was no research on infant nutrition. Choudhury et al. (2019) researched the individual BoP consumers and their decision-making motivations, and created a conceptual model. However, Choudhury et al. (2019) states that their study is

predominantly based on male participant's feedback, as women were always in a rush to tend to their house work, and never had time to be interviewed. They therefore call for future research that focuses on female participants and their decision-making process. Therefore, the decision to select YSMs at the BoP was taken, as they are generally responsible for decisions that determine what they feed their babies.

2.4. Nutrition for early childhood development (ECD)

The previous section discussed the vulnerability of YSMs. In this section, the definition and importance of ECD are explained. In addition, the nutrition literature is synthesised to reveal the importance of nutrition for ECD, as well as the status of childhood nutrition in the BoP in South Africa.

2.4.1 The Importance of ECD

ECD refers to growth and development that starts from the mothers pregnancy through to her child's attendance to primary school (until the age of seven) (Sayre et al., 2015). ECD addresses children's basic needs in health, nutrition, cognitive, and social-emotional development (Sayre et al., 2015).

A series in the Lancet on child development estimated that across the world more than 200 million children under the age of five do not reach their development potential from a physical growth, cognitive and socio-emotional perspective (Grantham-McGregor et al., 2007). The first five years are essential and the groundwork for "lifelong development" (Shonkoff & Phillips, 2000). Thus, it is important to focus on and evaluate children through this vulnerable life stage and ensure optimal development (Fernald et al., 2009).

Many children worldwide are poor and growing up in harsh conditions. Almost 40% of children under the age of five in developing countries are poor and stunted (Grantham-McGregor et al., 2007). This is because children from low-income households very rarely have access to the necessities such as water and sanitation, health services, healthy nutrition and quality schooling (Cole, 2000; Grantham-McGregor et al., 2007). According to Sayre et al. (2015), this can lead to poor physical, socio-emotional, and cognitive development, resulting in a life of lower success and achievement.

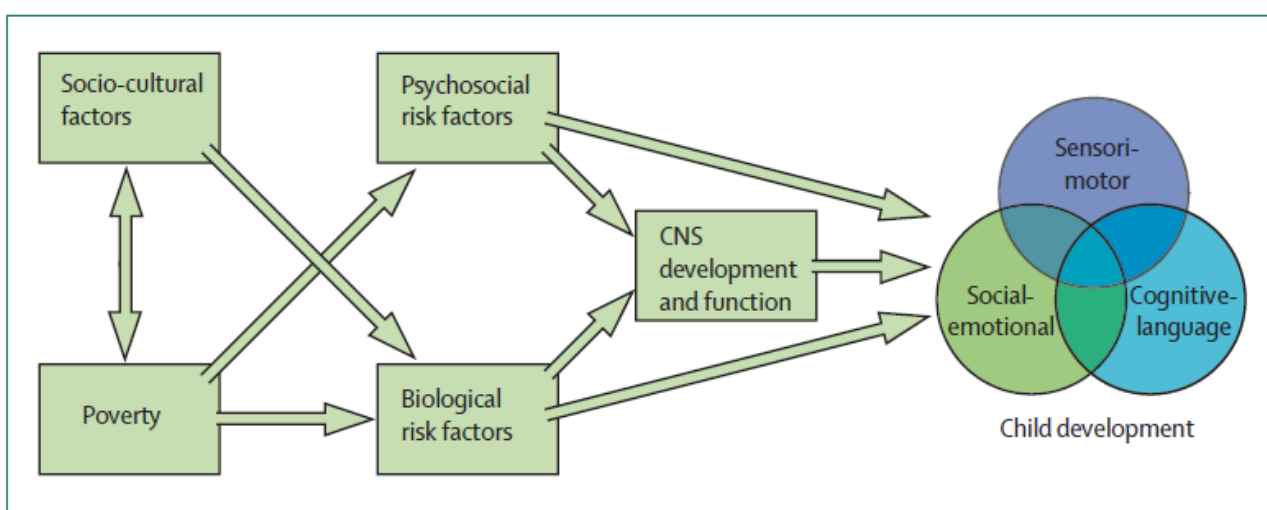
When children are still young and growing their neuronal systems are developing, which is why early childhood is a critical period of both risk and opportunity. A period when children can be both vulnerable to or benefit from environmental influences (Fernald et al., 2009). The probability of children from developing countries succumbing to deficiencies in adequate nutrition and basic health is higher

than that of those from developed countries. These deficiencies result in stunted physical and cognitive development (Fernald et al., 2009). Infants (defined as children from 0 to 12 months old) and children (between the age of 1 to 3) growing up in poverty are exposed to poor sanitation, crowded living conditions, a lack of psycho-social stimulation and fewer household resources (Walker et al., 2007). Young children growing up in poverty are more likely to experience developmental delays and growth deficits than those from more privileged backgrounds, because they are disproportionately exposed to a wide range of co-occurring risk factors that impact development (Fernald et al., 2009).

2.4.1.1 A conceptual model explains the effects of poverty on ECD

Poverty, sociocultural factors, biological and psychosocial risk factors all work together to affect child development and long-term adult productivity (Grantham-McGregor et al., 2007; Walker et al., 2007; Figure 2.1). A child develops in three interconnected domains: sensorimotor, socio-emotional, and cognitive-language skills. Child development is determined by the integrity and function of the central nervous system (CNS) and by positive and negative environmental factors that affect development. Positive environmental factors include opportunities to explore and engage in learning activities. Adverse environmental factors include exposure to psychosocial risks (e.g., harsh disciplinary measures or maternal depression) and biological risks such as malnutrition and infectious diseases (Fernald et al., 2009).

Figure 2.1: The relationship and flows between poverty and poor child development (Walker et al., 2007)



Children from low-income households, particularly in their second and third year of life, are more vulnerable to external factors than those in their first six months (Gottlieb, 1991; Werner, 2000). The long-term effects of the lack of stimulation marginalises the child into adulthood (Fernald et al.,

2009), and creates an endless cycle of poverty as they are unable to provide stimulation and lack the resources to offer their offspring, a better life (Sen, 1999).

2.4.2 Nutrition for ECD

There is a correlation between nutrition and the development of babies from ages 6 to 24 months (Vorster, 2010). Studies show that early nutritional interventions between the ages of 6 to 24 months have long-term benefits. These benefits are physical, social, educational, and psychological and are key to improving job opportunities, increasing income potential and ultimately contributing to poverty eradication (Faber & Wenhold, 2007). Interventions such as the addition of micro- and macro-nutrients to diet at this early stage exceeded results when added at later ages, such as pre-school and early school years (Chang et al., 2002).

“The first 1000 days” is a concept that states that pregnancy and the first two years of a baby’s life is the critical window to improving child health and development (Flood et al., 2018). The first 1000 days of life are the most important, as it is the period in which most physical and cognitive development takes place, and the period in which the effects of deficiencies are grave and often irreversible. These deficiencies include increased morbidity and mortality, growth faltering, and impaired motor, cognitive and behavioural development. This results in stunting, lower educational achievement, lower economic productivity and income, and decreased offspring birthweight in the long term (Dewey & Adu-Afarwuah, 2008, Adams et al., 2016). According to Anderson et al. (2008), optimising the nutritional status of children and their mothers before and during pregnancy, improved growth and cognitive development in children and potentially reduces their risk for non-communicable diseases (NCDs) in later life.

2.4.3 Nutrition transition

There has been a negative shift as populations’ dietary choices have changed from wholesome goodness in rural environments to the nutrient-deficient diets of urban lifestyle (Uauy & Monteiro, 2004). This transition, known as the nutrition transition, is characterised by changes in dietary patterns, nutrient intake, and physical activity (Vorster, 2010). Global producers are the main reason why the nutrition transition from traditional simple diets to highly processed foods have accelerated, producing progressively cheaper food, and promoting the highest possible consumption (Uauy & Monteiro, 2004). Regrettably, usually foods marketed to the poor are high in sugar, fat and packed with artificial

ingredients, with little to no nutritional value. The trend is to market healthy foods at high prices, keeping it exclusive, while cheap foods are mostly unhealthy, with very little nutritional benefits. As a result, most foods made available to low-income households lack nutritional benefits (Drewnowski & Eichelsdoerfer, 2010).

According to Chakona and Shackleton (2018), almost 14.3 million South Africans are defined as vulnerable to hunger, with 43% of households being vulnerable to poverty and about 20% living in extreme poverty. Many of these households cannot afford to purchase enough food to provide themselves with an adequate diet. Households that are living below the food poverty line therefore consume poor-quality diets and alter their consumption routines to fit with their poverty.

Food and beverage marketing and advertising have played a significant role in shaping the lifestyles and health of society and in turn affecting the economy. In the past, sizeable budgets and aggressive marketing campaigns were allocated to promote cigarette addiction before it was discovered that smoking causes serious societal illnesses, such as cancer. Similarly, Coca-Cola achieved the status of the number one brand in the world because of its aggressive marketing campaigns. Everett-Murphy, De Villiers, Ketterer and Steyn (2015) state that, in 2010, South Africans drank an average of 254 Coca-Cola products per person per year, compared to 139 in 1992. Furthermore, Everett-Murphy et al. (2015) also mention that the sales of snack bars, noodles and ready-made meals increased by more than 40% between 2005 and 2010.

South Africa has a high prevalence of under- and over-nutrition, including a fast-growing epidemic of obesity (Temple & Steyn, 2011). According to the Indigo Wellness index (Alison Millington, 2019), a global health-ranking institution, South Africa is the unhealthiest country in the world. The study was based on ten measures: healthy life expectancy; blood pressure; blood glucose (diabetes risk); obesity; depression; happiness; alcohol use; tobacco use; inactivity (too little exercise); and government spending on healthcare. In addition, in 2016, the World Health Organisation (WHO, 2016) reported that South Africa has the highest obesity rate among Sub-Saharan African countries.

2.4.4 Nutrition in BoP households

Many consumers at the BoP are afflicted by hidden hunger, a form of under-nutrition, that results when an individual's intake and absorption of essential vitamins and minerals are not enough to sustain good health and development (Von Grebmer et al., 2014). This is caused by a poor diet, infectious disease, poor food security, limited access to proper sanitation facilities, and conditions affected by economic, social, and political circumstances (Collishaw, 2017). Those most vulnerable to hidden

hunger are children and women of reproductive age, due to their high micro-nutrient requirements. Madhavan, Clark, and Schmidt (2021) stated that food insecurity is defined as inadequate quantity or sub-optimal quality of food. It was found that challenges of access and a lack of stable employment lead to such insecurity in urban spaces.

According to Drewnowski et al. (2010), when incomes drop and family budgets shrink, food choices shift towards cheaper food options, which are more energy dense. The healthier foods are the first to be dropped (for example, high-quality proteins, whole grains, vegetables, and fruit). The cheapest way to fill stomachs for longer is with energy-rich starches, added sugars and vegetable fats. This is because energy-dense sweets and fats are tasty, cheap, readily available, and convenient. Furthermore, cooking skills, money and time are limited or absent, so nutrient-poor options are preferred by lower-income groups to fresh produce and other more nutrient-rich foods. Tzioumis and Adair (2014) reported that the persistent pockets of under-nutrition in low-to-middle-income countries are a result of the widening of economic disparities characterised by poverty and poor access to resources.

2.4.5 Nutrition in South Africa BoP households

According to Bourne et al. (2002) and Vorster (2010), South Africa is undergoing a socio-economic transition that has triggered a rapid change in dietary habits towards consumption of less nutritious food which is highly processed. This food contains high levels of sugar, fat and salt and low levels of fibre. The nutrition transition in South Africa is characterised by urban migration, and economic and social transitions (Modjadji & Madiba, 2019).

Modjadji and Madiba (2019) concurred that South Africa and other low-to-middle-income countries are undergoing nutrition and lifestyle transitions. This has resulted in an increasing trend of over-nutrition at a population level, with under-nutrition among children. South Africa suffers from under-nutrition due to poverty, household food insecurity and over-nutrition (overweight/obesity), driven by the consumption of high energy-dense foods and little physical activity. The coexistence of under-nutrition (ie, stunting and being underweight) and over-nutrition or diet-related non-communicable diseases is known as the double burden of malnutrition (WHO, 2017).

2.4.6 Childhood nutrition in South Africa BoP households

Chakona and Shackleton (2018) highlight that stunted growth and being underweight are major nutritional disorders affecting South African children. This is despite school feeding programmes and child support grants that have reduced child under-nutrition in the country. According to Chakona et al. (2018), stunted growth is the dominant form of malnutrition among South African children, with about 21%–48% of young children suffering from chronic malnutrition. Poor access and availability to nutrient-rich foods restrict South African children from consuming adequate and diversified diets, with fruits and vegetables. This has been associated with poor growth, increased levels of stunting and being underweight in South African children. Household food insecurity is widespread in South Africa, yet there is limited information on its contribution to child malnutrition (Chakona et al., 2018).

This section provided insights into nutrition at the BoP and childhood nutrition in South African BoP households. Nutrition transition, food insecurity, double-burden malnutrition and hidden hunger have been highlighted as issues driven by the circumstances at the BoP.

2.5 Theoretical Foundation

2.5.1 What is the theoretical foundation of this study?

Nanda Choudhury, Srabanti Mukherjee and Biplab Datta (2019) have identified that consumer vulnerability affects the decision-making process and the transaction cost at the BoP level. This is driven by the characteristics of a lack of literacy (Venugopal & Viswanathan, 2017), uncertainty in decision-making, and restricted movement (Dinica & Motteau, 2012). Consumers at the BoP are vulnerable and therefore make constrained decisions as part of trying to minimise their transaction cost when deciding on a brand and retailer. The constrained brand and retailer choice results in a limited selection of products and brands.

2.5.2 Components of the model

The following propositions are made by Choudhury et al. (2019). These propositions inform the consumer decision-making process framework at the BoP, as well as points that will be explored in the specific context of this study:

The first proposition is vulnerability, which was identified as a moderating variable in the consumer decision-making process. Most consumers, whether rich or poor, use bounded rationality as a shortcut to cope with external circumstances during their purchase decision-making processes. According to Bonal and Zancajo (2018), these shortcuts can vary depending on external conditions. BoP consumers' external conditions are harsh, characterised by low levels of literacy, limited access to information, limited ability to process information, a lack of resources, inadequate support systems and a lack of time, which makes them prone to vulnerability (Gupta & Pirsch, 2015). Vulnerability acts as a major constraint to consumers' "freedom of choice" (Morgan, Schuler, & Stoltman, 1995).

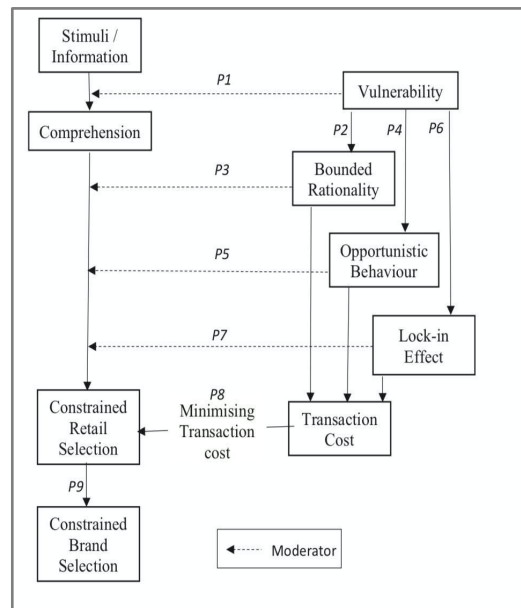
The second proposition is that BoP consumers revert to bounded rationality to cope with the harsh realities of their external circumstances, which include a lack of resources and low levels of literacy, to minimise transaction cost during their purchase. BoP consumers are therefore more likely to go to what they know or what their local independent retailers advise, in fear of making a mistake that will prove too costly. However, in many cases, this may result in BOP consumers purchasing products which are not best suited to their needs or purchasing products at a higher price.

Thirdly, Choudhury et al. (2019) reveal that the buyer, the seller and even the retailer depend on one another because they are from the same community and all dealing with the same hardships (ie, "life's events and odds while negotiating through 'poverty'"). This results in the buyer and seller getting "locked-in" to a specific retailer just to minimise the transaction cost (called the "lock-in effect").

In some cases, retailers engage in "opportunistic behaviour" to increase the transaction cost of BoP consumers. For example, retailers may take advantage of BoP consumers' lack of knowledge or literacy to mislead, distort or disguise information on the availability or prices of certain products. Retailers may use incomplete or incorrect information to exploit BOP consumers. This is referred to as "opportunistic behaviour" and is the fourth proposition made by Choudhury et al. (2019).

Finally, attempts to minimise transaction costs lead to constrained retail selection, which in turn leads to a constrained selection of products and brands. According to Choudhury et al. (2019), the consumption of a branded product at the BoP level is restricted by the product's availability at the chosen retail point. BoP consumers therefore resort to buying either known (used) or suggested (by retailer or reference group) brands, as demonstrated in Figure 2.2, sourced from Choudhury et al. (2019).

Figure 2.2: Consumer Decision-Making Framework at the BoP



Some authors have added new dimensions to the study of the BoP. Specifically, Singh et al. (2022) explored the theory of planned behaviour (TPB) in BoP choice of durable and non-durable goods. The research provided a rare psychographic approach to the BoP and opened the door for further research of this kind. While theoretically sound, Singh et al (2012) used TPB to provide a generally predictive outlook on decision and not a theoretically focused on in the way that Choudhury et al (2019), the basis of this study, did. In addition, Majumder’s (2012) slightly older research is helpful in contextualising BoP theory around ideas from Foucault, Marx and others. Both of these theoretical perspectives provide some broad perspective on BoP theory but do not get into the nuance of the decision-making process, nor the specifics of groups like YSM’s as discussed next.

2.5.3 The effects of vulnerability on YSM purchasing of nutrition for ECD

Communities are important to the BoP market (Subrahmanyam & Gomez-Arias, 2008), as networks such as family, friends and religious organisations are often groups they rely on in times of need. Choudhury et al. (2019) explains how this trust extends to local retailers and highlights the interactions between the BoP buyers and their local retailers, as well as the effect of these interactions on the decision-making process. Choudhury et al. (2019) found that reliance on local retailers increases the vulnerability of BoP individuals. This increases the risk of BoP individuals being taken advantage of and ultimately affects their purchasing decisions. Consumers at the BoP, usually frequent local, small, independent outlets which are close where they live. Unfortunately, these independent retailers

often charge much higher prices than the bigger retail outlets, owing to their inefficiencies and higher operational costs (Barki & Parente, 2010). According to Caplovitz (1963), often the poor consumers at the BoP pay more for the same products due to social costs, mobility limitations and distribution inefficiencies. Chikweche et al. (2012) explained how this imbalance leads to the vulnerability of the BoP consumer, which increases the transaction cost for each purchase.

2.5.4 The effects of vulnerability on minimising transaction costs

The transaction cost is a result of the vulnerability at the BoP. Transaction costs can be defined as additional expenses when buying or selling a good or service apart from the manufacturing cost of a product (Choudhury et al. 2019). Williamson (1983) explains transaction costs as the cost associated with an exchange of goods or services due to market limitations and imperfections. The determinants of transaction costs are frequency, uncertainty, limited rationality, and opportunistic behaviour. Mukherjee and Pal (2014) state that, according to a wealth of literature, BoP consumers attempt to minimise the transaction cost when purchasing a product by using their own choice rules. This is explored below.

a) Frequency

Many of the BoP consumers earn wages which are paid daily or weekly. In general, BoP consumers therefore avoid bulk shopping, preferring to do more frequent top-up shopping. This includes buying daily consumable items in smaller packs or quantities. The frequency of these purchases results in transactions costs which are higher than if they had bought in bulk. Multiple transactions of small volumes increase the transaction cost of both buying and selling (Mukherjee & Pal, 2014).

b) Uncertainty

Many of BoP consumers have irregular employment and earnings. According to Gupta and Pirsch (2015), they live in bad infrastructure and lack access to affordable goods and services. This results in BoP consumers increasing their dependence on credit in uncertain times (Mukherjee & Pal, 2014). Viswanathan et al. (2008) pointed out how building a relationship with local retailers helped BoP consumers to access credit during times of hardship.

c) Limited/bounded rationality

According to Amit and Schoemaker (1983), if the decision maker has a lack of both resources and know-how, it results in a cap/limit on their cognitive understanding of information. This is called bounded rationality. This results in bounded rational decisions, which may not be optimal. Bounded rationality means that BoP consumers often rely on

word-of-mouth, advice from vendors, or stick with what they know, due to a limited ability to read and comprehend marketing elements communicated.

d) Opportunistic behaviour

Many retailers in the BoP take advantage of BoP consumers, given their lack of literacy, understanding or financial constraints. For example, retailers may do this by misleading, distorting, or disguising availability or prices of certain products. Retailers may use incomplete or incorrect information to achieve this. This is referred to as opportunistic behaviour.

2.6 Conclusion

As demonstrated in this chapter, there is an opportunity to research the decision-making process of YSMs at the BoP when they purchase baby food. The vulnerability of low-income households at the BoP has a significant influence on their purchasing decisions. It has been confirmed that this is especially true for YSMs at the BoP, as their vulnerabilities are much greater due their complete dependency on parents and extended family. Furthermore, ECD of YSM babies is threatened by living at the BoP. Babies live in poverty with poor sanitation, crowded living conditions, lack of psycho-social stimulation, fewer household resources, and access to poor nutrition. Nutrition at the BoP is influenced by accessibility, availability and what is affordable; however, often these are not nutritious for growing children, and this results in children at the BoP suffering from stunted growth and malnutrition. Through an extensive review and synthesis of the literature, an opportunity exists to contribute to the knowledge gap in the study of the BoP in Africa, as well as to further existing research on the decision-making process of BoP consumers. It indicates that there is a need to increase the nutritional awareness of YSMs to influence their purchasing decisions; as nutrition influences ECD.

Chapter 3 : Methodology

3.1. Introduction

This chapter provides a detailed description of the research design and methodologies employed to address the research objectives of the study. The first section describes the research design. The second section unpacks sample size and sample description while providing the context and justification for the sampling method applied. A detailed discussion of the data-collection instrument is then presented, followed by the data-analysis methods used.

3.2. Research paradigm and design

This research was based on an interpretivist paradigm with an appreciation that many aspects of parenting are subjective, even with modern advances in nutrition knowledge. This study followed a qualitative research method, as opposed to a quantitative method (which is based on numerical data and methods that can be made objectively and propagated by other researchers). The qualitative method uses non-numerical data, including narratives and visuals, to gain insights into a phenomenon of interest (Gay et al., 2012). Qualitative research focuses on understanding a research query as a humanistic or idealistic approach (Pathak, 2013). The qualitative method is used to understand people's beliefs, experiences, attitudes, behaviour and interactions. It generates non-numerical data (Pathak, 2013).

Although once viewed as philosophically incongruent with experimental research, qualitative research is now recognised for its ability to add a new dimension to interventional studies that cannot be obtained through the measurement of variables alone (Pathak, 2013). Furthermore, qualitative methods, such as focus groups and in-depth interviews, are often used by researchers to better understand consumer behaviour research (Bristol & Edward, 1993). Qualitative descriptive studies largely aim to comprehensively summarise specific circumstances experienced by individuals or groups of individuals, and are a methodological approach often used in qualitative research (Sandelowski, 2000).

The objective of this qualitative study was to reveal insights into the decision-making of YSMs at the BoP when purchasing food for their baby, how their vulnerability influences these decisions and the final transaction cost.

3.3. Sampling

The sample population for the study was all low-income YSMs with babies between 6 and 24 months of age. From this population, a non-probability sampling technique, specifically purposive sampling, was used for this study (Malhotra, 2015). Purposive sampling is usually used to recruit a small number of participants and, according to Marshall (1996), purposive sampling requires that people are deliberately selected with a specific purpose to address the research aim, as they are rich sources of data in relation to this. The selection can be based on personal characteristics (for example, socio-economic status or gender), behaviour and attitudes or beliefs. Given the niche nature of this research, the method was appropriate (Malhotra, 2015). Therefore, this study used homogeneous purposive sampling, by selecting single urban mothers with children between the ages of 6 to 24 months at the BoP. A homogeneous purposive sample is one that is selected for having a shared characteristic or set of characteristics (Malhotra, 2015).

3.3.1 Sample context and justification

3.3.1.1 Context for the sample used

This study interviewed low-income YSMs, with the eligibility criteria that YSMs:

- (a) were 18 to 25 years old,
- (b) had babies between the ages of 6 to 24 months, and
- (c) lived in Khayelitsha, an urban informal settlement in the City of Cape Town, South Africa.

Mothers who were still only breast feeding were excused from this study. YSMs interested in the study completed a screener questionnaire.

3.3.1.2 Justification of the eligibility criteria used

(a) YSM age group

The study focused on a bull's eye age of 18 to 25 years, as this is the age at which the single mother is no longer a minor, yet still young. It is the age at which young adults are making important decisions on career choices and education path, who they are and who they want to be, a vulnerable period. The focus on single mothers is due to the size and rapid growth of this group.

In 2020, a Gallup poll revealed Sub-Saharan Africa has the highest percentage of single mothers worldwide, at 32%. According to 2019 research conducted by the Human Sciences Research Council (HSRC) and the South African Race Relations Institute (SARRI), more than 40% of South African mothers are single parents. The StatsSA research reported that, in 2018, many young children (46%) lived with only their biological mother, and 2% lived with their biological father only (Mamacos, 2021).

(b) Baby age group

According to the World Health Organisation (WHO), mothers should exclusively breastfeed infants for the child's first six months of life for optimal growth, development, and health (Chakona, 2020). Thereafter, infants and young children should be given complimentary foods which are nutritional, adequate and safe to meet the evolving needs of their growing bodies (Chakona, 2020).

Based on the recommendation issued by the WHO, this study only interviewed YSMs with babies from six months old that no longer only breast fed, ensuring that the study focused on purchasing decisions for complimentary baby foods. The study also only focused on babies up until the age of 24 months, because it ensures that the first 1000 days were accounted for. The first 1000 days refers to a child's life from the moment they are conceived until they have reached two years of age (24 months). Nutritious foods and diverse diets which are of good quality and quantity, are essential for children to meet their nutrient needs and support growth during the first 1000 days of a child's life. This period is critical for optimal child growth, health and development (Chakona, 2020). The age criterion for the baby (6 to 24 months) therefore allowed this study to focus on the most crucial period in the 1000 days that the baby would be feeding on complimentary purchased food.

(c) Geographical location

The decision to focus this study on an urban area was due to urbanisation rates in Sub-Saharan Africa being among the highest in the world (United Nations [UN], 2018). Furthermore, urban livelihoods in Africa have become the focus of much academic and policy interest given the uncertainties of urban life (Bjarnesen & Utas, 2018). Given the high urbanisation rates, cities in Sub-Saharan Africa are contending with food insecurity (Madhavan, 2021). Hunger and food insecurity

rity have been defining features of rural African contexts for a long time. This has recently become increasingly visible among urban households in low-income communities in cities across the continent (Madhavan, 2021).

This study was conducted in Khayelitsha. Khayelitsha is found in the Cape Town Metropole ('the City') and is the second biggest Black township in South Africa, after Soweto in Johannesburg (South African History Online, 2013). Khayelitsha is located in the south-eastern part of the City of Cape Town municipal area and has the highest rate of poverty in the city (Lappeman, 2020). Housing consists of both formal and informal dwellings, with health services and unemployment well above the national average (Coetzee et al., 2004). In the last ten years, the population of Khayelitsha has risen from 400 000 to 2.4 million, with 50% of the population being under the age of 19. The unemployment rate is around 73%, with 70% of the population living in temporary structures called shacks (Lappeman et al., 2019). Eighty-nine percent of households are considered moderately to severely food insecure.

Extreme poverty and poor community infrastructure have led to an increase in crime, gangs, violence, drugs, and other social ills. Khayelitsha is known as the murder capital of South Africa, with the number of attempted murders increasing by nearly 30% in 2012/13 (Lappeman et al., 2019). Women in the Khayelitsha community are often devalued (Kaminer, 2010), with teenage and unwanted pregnancies being a common occurrence. This leads to inadequate pre-natal care, often due to shame or lack of knowledge (Lappeman et al., 2019).

3.3.2 Sample size

The main intentions in qualitative research are explanation, description and interpretation (Maxwell, 2013). Qualitative research often concerns developing a depth of understanding rather than a breadth (Boddy, 2016). Sampling should focus on obtaining rich information from an adequate and appropriate sample, rather than representative, generalisable views from a large sample (Morse & Field, 1995). Qualitative studies therefore typically have smaller sample sizes than those used for quantitative studies.

In terms of the upper limits to sample size, Sandelowski is one of the few commentators on qualitative research to note that a sample can be too large (Boddy, 2016). A sample which is too large does not permit the deep, case-oriented analysis that is the *raison d'être* of qualitative enquiry (Sandelowski, 1995). In terms of how large is too large, few have ventured an opinion. Sandelowski suggests that 50 interviews are a large sample for a qualitative study (Boddy, 2016). In making a justification for

an adopted sample size, qualitative researchers should refer to the scope of the study and nature of the topic (Morse, 2000), the contact time to be spent on each individual research participant (Marshall et al., 2013) and the homogeneity of the population under consideration (Trotter, 2012).

In practical terms, attempts should be made to ensure that the sample is as representative of the population as possible (Bock & Sergeant, 2002), unless it is a very tightly defined or unusual population. Theoretical saturation can also be useful as a guide in designing qualitative research, with practical research illustrating that samples of 12 may be cases where data saturation occurs among a relatively homogeneous population (Boddy, 2016). Determining a suitable sample size for qualitative studies is therefore at the researcher's discretion, based on an assessment of the appropriateness and adequacy of the results provided by participants in relation to the fulfilment of specific research objectives (Onwuegbuzie & Leech, 2007).

This research identified 22 urban interviewees, South African BoP single mothers, in one urban informal settlement within the Cape Town area. The sample size conforms to those of other researchers who sampled urban interviewees (Chikweche et al., 2012; Chikweche et al., 2010; Hunter-Adams et al., 2016a; Hunter-Adams et al., 2016b). The data collection as carried out in the study is discussed in detail in the following section.

3.4. Data collection

Data collection in qualitative research is aimed at determining the nature of a particular phenomenon; it involves unstructured or semi-structured, open-ended individual interviews or focus groups (Lambert & Lambert, 2012). The unstructured interview is conducted together with the collection of observational data, whereas semi-structured interviews are often the sole data source for a qualitative research project. Semi-structured interviews are usually scheduled in advance at a designated time and location outside of everyday events (DiCicco-Bloom et al., 2006). They are generally organised around a set of predetermined open-ended questions, with other questions emerging from the dialogue between interviewer and interviewee (DiCicco-Bloom et al., 2006). Semi-structured in-depth interviews are the most widely used interviewing format for qualitative research and can occur with an individual or in groups (DiCicco-Bloom et al., 2006).

The main advantage of an individual in-depth interview is that the participants get to express themselves, along with sharing their personal opinions, and this allows the interviewer to delve deeply into social and personal matters. It allows for deeper insights. Interviews often last between 30 to 60 minutes (Bryman & Bell, 2011). Interviews are a personal collection method, given the face-to-face,

one-on-one set up (one person as an interviewer and one person being interviewed). The framework and flexibility of the responses constitute the semi-structured aspect of the method. It makes it unique among interview methods for the degree of relevancy, and it provides the topic while remaining responsive to the participant (Bryman & Bell, 2011).

This study conducted in-depth interviews with 22 participants and used the interview collection method, in the form of semi-structured interviews. The interviews included a number of open-ended questions and focused on the responses of each participant. Participants were free to respond to the open-ended questions as they deemed appropriate, and the interviewer probed these responses when necessary (as per the Discussion Guide in addendum 1.2). The reason the interviews were based on open-ended questions was to ensure that the approach adapted to the BoP environment and to ensure that this method of qualitative research conformed with previous BoP research performed (Chikweche et al., 2012; Chikweche et al., 2010). Participants were therefore allowed to tell their story in an authentic way, with the interviewer steering the discussion to ensure coverage of specific topics.

Interviews were approximately 30 minutes long, to keep the discussion focused and meaningful. A discussion guide was used to facilitate the in-depth interviews (refer to addendum 1.2). Interviews were recorded using two audio and video recorders to ensure accuracy and to avoid errors in data capture. The researcher also recorded field notes before and after each interview. The interviews and the field notes were transcribed and validated by comparing the field notes to the original audio file. The interviews were transcribed verbatim and translated into English where necessary.

The interview was flexible to allow participants ample opportunity to share their experiences. After responding to each question, participants were then asked further probing questions designed to elicit a deeper understanding of their experiences. There were no incentives for participation in this study and only refreshments were provided during interviews (consent was requested in the form of addendum 1.3). In order to make sure that the data were good quality, the research was sense checked for credibility, dependability, transferability and conformability. The interview process spanned one week, from the 9th to 15th November 2020, and the necessary data collected was used to identify the themes in this study and support the interpretation of the findings.

3.5 Data analysis

Interviews were audio-recorded and video-recorded, transcribed and translated into English for thematic analysis. Thematic analysis is an appropriate method of analysis for seeking to understand experiences, thoughts, or behaviours across a data set (Kiger, 2020). Themes are actively constructed patterns (or meanings) derived from a data set that answer a research question, as opposed to summaries or categorisations of codes. Themes can be generated inductively or deductively (Kiger, 2020). The inductive approach was used to analyse the data for this study and emerging themes were developed by studying the transcripts repeatedly while considering possible meanings and how these fitted with developing themes. The inductive approach is a systematic procedure for analysing qualitative data where the analysis is guided by specific objectives (Thomas, 2003).

The primary purpose of the inductive approach is to allow research findings to emerge from the frequent, dominant or significant themes inherent in raw data, without the restraints imposed by structured methodologies (Thomas, 2003). According to Thomas (2003), an inductive approach would be used to:

- (a) Condense extensive and varied raw text data into a brief, summary format,
- (b) Establish clear links between the research objectives and the summary findings derived from the raw data, and
- (c) Develop a model or theory about the underlying structure of experiences or processes which are evident in the raw data.

Thematic analysis is conducted in six steps: data analysis; code generation; theme identification; reviewing themes; name and define themes and collate a report (Kiger, 2020). These steps were closely followed in this study, based on themes from the interviews (Braun & Clarke, 2006). The process of the data interpretation combined descriptive and interpretive analysis (Masebo, 2019). Identifying and describing the themes and interpreting these by linking them to existing literature (Yin, 2003). Key themes were identified throughout data collection and quotations from transcripts were used to support them. The report was collated with the findings.

These findings are discussed in the following chapter.

3.6 Conclusion

This chapter explained the qualitative methodology used and unpacked the sample size and description, while providing the context and justification for the sampling method applied. It explored the data-collection method used and discussed the data analysis that was performed. The next chapter presents the results of this study.

Chapter 4: Findings

4.1 Introduction

Chapter 3 focused on the methodology of the study. It discussed the sample and data collection, as well as the data analysis, which in turn explained how the findings were compiled and themed. Chapter 4 focuses on the findings of the study, exploring how YSMs make decisions when shopping for baby food, as well as the impact of their constraints and vulnerabilities for nutrition and ECD. Key themes are identified and unpacked, namely, Frustrations and Challenges, Life Goals and Motivations, Sources of Information, Constraints faced by YSMs, YSMs 'Shopping Behaviour and Purchasing Decisions for Nutrition, and lastly YSMs Shopping Behaviour and Purchasing Decisions for Baby Nutrition.

4.2 Participants profile analysis

This study included 22 low-income YSMs with babies between 6 to 24 months. The average age of YSMs sampled was 22, ranging from 18 to 25 years. Figure 4.1 indicates the participants 'level of education, showing that half of the mothers had a high school diploma, 27% claimed to be completing high school, 9% have not completed high school, and 14% did not indicate their education level. Figure 4.2 shows the percentage of mothers who have one or more children. It highlights that, with a range of one to five, most mothers had one child (82%), with the remainder consisting of mothers with two children and only one participant with five children. In terms of employment, Figure 4.3 confirms that 77% of the YSMs were unemployed; 14% were employed and 9% self-employed. All participants claimed to receive the government grant as part of their household income, with the majority having additional income from other household members. Only a few generated incomes from other sources, such as rent (for example, room rental and spaza-shop space), a full-time job or a part-time job. Refer to Table 4.1 for the detailed information informing figures 4.1, 4.2 and 4.3, which present participant demographics.

Figure 4.1: Participants 'Level of Education

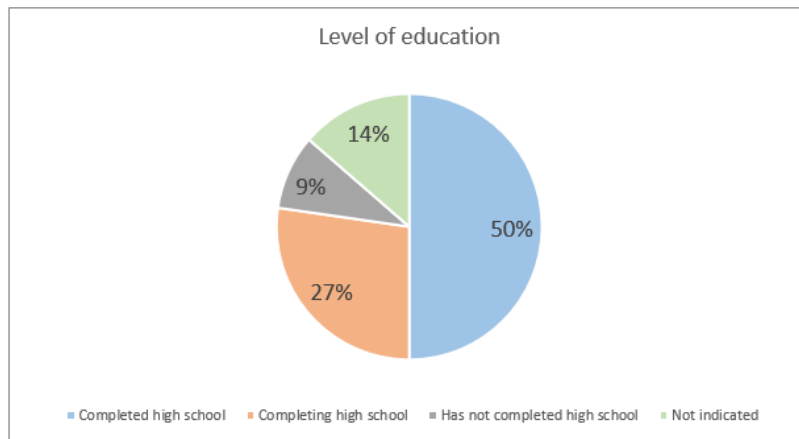


Figure 4.2: Participants No. of Children

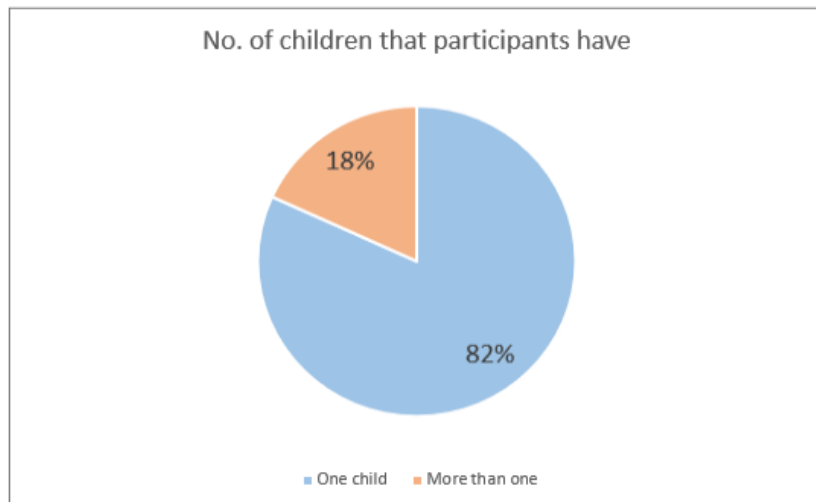


Figure 4.3: Participants Employment Status

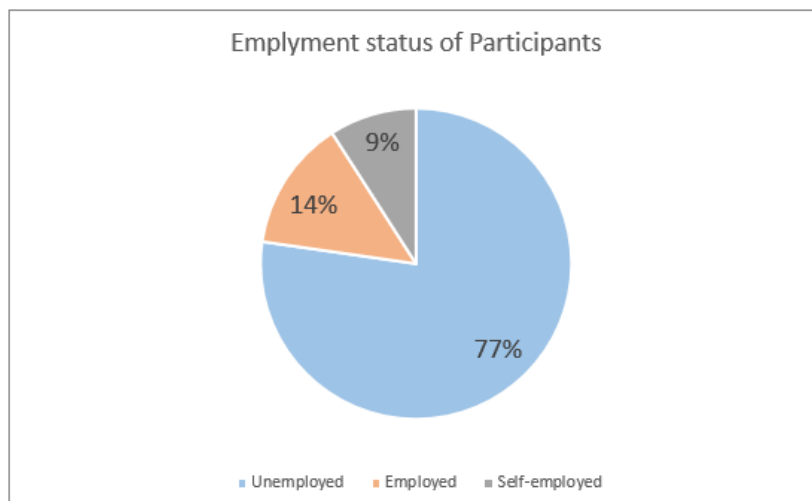


Table 4.1: Participant Demographics

Participant	Number of children	Age	Level of education	Employment status	Sources of household income
1	1	19	Completing high school	Unemployed	<ul style="list-style-type: none"> • Government grant • Income from other household members
2	1	23	Has not completed high school	Employed (full-time)	Participant's full-time job
3	2	25	Not indicated	Unemployed	<ul style="list-style-type: none"> • Government grant • Income from other household members
4	5	25	Not indicated	Unemployed	<ul style="list-style-type: none"> • Government grant • Income from other household members
5	1	25	Completed high school	Unemployed	<ul style="list-style-type: none"> • Government grant • Rental income
6	1	19	Completed high school	Unemployed	<ul style="list-style-type: none"> • Government grant • Rental income
7	1	25	Completing high school	Unemployed	<ul style="list-style-type: none"> • Government grant • Income from other household members
8	1	24	Completed high school	Unemployed	<ul style="list-style-type: none"> • Government grant • Income from other household members
9	1	25	Completed high school	Unemployed	<ul style="list-style-type: none"> • Government grant • Income from other household members
10	1	18	Completing high school	Unemployed	<ul style="list-style-type: none"> • Government grant • Income from other household members

Table 4.1: Participant Demographics

Participant	Number of children	Age	Level of education	Employment status	Sources of household income
11	1	18	Completing high school	Unemployed	Income from other household members
12	1	25	Has not completed high school	Employed (Part-time)	<ul style="list-style-type: none"> • Income from other household members • Government grant • Participant’s part-time jobs
13	2	25	Completed high school	Self-employed	<ul style="list-style-type: none"> • Income from other household members • Income from Participant’s informal business
14	2	25	Completed high school	Self employed	<ul style="list-style-type: none"> • Income from other household members • Income from participant’s informal business
15	1	21	Not indicated	Unemployed	<ul style="list-style-type: none"> • Government grant • Rental income
16	1	22	Completing high school	Unemployed	<ul style="list-style-type: none"> • Government grant • Income from other household members
17	1	22	Completed high school	Employed (Part time)	<ul style="list-style-type: none"> • Income from other household members • Income from participant’s part-time jobs
18	1	18	Completing high school	Unemployed	<ul style="list-style-type: none"> • Government grant • Income from other household members

Table 4.1: Participant Demographics

Participant	Number of children	Age	Level of education	Employment status	Sources of household income
19	1	24	Completed high school	Unemployed	<ul style="list-style-type: none"> • Government grant • Income from other household members
20	1	22	Completed high school	Unemployed	Government grant
21	1	22	Completed high school	Unemployed	<ul style="list-style-type: none"> • Government grant • Income from other household members
22	1	21	Completed high school	Unemployed	<ul style="list-style-type: none"> • Government grant • Income from other household members

4.3 Factors that influence YSMs

This section explains the factors influencing YSMs and their decision-making after analysing four key themes which surfaced from the interview process. These key themes were frustrations and challenges, life goals and motivations and sources of Information. Each of these key themes was then unpacked further into four subsegments: a, b, c, and d.

4.3.1 Theme 1: Frustrations and challenges

The first key theme identified is ‘Frustrations and Challenges’. YSMs living at the BoP face many frustrations and challenges on a daily basis. The subsegments of this theme were captured as 1a: Making up for lost time, 1b: Adjusting to motherhood, 1c: Uncertain future, and 1d: Single-parent struggles.

4.3.1.1 Theme 1a: Making up for lost time

The participating YSMs indicated that they enjoy time spent with their baby because they love them dearly and want what is best for them. However, despite this they deal with many frustrations and challenges.

They are frowned upon by their communities because many of them had to leave school when they got pregnant (often at a very young age). They also feel as though they are behind in life, having to catch up with other young women their age.

“Right now, I have a baby. I could have been done with school, so I am catching up with that and finding a job, I am also catching up with that” (Participant #7).

There is a direct connection between this theme and Theme 1b: Adjusting to motherhood.

4.3.1.2 Theme 1b: Adjusting to Motherhood

After having a baby, many of the YSMs’ way of life had changed from being carefree teenagers and young women with little to no responsibilities, to mothers who now need to think about their baby in every decision they make. For many, this means limiting time spent with friends so that they can spend more time caring for their baby.

“Yes, I need some me time, since I had a child, it’s been tough. Taking care of him has been one hell of a job.” (Participant #9)

When asked whether they have time for their own interests, the following type of response was common.

“No, ever since I had a child, I don’t have time” (Participant #1)

This kind of response highlights how having a baby has changed the lives of YSMs, which highlights the significance of Theme 1c: Uncertain future.

4.3.1.3 Theme 1c: Uncertain Future

Most of the YSMs interviewed had dropped out of school to have their children and did not complete their matric or high-school education. Many of the YSMs felt that this hindered their chances of getting proper employment. These YSMs are frustrated that they do not have money to safeguard their baby’s future. Not having a job or monthly income that would allow them to save, or an insurance policy to take care of their baby, if something were to happen to them.

“I don’t have savings so that I can budget and save because I don’t know what will happen in future if I was to die. I don’t know what will happen, I don’t have money and maybe I can save for school.” (Participant #3)

When asked about future uncertainty, one participant said the following:

“Long-term, I would like to erect a tombstone for my mother. I also want to have my own cars, my own house, have life insurance so if I pass away my child can get something in case something happens. I want him to be sorted in case something happens because there won’t be anyone he can depend on” (Participant #10).

This kind of response shows how being a single YSM at the BoP can be difficult and connects to Theme 1d: Single parent struggles. It also provides insights to Theme 2 which speaks to future plans to achieve life goals and motivations.

4.3.1.4 Theme 1d: Single Parent Struggles

YSMs are faced with obstacles such as raising their baby on their own, even though some have maintained the relationship between themselves and the fathers of their babies. In the end, the financial burden of raising the baby falls mainly on YSMs and their families.

“So, I have a six-month-old baby and when I buy, I need to check where I can cover and even with food, he eats food that does not make me happy as a parent, so I need to make sure I can get things my children need”. (Participant #3)

Some have had to start new relationships, which they have found difficult while raising a child. Most are facing the challenge of raising a baby without a father. The absence of the father’s influence or emotional support is something that the YSMs struggle with. In some cases, reaching out to the child’s father or his family to help with babysitting is not an option. As a result, YSMs usually have little time to themselves to pursue other interests, including furthering their own education and finding formal or informal employment opportunities. Some YSMs are without the support of a parent, having little to no contact with their own fathers and others having lost their own mothers.

“Right now, my challenges are raising a boy child without any male influence or guidance. We all know that boys need their fathers. Being a mother and a father at the same time is a bit tricky for me it’s challenging for me, but I am getting there”. (Participant #8)

“ A child needs somethings from a father, you feel like when you get a chance... let me say like me when I get busy, I wish there was someone to help me, you understand” (Participant #13)

Another challenge is that they live in what is called *family homes* where a whole family, including all extended family, live under the same roof with limited space and little to no privacy. These YSMs often feel stifled by their circumstances, having to depend heavily on household members and enjoying very little independence. Figure 4.4 summarises Theme 1 and its subsegments discussed above.

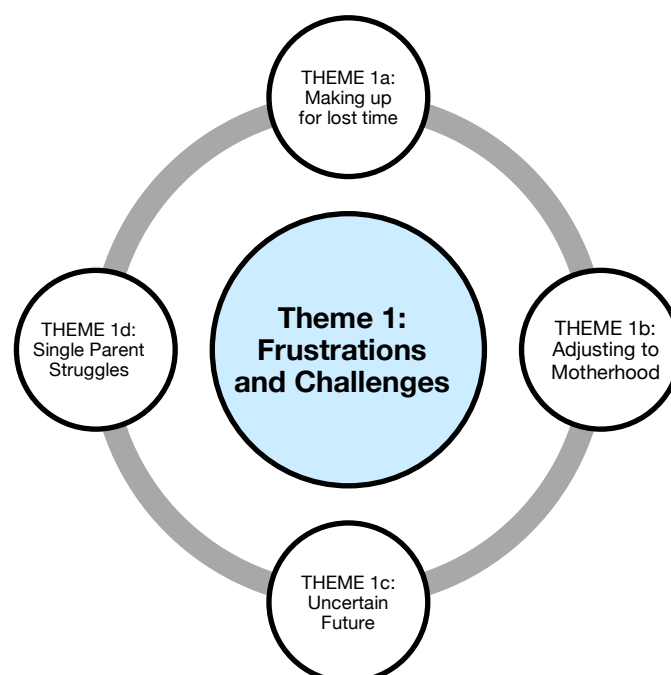


Figure 4.4: Theme 1 summary

4.3.2 Life goals and motivations

The second key theme identified is 'Life Goals and Motivations'. The subsegments of this theme were captured as 2a: To build a stable future, 2b: To make a living, 2c: To take up a profession, 2d: A supportive family and community base, and 2e: The good life-popular culture and money.

4.3.2.1 Theme 2a: To build a stable life

Most YSMs yearn for homes of their own where they are able to raise their baby. Many YSMs wish to be married and to be able to provide for their baby's immediate needs as well as long-term education, so that their children can have a better life than they have.

*“Long-term I see myself married with my own house and I am able to take care of my family.”
(Participant #16)*

*“Five years from now I will be having my own house and I will probably buy my mom another house and she can live with the sisters there, have my own car and family, married by then.”
(Participant #9)*

This theme connects directly with Theme 2b: To make a living.

4.3.2.2 Theme 2b: To make a living

Finding employment is also a big goal for YSMs, as they feel this will make their life and the life of their baby better.

*“If you get that nursing degree what would your life look like?”
“It will change extremely; things will change a lot because I will be able to fix here at home and I will be able to live like other people; financially we will be able to grow.” (Participant #6)*

“Waking up and getting money it motivates me. I need to work for my child; sitting like this is not life. I always say if I can get a job, I would be happy.” (Participant #22)

Some wish to be the providers so that they can take care of their mothers and relieve them of the responsibility they now shoulder alone.

“I just want to see my child attending good school like giving her what my parents gave me, that's my main thing that I want to do for her. (Participant #1)

*“ My biggest challenge is when it comes to my mom providing everything, I just feel so small like I can’t do anything about it looking at how stressed she is.”
(Participant #1)*

“The way she takes care of us, the love she gives us, she taught me so much after... we had family problems on my father’s side. They didn’t want my mother and telling her we are not his (father) children. So, it’s been tough for her, and I think she needs a break, but if there were jobs and we were working because all of us are not working, we would take her somewhere (mother) so that she would relax and this moment it’s a period where we should be providing for her, not her providing for us.” (Participant #9)

“Definitely a big house but not big like a mansion but a house that we are both comfortable in and a place where she can call home.” (Participant #2)

This kind of response demonstrates a strong desire by YSMs to make a living and take up a profession. This is discussed further in Theme 2c: To take up a profession.

4.3.2.3 Theme 2c: To take up a profession

Some YSMs still have goals of studying further and making their educational dreams a reality. Most will have to complete their matric, but some want to further their education by applying for funding from the government and studying towards a profession.

From teachers to doctors, nurses, chefs, chartered accountants or unskilled labourers, these mothers have big goals that they would like to achieve. Finishing school for some is fueled by the knowledge and belief that education will lead to better job opportunities and a stable income.

“Nurses, I envy their life and I also want to be a nurse; so that’s what I’m going to study because I like seeing people helping other people.” (Participant #6)

*“I enjoy teaching. If I could go back to school, finish, and get a job as a teacher, I will be fine.”
(Participant #12)*

“Coming up with different recipes that will make everyone lick their fingers. That’s why I am studying to become a chef.” (Participant #8)

“Short-term goal is to study HR management and the long-term goal I want to be a chartered accountant.” (Participant #20)

These kinds of responses reveal a deep-seated desire within the YSMs to work hard and make something of themselves so that they can reciprocate the support shown from their existing support structure. This support structure is discussed further in Theme 2d: A supportive family and community base.

4.3.2.4 Theme 2d: A supportive family and community base

YSM had received a great of motivation as well as emotional and financial support from their families even while they were pregnant. For many, it was their families who motivated them to not give up on their dreams and goals.

“My mom motivates me. She is a strong woman. She struggled to bring us up; even now she’s struggling but she’s always there for us and trying to give us whatever we want, even though she can’t.” (Participant #9)

“My brother. He is the one who always consoles me every day. He is the one who is paying for the studies. He says without matric you will fail in life. He says I need to fight for what I want in life. He is always encouraging me every day.” (Participant #16)

“My sister works at a bank so like I want to be like her, I wish I was her, she married young, 19 she got married and at 20 she was at the bank, I am job hunting strongly.” (Participant #20)

Community leaders such as pastors and priests also provide motivation and guidance to YSMs. The motivation to finish school is fueled by the knowledge and belief that education will lead to better job opportunities, a stable income and an improved quality of life.

4.3.2.5 Theme 2e: The Good Life – popular culture and money

Popular culture, in the form of social media, TV and music, is also a strong motivating factor for YSMs. This motivates them to aspire to a better life for themselves as well as the life of their baby.

“Social media, I don’t want to lie. Yes, that’s the place that I get most of the advices that I can get and to move on with my life and forget about certain things.” (Participant #15)

One of the biggest challenges faced by YSMs is feeding and clothing their children and themselves in the face of financial limitations. Having money is seen as a way of solving the problems that are making their lives difficult. YSMs believe that money is definitely a way to gain independence and freedom. With their own money, they would not need to rely on others to provide food and essentials.

“Money makes the world go around; it means everything because more money less problems.” (Participant #15)

“When your child wants things, you can’t afford because you work on a budget that will fit him or her for the whole month, that’s the hardest thing.” (Participant #9)

“Money makes the world go around. Right now, money makes us live; you cannot go anywhere without money. You need money to catch a taxi, to buy bread; you need a lot of money to buy

diapers. Money is life right now; you cannot do anything without money. To start a business, you need money.” (Participant #5)

“Money means freedom. I don’t like asking for money. If I have it, it’s freedom. I don’t have to bother anyone.” (Participant #2)

YSMs view having money as being successful in life and as a way to be respected by their families and communities. According to YSMs, people who have money in their communities are always respected. Figure 4.5 summarises key Theme 2 and its subsegments discussed above.

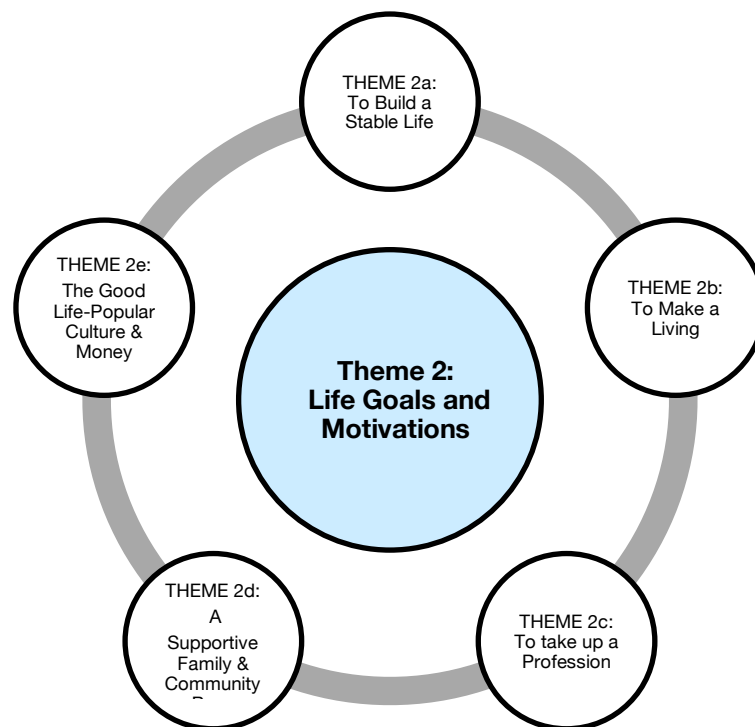


Figure 4.5: Theme 2 summary

4.3.3 Sources of information on child nutrition and retail choice

The third key theme identified is ‘Sources of information on child nutrition and retail choice’. The subsegments of this theme are 3a: Word of mouth, 3b: Family and community, 3c: The internet and social media, and 3d: Television.

4.3.3.1 Theme 3a: Word of mouth

For most YSMs word of mouth is a key source of information. Even though they have access to the internet, this is usually limited or infrequent because of data costs.

4.3.3.2 Theme 3b: Family and Community

Another trustworthy source of information is usually a trusted and respected member of the family or the community. These include a mother, a sibling, a community member, an educator or mentor.

“I usually go to the local clinics and then I often visit the NGOs and speak to the social workers there; then they guide me and give me the information I need to get there.” (Participant #6)

“At the clinic, they tell us what is good to buy the baby and also my mother advises me.” (Participant #6)

“I get my information from my sister-in-law because she has two children; so she already knows; so she advises me.” (Participant #22)

These people are trusted sources of information when it comes to anything to do with baby and life in general, including the emotional challenges YSMs may face.

4.3.3.3 Theme 3c: The internet and social media

YSMs also have access to the internet and social media, through apps such as WhatsApp, Facebook and Opera Mini (which is a free news app with information about current news updates and local and international celebrity/entertainment news).

“If something was happening, or I didn’t know what was happening I would Google ‘what happens when my child has fever ’and they would tell me what to do. Or anything that I am facing, and I need information. Like when I missed my periods, I Googled “is it normal for this to happen” (Participant #10).

“Usually, I pick one for teenage mothers and how to engage and do other things, and the other part I look at is celebrities and how they live their life and how do I get to that level, how do I make connections and everything.” (Participant #11)

The internet and social media provide guidance to YSMs on how to manage their new experiences with baby and help them keep abreast of current affairs, which include topics pertaining to motherhood.

4.3.3.4 Theme 3d: Television

Although many are not interested in daily news or current affairs, YSMs watch television programmes dealing with issues that interest them.

“Another thing that helps is television; you can watch Moja Love and other things; there is also fashion where they show you a lot of styles. (Participant #13)

“I think reality shows, that’s where you get to know things, there are shows like “It Takes a Village”. There are many reality shows that I catch up on and I can see that these are real-life problems and on Channel 135, there is ‘Teenage Pregnancy Moms’.” (Participant #10)

While television is mainly used for entertainment, it is also a powerful source of information, since many YSMs stay at home and watch television during the day. Figure 4.6 summarises key Theme 3 and its subsegments discussed above.

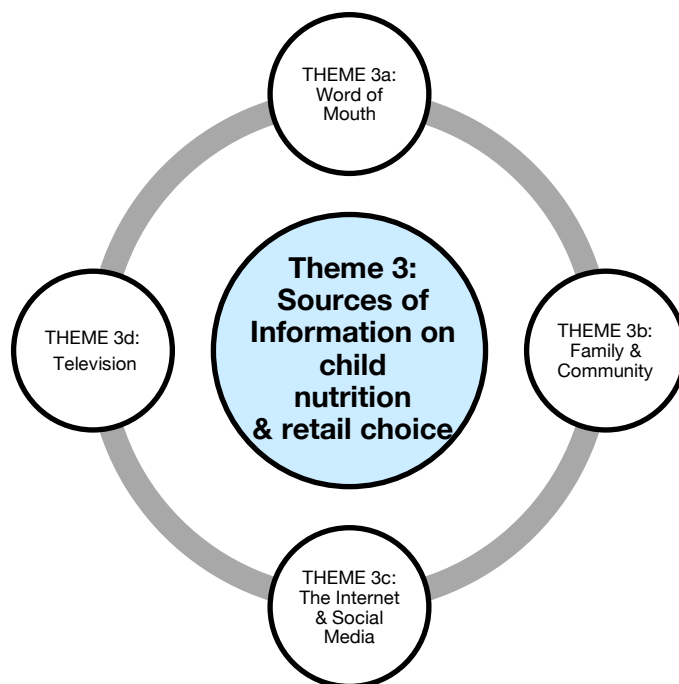


Figure 4.6: Theme 3 summary

4.4 Constraints faced by YSMs

The fourth key theme identified is ‘Constraints faced by YSMs’. The YSMs sampled are subject to various constraints which in turn increases their vulnerability when making purchasing decisions. The subsegments of this theme are 4a: Confined financial power, 4b: The education gap, 4c: Entrenched family filters, 4d: The proximity trap, and 4e: The catalogue constraint.

4.4.1 Theme 4a: Confined Financial Power

The YSMs sampled are financially dependent on their parents or extended family since they often have very little to no purchasing power. This is because many of them are either unemployed or have informal or part-time jobs. Confined financial power means that YSMs ’purchasing decisions are

often limited by household income generated by family and by government grants received. Furthermore, YSMs 'purchasing decisions are often subject to the needs and wants of household breadwinners who 'hold the purse strings.'

"My mom makes the most, my father is not here much. He comes and goes, so once my mother has money, she gets everything for everyone, and we get income from the SASSA fund for unemployed people." (Participant #1)

"For me and my mother, my two little sisters and my baby, it's my mother. She is the one who is working and my two uncles they take care of themselves." (Participant #11)

The purchasing decisions made by YSMs are therefore constrained by financial dependency. This constraint is known as confined financial power.

4.4.2 Theme 4b: The Education Gap

Many YSMs sampled have not passed matric or completed a professional qualification, resulting in an education gap (and for some a literacy gap as well). This education gap, along with YSMs 'life inexperience, significantly increases their vulnerability when making purchasing decisions and ultimately affects their own nutrition as well as the nutrition of their baby.

"I like school even though I didn't finish it. I'm going to go back to school. But not high school but here at the college." (Participant #1)

"School because I won't be able to have a source of income if I don't go to school. I have to do it for my child because my mom cannot do everything for the rest of my life. I just told her when I was pregnant that I just need her for these 4 years for me to finish school and then I will look for a job." (Participant #2)

"No, I lose concentration I don't know why. I just get distracted when I'm reading." (Participant #1)

The purchasing decisions made by YSMs are therefore constrained by a lack of formal education and the inexperience of youth. This constraint is known as the education gap.

4.4.3 Theme 4c: Entrenched Family Filters

For the YSMs sampled, their decisions are influenced by their families 'routines, cultural norms, beliefs and brand experience. These factors are deeply entrenched and are likely to play a key role in purchasing decisions made by YSMs. Most of the time the family member who is responsible for

the household will decide what goes onto the shopping list, with limited input from the rest of the family.

“Yes, my grandparent's make the list” (Participant #2).

“I am not sure how much we spend on groceries; I hardly go. My aunt buys” (Participant #7).

“We shop at Pick n Pay, Shoprite, Roots for meat and at the local supermarket. My uncle prefers those shops.” (Participant #22)

“No, because my mother says the child must eat specific things that she's used to otherwise she will lose the taste, so she's used to certain food.” (Participant #1)

“I get that information from my mom, yes, because she already has four kids, so she knows.” (Participant #1)

The purchasing decisions made by YSMs are therefore constrained by entrenched routines, cultural norms, beliefs and experiences. This constraint is known as entrenched family filters.

4.4.4 Theme 4d: The Proximity Trap

Most of the YSMs sampled live far from larger shopping centres and would need to rely on public transport. This represents an additional cost to be factored into their normal shopping routines. The proximity of nearby stores means that YSMs often favour their local retailers, since transport costs can be avoided or reduced. This is the case even if the local retailers do not always have exactly what the YSMs are looking to purchase. It is only in certain cases when YSMs choose to travel to retailers which are further away to do their shopping. This is usually when there are discounts and promotions to be taken advantage of.

“We shop mostly at Pick n Pay, Clicks and ... Shoprite is very far, so they are nearby. I really don't have a reason to stop shopping where I shop because I get everything I want and it's close to where I live.” (Participant #2)

“Pick n Pay is the nearest. Sometimes my aunt comes with something from Shoprite but because Pick n Pay is everywhere it is easily accessible. That is why most of the time we use Pick n Pay” (Participant #10)

“No, I feel that is a waste. The money I use to travel is a waste because I would have found what I need, close to where I live.” (Participant #17)

The purchasing decisions made by YSMs are therefore constrained by the location of retailers. This constraint is known as the proximity trap.

4.4.5 Theme 4e: The Catalogue Constraint

Catalogues are promotional leaflets which are advertised in community newspapers, distributed in mailboxes and made available at stores. Month-end discounts, bulk buys and combo deals are advertised in retailer catalogues. Due to YSMs' confined financial power, they are more vulnerable to the offerings in the catalogues.

“No, other than the specials, I don't look at the information on food.” (Participant #6)

“The sale catalogues. We check how much the things we need will cost at Shoprite, Pick ‘n Pay and Supa Store. Wherever it's cheaper that's where we will go.” (Participant #8)

“End of the month there are specials, we choose from the papers that they deliver where to buy, let's say our budget is R1000. From that R1000 we wrote down everything that we want then we get those papers and we calculate and from that R1000 we can get everything we want.” (Participant #9)

The purchasing decisions made by YSMs are therefore constrained by the pricing strategies used by retailers. This is known as the catalogue constraint. Figure 4.7 summarises key Theme 4 and its sub-segments discussed above.

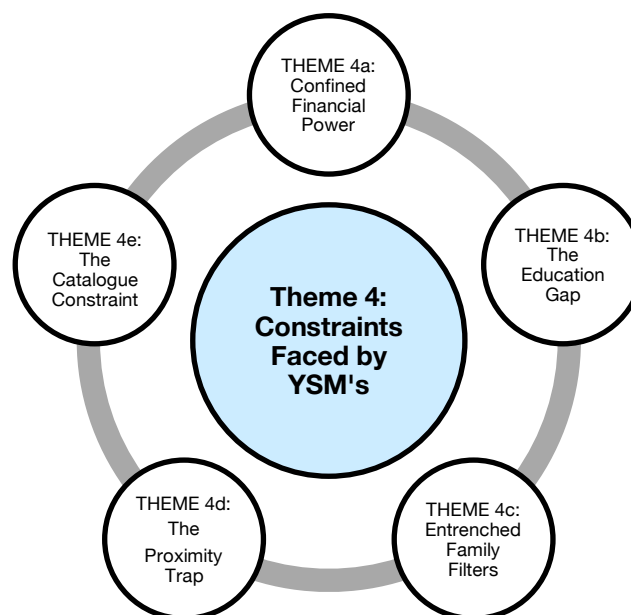


Figure 4.7: Theme 4 summary

4.5 YSMs Shopping Behaviour and Purchasing Decisions for Nutrition

The fifth key theme identified is ‘YSMs’ shopping behaviour and purchasing decisions for nutrition’. The subsegments of this theme are 5a: Basic household foods, 5b: Specials and combos, 5c: Preferred retailers, 5d: Affordable brands, 5e: Brand loyalty, 5f: Shopping for convenience, 5g: Bulk shopping, and 5h: Loyalty cards.

4.5.1. Theme 5a: Basic Household Foods

The diet of YSMs at the BoP is centred around starch, accompanied by vegetables and protein. Therefore, when shopping, they make sure there is enough starch to last the whole month. Household starch intake will consist mainly of maize meal, samp, rice and flour. Flour is a key component of the household diet which is used as the main ingredient for food preparation. Instead of buying bread every day for a large family, flour is used to make fat cakes, homemade bread and dumpling, which can be eaten by the whole family as a meal on its own or to compliment other foods.

“We make sure we have maize meal, cooking oil, sugar, rice, samp and flour. Those are the basics we make sure that even if others are out of stock, these are always there.” (Participant #6)

Vegetables are another key component of the household diet and are included in the main meal (dinner). Dinner usually consists of a starch and a relish (usually vegetables, gravy or soup), meat (chicken), or beans and lentils which are also bought to be eaten with pap and made into soup.

“Maize meal, soup and vegetable, we always have vegetables because they help us a lot. We also have meat. We buy 3.5 kgs. It’s not something we need a lot, but vegetables help a lot.” (Participant #13)

Sugar is also very important and forms a key part of household food preparation, including being eaten for breakfast with porridge to being used for making fat cakes and homemade bread. Sunflower oil is another important ingredient, which is used for frying and cooking in the household. Sunflower oil is often a staple requirement when buying monthly essentials. Tea is used as a refreshment for both adults and children and is mostly had with bread for breakfast and lunch. Instant soups, stocks and spices are bought because these items add taste to meat and vegetables, and can help feed more people, by ensuring that food goes further.

All these products are considered “basics”, which means they are the most important to have on a grocery list before considering any other needs. Basics are usually bought on a monthly basis or in large quantities where shopping is not done on a monthly basis.

Most households do not prioritise snacks for the family and will only buy these if there is money left over – for example soda drinks or crisps, once “basic” grocery shopping has been done. Snacks are generally affordable chips or sweets which are bought from local spaza shops.

“We do but not a lot. We buy snacks with the change from the budget. If it’s R500 change, we will buy those snacks, but we focus on the food so that when a person comes back from work, they can eat.” (Participant #11)

This theme indicated the key basic household foods purchased. These purchases are often influenced by specials and combos, which are discussed further in Theme 5b: Specials and combos.

4.5.2. Theme 5b: Specials and Combos

Shop catalogues or leaflets are used to compare prices and check which shops have more specials on most of the products that the household will need. These are distributed by retailers. Those YSMs who don’t make a shopping list say that they already know what products are needed based on what they have bought in the past. These YSMs, however, still use retailer catalogues and leaflets to see which shops have sales or specials on products, especially when doing month-end shopping.

“Yes, we do have a shopping list when we go shopping. We look at the specials catalogue just before month end to see what combos we can get.” (Participant #4)

“Yes. We check where it’s cheaper on the catalogues. The nice thing about KitKat is that they sell in bulk. You can get cooking oil, three for R100.00 that will last you three months.” (Participant #16)

While specials and combos influence the purchase of basic household foods, sales and combos also influence where YSMs choose to shop. YSMs often have preferred retailers which are able to offer the best specials and combos. Availability, product choice, and proximity are also key deciding factors when choosing preferred retailers. Preferred retailers are discussed further in Theme 5c: Preferred retailers.

4.5.3 Theme 5c: Preferred Retailers

Some YSMs prefer to shop at retailers which are further away from where they live even though there are other major retailers (such as Pick n Pay and Food lovers and other supermarkets) in their vicinity that sell the same products they need.

“The shops close to where we live we only use if we need to buy something small unlike you get into a taxi and buy only one thing or two things; so usually I go there during the month, and another thing our local shops are always full and when you go there if it’s month end you

will always have to queue for a long time. Everyone wants to go there because it's not far so when you take a taxi away. The other place may be full but not like here where we live.” (Participant #9)

“Availability, one stop shop if it is available there we buy and we don't have to go elsewhere.” (Participant #7)

As indicated above, these kinds of responses indicate that, in addition to specials and combos, YSMs also consider availability and product choice when choosing preferred retailers. However, affordability is the primary decision when YSMs purchase brands. This is discussed further in Theme 5d: Affordable brands.

4.5.4 Theme 5d: Affordable Brands

YSMs will usually favour cheaper brands because of the size of their household. If there is a cheaper brand of the product they currently use, YSMs will buy it to try and see if it suits them. If so, then that particular brand is likely to be bought again. The confined financial power constraint faced by YSMs means that brand loyalty often takes a back seat to price.

“We compare when we get to the shop. We don't buy the same brand all the time. If there is a cheaper brand, we will take that one. We compromise” (Participant #12).

As indicated above, this kind of response indicates that brand loyalty is often a secondary consideration in relation to price. Brand loyalty is discussed further in Theme 5e: Brand loyalty.

4.5.5 Theme 5e: Brand Loyalty

Big brand names are not considered unless they are the most reasonable on the shelf or if there are other factors which increase brand loyalty (for example, specific household taste profiles).

“Yes, we bought a Pick n Pay brand mealie meal as we heard people say it was delicious; when we got home it tasted like flour. It did not taste like porridge. We are used to White Star but like now we bought Top White which is a Cambridge brand. The Pick n Pay brand tasted like flour. We found that Top White tasted good because we tried it.” (Participant #3)

“There is one that we buy, All Gold. You can't change something we grew up with, even though there is no money, we can't. (Participant #1)

As indicated above, this kind of response indicates that a level of brand loyalty exists amongst YSMs where past experience with the brand has left a strong impression. YSMs who prioritise certain brands choose to shop at certain retailers which are sure to stock those brands at a reasonable price. This is discussed further in Theme 5f: Shopping for convenience.

4.5.6 Theme 5f: Shopping for Convenience

YSMs who prioritise certain brands choose to shop at retailers that guarantee the availability of these brands at a price which is less than other retailers.

“Close to 20-30 minutes, when we leave, we know what we are going to buy.” (Participant #20)

“We leave the house already decided because we made the list.” (Participant #15)

“Not long really because I walk in there take a trolley take the stuff that I have written on my list and go pay. So, I am not a person who roams around the shop looking for things that I don’t want so it does not take me long. So, I think that 15 min is long for me. I take whatever then I leave.” (Participant #13)

As indicated above, these kinds of responses indicate that those YSMs who prioritise certain brands know exactly which brands they want before they arrive at the shop. The shopping experience therefore does not take much time. In contrast, shopping in bulk usually takes more time, due to the number of items purchased, and often quantity outweighs the nutritional benefits associated with buying certain brands. This is discussed further in Theme 5g: Bulk shopping.

4.5.7 Theme 5g: Bulk Shopping

The health benefits and popularity of products are often not key considerations for YSMs when making purchasing decisions. Instead, price, availability and accessibility often take greater priority.

“Prefer Superstore and Shoprite because they are cheaper. They have sales when buying in bulks, so my own preference is that bulk is more lesser and more important than buying single items because there is a time when you don’t have the money and you need that thing, so if you could have bought it in bulk you would have just taken it out instead of taking out money and still going to spend it on the very same thing that is in bulk.” (Participant #15)

“I would buy at another shop if they were cheaper and offered things in bulk because when you buy in bulk you save.” (Participant #15)

“I prefer to buy at Boxer, Shoprite and Cambridge. Their special also comes in combo deals, so they are reasonable.” (Participant #3)

These kinds of responses indicate that bulk deals are powerful considerations for YSMs when they choose where to shop. In addition to bulk deals, loyalty incentives offered by retailers are powerful tools used to influence YSMs’ purchasing decisions. This is discussed further in Theme 5h: Loyalty cards.

4.5.8 Theme 5h: Loyalty Cards

Most YSMs do their main groceries shopping once a month and are able to get the majority of their shopping done at the same store. These stores do not offer credit to customers but do have a point-based discount card where the more you buy of a specific product or products, the greater the discount.

“With Shoprite, they have crazy sales. I have a Shoprite card at home like the one from Pick n Pay. Every time you swipe, you get points.” (Participant #16)

These loyalty cards are powerful tools to incentivise YSMs to keep shopping at specific retailers and in accordance with retailers’ targeted product mix strategies. Figure 4.8 summarises Theme 5 and its subsegments discussed above.

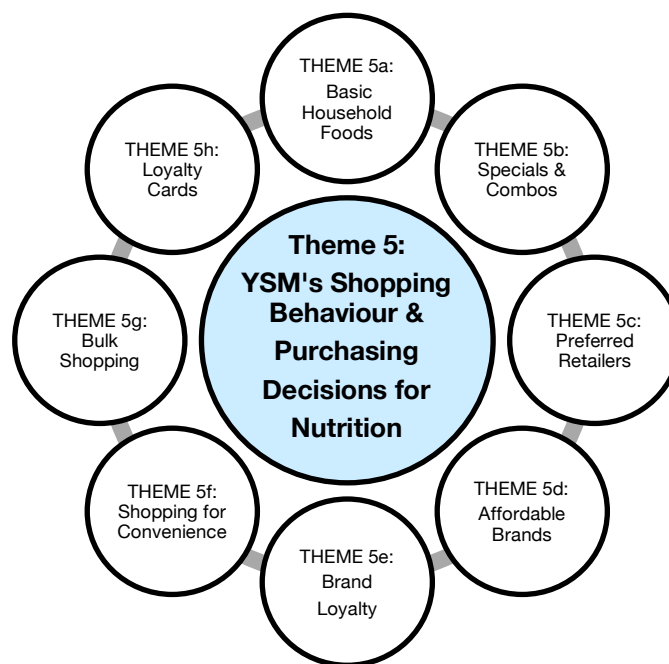


Figure 4.8: Theme 5 summary

4.6 YSMs’ shopping behaviour and purchasing decisions for baby nutrition

The final key theme identified is ‘YSMs’ shopping behaviour and purchasing decisions for baby nutrition’. The subsegments of this theme are 6a: Shopping for baby food, 6b: Affordable brands, 6c: Brand nutrition, 6d: Brand loyalty, 6e: Brand substitution, and 6f: Brand packaging.

4.6.1 Theme 6a: Shopping for Baby Food

YSMs rely on a number of sources for advice on feeding their baby, including clinics, branded food packaging, family, friends, trial and error and media (for example, television, social media and the internet).

Baby shopping is done once a month together with the rest of the household shopping, once the government grant has been received. If a top-up is needed during the month, YSMs will buy from their local retailers.

Some YSMs use a baby-shopping list to do their shopping and, for those that do, it only takes on average of 5-10 minutes to draft. Some will draft a list before going to shop and others will keep on adding to the list throughout the month. The list is used to save time when shopping and to avoid buying products that are unnecessary.

“Yes, so usually I would draft it before the end of the month, so every time something runs out, I write it on the baby-shopping list, so I know when we ran out and see if next time I need to buy him more.” (Participant #9)

“Yes, I do, and it does not take me long. It’s a few minutes thing because already it’s in my head, so there is not a lot of writing on the shopping list.” (Participant #13)

“It will depend on the line; so, without the line it will be 10 minutes but if there is a line then I will spend 30 min in the store.” (Participant #5)

Those who do not use a baby-shopping list find that the baby shopping does not change much from month to month, and they usually stick to the same products.

“I don’t really write anything down because I already have them in my head.” (Participant #10)

“I always check these pamphlets, then I go where it is affordable to buy and I compare prices.” (Participant #9)

These kinds of responses indicate that YSMs generally adopt a structured approach to shopping for baby, with some using lists, store catalogues and pamphlets, and making mental notes of their shopping needs.

4.6.2 Theme 6b: Affordable Brands

There is no credit available or used at many of the shops that the YSMs use for their baby shopping. Instead, there are loyalty cards that use a points system whereby the more you buy of a specific product or products, the more points you accumulate and the greater the discount.

“Brands are not important. I want quality because if I can buy something that does work for less money then why not, but I also love the Clicks baby brand.” (Participant #6)

This kind of response indicates that price is important for YSMs and, even though they are concerned about quality, the confined financial power constraint usually causes them to favour cheaper brands that are of fairly good quality. Brand affordability generally outweighs nutritional value, which is discussed in Theme 6c: Brand nutrition.

4.6.3 Theme 6c: Brand Nutrition

Nutrition is considered by YSMs when buying food for their baby, as they want to provide the best health for them. They want their babies to grow up strong and healthy. YSMs consider food that is filling, like porridge, to be nutritious, as well as anything with fruit and vegetables. They know that for a baby to grow strong they need food that will provide vitamins and minerals. YSMs are cautious of the expiry dates on products to make sure that their children are not exposed to anything that is unhealthy.

“To tell if the food is healthy and nutritious, you will look at the expiry date and when it was made.” (Participant #12)

“No, I don’t use tuck shops for add-on. I refuse. I told you I am an expiry date looker and sometimes those expiry dates are rubbed off.” (Participant #5)

While nutrition is considered by YSMs, much of what they believe makes food nutritious is not always correct and may be very limited.

“I don’t know what to say. I don’t know what nutrition is.” (Participant #4)

“What is nutrition? Is nutrition not the food grants the kids get at school.” (Participant #16)

“No, we don’t read the things at the back of things.” (Participant #1)

“Not mostly, we don’t read the back of the pack” (Participant #3)

“I don’t take notice of those kinds of things, the nutrition information and stuff.” (Participant #21)

These kinds of responses indicate that, due to the constraints faced by YSMs, nutrition is usually not a primary consideration informing their purchasing decisions.

4.6.4 Theme 6d: Brand Loyalty

There are a few YSMs who consider brands to be important when making purchasing decisions, as they feel that these brands mean that the product is of a higher quality. Even though the brand they choose may not be the most expensive on the shelf, it is usually a visible brand that they trust, regardless of the price.

“I don’t compromise when it comes to Nestle, Nestle has vitamins carbohydrates and everything that is good for the baby” (Participant #1)

“Yes, even if it’s expensive I would rather go for that one even though it can take money from other things in my budget, we will see.” (Participant #13)

“Yes. I buy Mabele Porridge because it doesn’t constipate him.” (Participant #4)

“Nutritious baby products, it’s what I buy basically Purity, because there are Purity’s that he can eat for children who are lactose intolerant. Because he likes Weet-Bix and Oats I can buy the Parmalat milk, even though it is expensive, one litre is R20.00 even though the normal milk for us is R11.00. Parmalat and Lollipop accommodate him.” (Participant #8)

These kinds of responses indicate that some YSMs have no choice but to use certain brands which accommodate their baby’s specific needs (for example, allergic reactions to certain baby foods). In such cases, there is a higher level of brand loyalty, and the likelihood of substituting brands is lower. Brand substitution is discussed in Theme 6e: Brand substitution.

4.6.5 Theme 6e: Brand Substitution

When it comes to branded food products for baby, YSMs purchase Purity jars or pouches, and Cerelac baby cereal, as they trust that these brands would ensure the best nutrition for their baby.

“I’m stereotype; there are other brands that I look at but when I know I can’t afford them, I don’t stress too much. I feed my child vegetables. I will mash potatoes, carrots and other ones and my child will eat. I don’t want to stress myself because she will grow just like any other child.” (Participant #13)

“She eats what we eat.” (Participant #7)

However, YSMs often find that branded complimentary baby foods are often too expensive and they end up feeding their baby the same food as the rest of the household (for example, pap and gravy,

vegetables, soft mielie meal porridge, oats, eggs, sour milk, peanut butter, and bread). Other snacks that are considered nutritious for baby are yoghurt, cheese curls/flings and 2 min noodles.

4.6.6 Theme 6f: Brand Packaging

Packaging is an important source of information for YSMs 'purchasing decision.

“I look at the back of the product like when I have a child there is a stage 1 stage 2 and stage 3. I check the nutrients and how they differ between the stages.” (Participant #3)

“I look at the back of the pack of the product for ingredients.” (Participant #18)

“Yes, because I look at age, then I take those and stuff that look like they will be alright for her.” (Participant #18)

Some YSMs decide if food is nutritional by checking packaging for pictures of fruit or vegetables, or for recommendations based on the age and developmental stage of the baby. Figure 4.9 summarises Theme 6 and its subsegments discussed above.

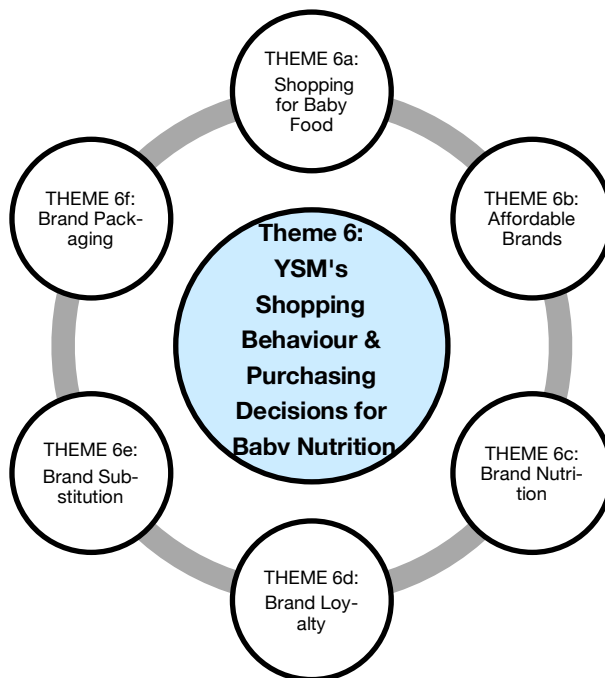


Figure 4.9: Theme 6 summary

4.7 Conclusion

This chapter explained the findings of the study by unpacking six key themes and sub-themes that explain YSMs and their decision-making. The next chapter discusses the findings and comparisons with the existing literature. It also presents the theoretical contribution of the study, a decision-making model for YSMs when purchasing baby food and calls for future research in this space.

Chapter 5: Discussion and Conclusion

5.1 Introduction

Chapter 4 detailed the findings from the semi-structured interviews. It unveiled the effects of the socio-economic environment experienced by YSMs, followed by the unpacking of key themes to better explain what influences YSMs' purchasing behaviour and decision-making when purchasing baby food. The findings were summarised, and a summary diagram was derived. In Chapter 5, the summary of findings and discussion of findings is presented (the comparisons between this study and similar decision-making theory constructs). Followed by the introduction of the theoretical contribution, the model for this study is called the YSMs' typical decision-making process when purchasing baby food. It explains the significance of the findings and explores the components of the model that make up the theoretical foundation that this study is based on. Chapter 5 concludes with managerial and methodological contributions and suggestions for future research.

5.2 Summary of findings

The results of this study have shown that YSMs are facing many constraints, and often find themselves in a constraint crisis. Many YSMs are experiencing extreme poverty; many are unemployed and have limited education. They are dependent on family, extended family, their community, and government grants. Although they are facing constraints, they still have goals and are motivated to better their circumstances and build a better life for themselves and their baby.

The constraints and vulnerabilities faced impact the purchasing decisions of YSMs. What and where they buy their food and food for their baby is dependent on the availability and accessibility of affordable products. Therefore, discounts and promotions are sought out, and additional travel costs are avoided. YSMs are unable to be loyal when it comes to purchasing food, as survival takes precedence, and therefore the quantity of food is prioritised over nutrition and brand loyalty. Enough food to last the full month is the objective. Figure 5.1 is a summary of the key themes and sub-themes found in this study.

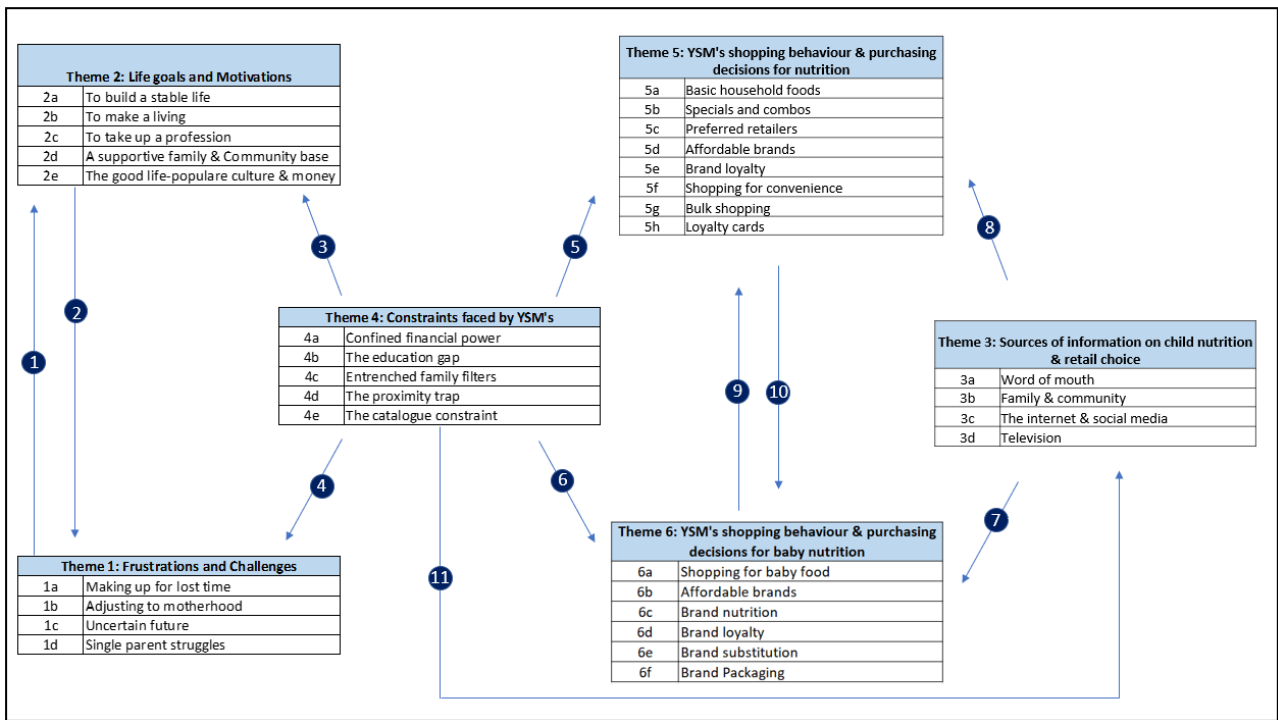


Figure 5.1: Summary diagram of key themes

The flows between the key factors are presented in Figure 5.1 above and explained below.

1. **Theme 1 to Theme 2:** Frustrations and challenges fuel a desire to achieve life goals and motivations.
2. **Theme 2 to Theme 1:** The life goals and motivations if not achieved exacerbate the frustrations and challenges.
3. **Theme 4 to Theme 2:** The ability to achieve life goals and motivations are impacted by the constraints faced.
4. **Theme 4 to Theme 1:** The level and number of constraints faced directly impacts the frustrations and challenges YSMs have, which could motivate them to work harder to achieve their life goals.
- 5 and 6. **Theme 4 to 5, and Theme 4 to 6:** Constraints faced directly impact shopping behaviour for both general household goods and baby food.
- 7 and 8. **Theme 3 to 5, and Theme 3 to 6:** YSMs 'vulnerability means that they are also heavily dependent on various information sources when making purchasing decisions affecting nutrition for their baby and general household goods.
- 9 and 10. **Theme 5 and Theme 6:** Due to financial constraints at the BoP, a trade-off usually exists between spending on baby food and general household goods.

11. Theme 4 to 3: Constraints that YSMs face shape the information needs and sources of information used.

The flows above indicate the relationships between the key themes and provide insights into the situation in which YSMs find themselves.

5.3 Discussion of findings

The results of this study contribute to the basis of a deeper understanding of the dynamics of decision-making at the BoP and specifically for YSMs. The results showed that YSMs are particularly vulnerable, due to high levels of unemployment and extreme poverty. It places them in difficult positions, as they struggle to pay for food, shelter, and other necessities critical to the health and wellbeing of their babies. This is consistent with Madhavan et al. (2021) and Jama et al.'s (2018) findings.

Therefore, according to the results, YSMs are often dependent on their family or extended family and usually are still seen as children in the household. This is also consistent with Radey et al. (2022), who suggest that low-income single mothers depend upon their families and friends for emotional, practical, and economic support in times of need. The study shows that YSMs therefore hardly play a primary influential role in decision-making when purchasing food and baby food. Instead, the heads of the household are primary decision-makers, as they hold the purse strings. This is consistent with Chikweche et al. (2012) who reported that the decision-making patterns among households differ depending on life stage. What Chikweche et al. (2012) found for urban nuclear families, was also found to hold true in this study for urban YSMs, that those at the life stage of a child (children), do not play an influential role in purchasing decisions.

The results have also shown that the landscape and behaviour of YSMs at the BoP are characterised according to levels of awareness, availability, affordability and accessibility of a product. This is consistent with Prahalad's (2012) 4A's Model. However, things seem to be more dire for YSMs as they are dependent on others and their youth brings with it a higher level of vulnerability.

The results highlighted the YSMs' vulnerabilities and the impact on their decision-making. These were driven by the characteristics of a lack of education and for some a lack of literacy (Venugopal & Viswanathan, 2017), uncertainty in decision-making, and restricted movement (Dinica & Motteau, 2012). This study showed that YSMs at the BoP are vulnerable and thus make constrained decisions, trying to minimise their transaction cost when deciding on a retailer. The constrained retail choice leads to a limited selection of products and brands. These findings are consistent with those reported by Choudhury et al. (2019), who identified that consumer vulnerability affects the decision-making

process and the transaction cost at the BoP level. This study specifically identified five vulnerabilities, namely, confined financial power, the education gap, entrenched family filters, the proximity trap and the catalogue constraint. The vulnerabilities of the education gap and confined financial power in the study are the same as the vulnerability of ‘bounded rationality ’in the Choudhury et al. (2019) study. This study has identified new vulnerabilities when focusing on YSMs. These are entrenched family filters, the proximity trap and the catalogue constraint. However, in this study ‘the lock-in effect ’and ‘opportunistic behaviour ’were not evident.

In terms of nutrition, the results have shown that participants were aware of the importance and benefits of good nutrition for their baby, but mothers rarely prioritised nutrition when purchasing food for their baby. This is due to various reasons, such as not knowing what good nutrition is (how to read the back of the packs of branded baby food) and mainly focusing on being able to afford enough food to survive (as more nutritious food is usually more expensive), consistent with Chakona (2020) and Flax et al. (2021). The food purchased by YSMs in this study (for the household and their babies) was dominated by starchy staples, as it is difficult for them to provide their babies with good-quality nutrition. These findings are consistent with those reported by Drewnowski et al. (2010), Chakona and Shackleton (2018), Bourne et al. (2002) and Vorster (2010), who reported that cereals and starchy foods dominate the diets of most poor communities at the BoP, with low intakes of fruits and vegetables. Participants had some knowledge when it came to how important vegetables and fruits are for their babies; however, many could not purchase these due to the high cost; the majority of YSMs are dependent on the government grant (Chakona, 2020).

Instead, in this study, price was a primary factor in the decision-making process when purchasing baby food and many YSMs appeared to be price sensitive. YSMs opted for less expensive baby food to increase the quantity purchased. Similar findings have been reported in other food-choice studies in low-income countries (Cabral et al., 2017; Daivadanam et al., 2015; Farris et al., 2019; Flax et al., 2021).

5.4 Theoretical contribution

The shopping behaviour discussed in Chapter 4 is an expression of the vulnerability of YSMs, which informs the typical YSM decision-making process. In the typical YSM decision-making process, nutrition and brand (while important) are not always key considerations when making purchasing decisions. Instead, price, availability and accessibility often outweigh brand and nutritional value. The typical YSM decision-making process when purchasing baby food is illustrated below in Figure 5.2, as part of the YSM purchasing decision model for this study.

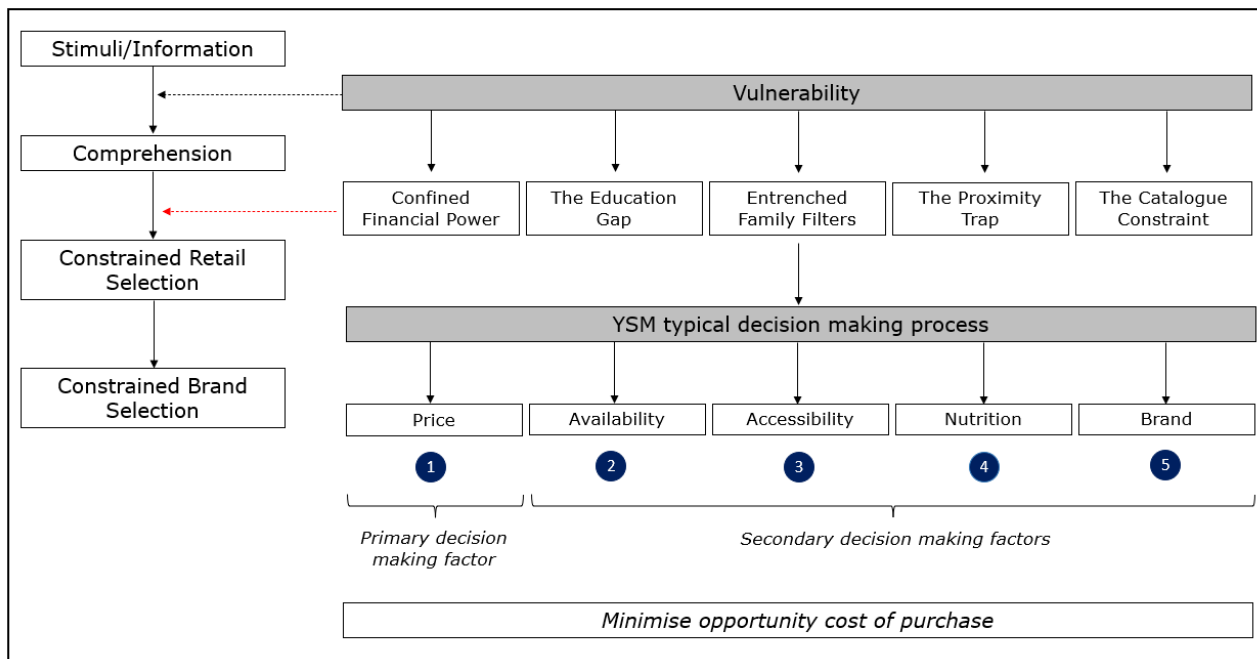


Figure 5.2: The YSM Purchasing Decision Model

The first proposition of the YSM purchasing decision model is vulnerability, identified as a moderating variable in the YSM decision-making process. The study showed that YSMs at the BoP are vulnerable, and five constraints were identified as impacting YSMs' decision-making: confined financial power, the education gap, entrenched family filters, the proximity trap and the catalogue constraint. These constraints best explain YSMs' typical decision-making process for both general household purchases as well as baby-food purchases. Depicted in the model, the five vulnerabilities lead to constrained retail selection, which in turn leads to a constrained selection of products and brands. This is similar to Choudhury et al. (2019), where the consumption of a branded product at the BoP level is restricted by the product's availability at the chosen retail point. Thus, a BoP consumer resorts to buying either known (used) or suggested (by retailer or reference group) brands.

The model of this study further explored the typical YSM decision-making process and the results found that there is a particular sequence of decisions that YSMs follow when purchasing baby food. Price as a primary decision-making factor, followed by the secondary decision-making factors, availability and accessibility, with nutrition and brand often lagging some way behind. Even though the decision-making factors are illustrated in a linear fashion, these are in fact interdependent.

The following key questions in Table 5.1 are associated with each of the decision-making factors in the YSM purchasing decision model, based on the results of the semi-structured interviews with YSMs, and highlights questions to minimise the opportunity cost of purchase.

Table 5.1: Key questions associated with each decision-making factor

Level of Decision	Type of Decision	Questions Asked	Opportunity Cost
Primary	Price	• Can I afford this product at the advertised price?	These questions reflect the opportunity cost associated with buying a more expensive product versus a cheaper substitute/similar product.
		• Can I find this product at a cheaper price?	
		• Can I find a substitute/similar product at a cheaper price?	
Secondary	Availability	• How much of this product do I need?	These questions reflect the opportunity cost associated with buying more of one product versus buying more of a substitute/similar product.
		• Where am I guaranteed to find this product?	
		• Where can I find a substitute/similar product?	
	Accessibility	• How easily can I get to the retailer?	These questions reflect the opportunity cost associated with buying from local retailers versus buying from retailers which are further away.
		• How easily can other shoppers get to the retailer?	
	Nutrition	• What is the nutritional value of this product?	These questions reflect the opportunity cost associated with buying products with differing nutritional values.
		• Am I able to buy another product with a different nutritional value? (i.e. do I have to use this product due to specific dietary needs/allergies)	
		• What is the nutritional value of a substitute/similar product?	
	Brand	• Is this a well-known brand?	These questions reflect the opportunity cost associated with buying products with differing perceived qualities.
		• Do I associate this brand with quality?	
		• Do I associate quality with a substitute/similar product?	

While this may minimise the opportunity cost of purchases in the short term, in the long term this may have a significant negative impact on early childhood development. This study therefore highlights the need for a change in the sequence of decisions that YSMs follow when purchasing baby food. Nutrition is important for a baby’s development and needs to be at the forefront of a YSM’s decision-making when purchasing baby food. The government needs to acknowledge this and implement strategies that allow YSMs the opportunity to put nutrition first when purchasing food for their baby, as this will not only improve ECD, but in the long run aid the struggle to reduce poverty and unemployment.

5.5 Managerial and methodological contributions

There are certain initiatives that can be implemented to enhance YSMs’ consideration of nutrition and ECD for their baby, as well as entrench sustainable food security practices within YSMs’ lifestyle and their communities.

5.5.1 Driving nutrition and ECD awareness

Increasing the awareness of the importance of nutrition for ECD can be a start. Marketers in partnership with the Department of Health (DOH) can implement community drives at the BoP, educating

on the importance of ECD and nutrition for babies. It can provide easy steps and tools on how to ensure good nutrition for baby-food that is healthy and affordable. This information can be shared at clinics as part of the prenatal advice that nurses provide new mothers with (for example, as part of the information on how to wash a baby). The information should include how to read baby-food packaging and what makes something healthy for a baby at the specific age or stage of their life. One way to entrench this awareness into behaviour is by making key milestones and nutrition basics part of the vaccination-card completion. This can be further enhanced using a mobile app which can assist with not only the recording of nutrition and key milestones but also as a knowledge-sharing platform. Therefore, check-ups will incorporate the enforcing of good nutrition practices for a baby, so that nurses are able to check what a baby is being fed and at what age and stage (for example, the introduction of solid foods, the introduction of texture and portion control). Further to this, targeted training projects in clinics could be implemented for key ages and stages at which nutritional information to upskill YSMs towards meeting key milestones could be held in community centres.

5.5.2 Addressing affordability of baby food for ECD

Price is the primary decision-making factor for YSMs when purchasing baby food. Therefore, the affordability of baby food needs to be addressed. Companies could manufacture and market more affordable baby food by creating a product range that targets low-income households (making these available and accessible at the BoP). An example of how this could be achieved could be by manufacturing baby food products in formats such as sachets, where companies can save on packaging costs e.g., less expensive packaging such as spoutless pouches. Another way is to treat these products as volume drivers and offset the costs with other value driven ranges or products sold to high-income households, thus still ensuring profits. In addition, affordability can be overcome while addressing the issue of food wastage and food security. An initiative could be to partner with retailers to ensure that excess stock on baby food and fruit and vegetables that are still fresh, known as ‘waste’, can be reserved for distribution to BoP communities. YSMs can access this in various ways. First, these baby food ‘goodie bags ’ could be available at key community centres that are advertised in community newspapers or on retailer catalogues. Second, the same mobile app used to record baby milestones and knowledge on nutrition can be used to control the distribution of the ‘goodie bags’, based on location. For example, YSMs are notified to collect ‘goodie bags ’ from 6pm to 7pm from their nearest community centre or retailers or clinics on specific days. The baby food ‘goodie bags ’ can either be free or involve the payment of a nominal amount that covers retailer costs.

5.5.3 Creating sustainability for food security

Urban food insecurity and under-nutrition are growing rapidly under conditions of rapid urbanisation (Crush et al., 2011). The urban poor are exposed to both acute and chronic problems of food access, which impacts nutritional status negatively at all stages of the life cycle (from conception to adulthood) (Crush et al., 2011). A culture of growing food for the community and farming could be a solution to the issue of food insecurity. YSMs could grow gardens on their own property for their own household and community consumption. On a bigger scale, governments and companies could create jobs by empowering YSMs; providing access to start-up financing, infrastructure, and routes to market for small-scale farming; equipping YSMs with an understanding of agriculture and how to farm to be more sustainable so that YSMs could not only find work but feed their babies the nutrition they need. These female-owned small-scale businesses and farms could supply manufacturing food companies or retailers and generate income. The government could incentivise retailers and food manufacturers to use small-scale female farmers as suppliers, which would assist in the success of such an initiative.

5.6 Future research

The study has several limitations and opportunities for further research. First, research should be done to investigate the comparison of dual families' vulnerabilities versus single-parent families and their purchasing decisions for baby food.

Second, participants in this study were between the ages of 18 and 25 (young adults). It may have very different implications and a change of results if a comparison of the decision-making power of teenage single mothers to a more mature single mother when purchasing food for their baby were investigated. This may further explain the level of vulnerability and the impact of autonomy and effects of being younger (for example, the more mature YSMs with a job vs the teenagers without one). The involvement and impact of young single fathers (YSFs) on YSMs' decision-making when purchasing baby food is another study that would provide further insight.

There is also an opportunity to broaden the scope of the discussion guide to expand existing themes or to identify new themes with more in-depth exploration and relevance to nutrition and ECD. The themes from the study could also be explored quantitatively to gather the numeric/economic impact of the decisions made by YSMs. There is also an opportunity to understand the YSM and local retailer relationship to confirm whether the themes of 'lock-in effect' and 'opportunistic behaviour' found in the Choudhury et al. (2019) study still stand.

Furthermore, this research did not delve into or explore the effects of increasing the YSM's knowledge of nutrition. More research should be done to understand what the impact would be if infant feeding and nutrition advice were enhanced or given to YSMs, as well as ECD explained. Would the impact on the YSMs' typical purchasing decision model differ? This would therefore explore whether more knowledge on infant feeding and the importance of nutrition would improve the food that baby is fed. It would also test whether it would impact the share of wallet (SoW) on baby food and the budgetary trade-offs that would occur in order to ensure greater nutrition for the YSMs baby. Or it would confirm whether the entrenched family filters and financial situation are so strong that no improvement or change is made to this model.

This study was performed in South Africa. It may have very different implications and results if performed in different geographical locations (countries or continents with different cultures and traditions). Therefore, an extension of this study would be to use an ethnographic research design to test whether the model still holds true. It would also be interesting to understand if there is any difference between YSMs from rural and urban backgrounds.

Future research can be performed to understand the impact of the use of key opinion leaders (KOLs) or influencers in marketing campaigns on baby food and nutrition on the YSMs' decision-making when purchasing baby food. Would the aspirational aspect cause nutrition to move higher up in consideration in the YSMs typical decision-making process? As per the Barki and Parente (2010) study, where many times we see that lower-income consumers purchase trusted brands despite the higher prices. This is because the benefit of higher quality and higher yield makes it worth what it costs, a higher value proposition or because it is an aspirational brand. From a methodological perspective, there are more approaches to answering the research question that could be considered. Besides the already mentioned quantification, research could explore expert interviews as well as focus groups. Panel data could also be explored to see the actual purchasing behaviour (which may differ from expressed attitudes).

Lastly, there is an opportunity to focus on the first thousand days, thus broadening the study to include the practice of breastfeeding to the investigation of the decision-making of YSMs, i.e., YSMs with new-borns to 24-month-old babies. As breastfeeding in the first six months is crucial for development (according to the WHO), it would be interesting to understand if YSMs continue breastfeeding for the first six months or introduce complimentary food or infant formula sooner than suggested despite the impact on ECD. This research would allow tracking of the full understanding of nutrition for a baby from day 1 to day 1000.

5.7 Study summary and conclusion

This study investigated how young single mothers (YSMs) in South Africa's bottom of the pyramid (BoP) purchase food for their babies. The study focused specifically on mothers with babies between the ages of 6 to 24 months and explored all elements of their baby food decision-making. The findings highlighted the hardships that YSMs at the BoP live through and the constraints that breed vulnerabilities. Six key themes and sub-themes were revealed that provided insights into YSMs challenges and motivations, vulnerabilities and how they purchase baby food.

A conceptual model for this study was developed and is aligned with the Choudhury et al. (2019) framework. Both determined how consumer vulnerability affects both decision-making and transaction costs. The study also builds on the Choudhury et al. (2019) framework, as it tested how vulnerability specifically impacts YSMs at the BoP, and how this affects both purchasing decision processes and transaction costs when purchasing nutrition for their baby. The findings identified three new vulnerabilities: entrenched family filters, the proximity trap and the catalogue constraint. The vulnerabilities found have a direct impact on the YSMs' decision-making process, resulting in price being the primary factor and nutrition being a distant decider. The secondary factors affecting YSM decision-making at the BoP were availability, accessibility, nutrition, and brand.

According to the findings, there is a great need to educate and entrench knowledge of baby nutrition for ECD so that nutrition can become a primary factor in the YSM's decision-making process. Otherwise, food insecurity, malnutrition, stunted growth and infant mortality will continue, with the inevitability of unemployment and poverty at the BoP to increase. There needs to be a change that focuses on improving the health of babies and their development, so that they can grow into adults who are able to become a part of the workforce and contribute to the economy.

There is an opportunity and responsibility for the government, companies and marketers to market baby food that is affordable and specially tailored to BoP YSMs, i.e., made available and accessible. They can empower YSMs and their decision-making process can reflect the importance of nutrition for ECD for their babies. If this change does not take place, then unfortunately the vulnerabilities that plague YSMs will continue to impact their decision-making process and result in a transaction cost that is constrained and sub-optimal for the health of their babies. Ultimately a BoP population that will continue to grow and soon cripple economies.

References

- Adams, T., Kelsberg, G., & Safranek, S. (2016). Clinical Inquiry: Does caffeine intake during pregnancy affect birth weight? *The Journal of Family Practice*, *65*(3), 205-213.
- Amit, R. & Schoemaker, P. J. (1993). Strategic assets and organizational rent. *Strategic Management Journal*, *14*(1), 33–46.
- Anderson, V. P., Cornwall, J., Jack, S., & Gibson, R. S. (2008). Intakes from non-breastmilk foods for stunted toddlers living in poor urban villages of Phnom Penh, Cambodia, are inadequate. *Maternal & Child Nutrition*, *4*(2), 146–159. <https://doi.org/10.1111/j.1740-8709.2007.00120.x>.
- Baker, J., Parasuraman, A., Grewal, D. & Voss, G. B. (2002). The influence of multiple store environment cues on perceived merchandise value and patronage intentions. *Journal of Marketing*, *66*(2), 120–141.
- Barki, E. & Parente, J. (2010). Consumer behaviour of the base of the pyramid market in Brazil. *Greener Management International*, *56*, 11–23.
- Bartholomew, K., Henderson, A. J. Z., & Marcia, J. E. (2000). Coded semistructured interviews in social psychological research. In H. T. Reis & C. M. Judd (Eds.), *Handbook of research methods in social and personality psychology* (pp. 286–312). Cambridge University Press.
- Bock, T. & Sergeant, J. (2002). Small sample market research. *International Journal of Market Research*, *44*(2), 1–7.
- Boddy, C. R. (2016). Sample size for qualitative research. *Qualitative Market Research*, *19* (4), 426–432. <https://doi.org/10.1108/QMR-06-2016-0053>
- Bonal, X. & Zancajo, A. (2018). Demand rationalities in contexts of poverty: Do the poor respond to market incentives in the same way? *International Journal of Educational Development*, *59*, 20–27.
- Bourne, L. T., Lambert, E. V., & Steyn, K. (2002). Where does the black population of South Africa stand on the nutrition transition? *Public Health Nutrition*, *5*(1a), 157–162.
- Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101.

- Bristol, T. & Fern, E. F. (1993). Using qualitative techniques to explore consumer attitudes: Insights from group process theories. *ACR North American Advances. Advances in Consumer Research*, 20, 444–448.
- Bryman, A. & Bell, E. (2011). *Business research methods* (2nd ed.). Oxford University Press.
- BusinessTech*. (2019, October 29). South Africa's unemployment rate climbs to 29.1%. <https://businessstech.co.za/news/business/349673/south-africas-unemployment-rate-climbs-to-29-1/>
- Cabral, D., de Almeida, M. D. V., & Cunha, L. M. (2017). Food choice questionnaire in an African country: Application and validation in Cape Verde. *Food Quality and Preference*, 62, 90–95.
- Caplovitz, D. (1963). Poor pay more: Consumer practices of low-income families. *Administrative Science Quarterly*, 8(4), 568–570. www.jstor.org/stable/2391435
- Chakona, G. & Shackleton, C. M. (2018, January 22). Household food insecurity along an agro-ecological gradient influences children's nutritional status in South Africa. *Frontiers in Nutrition*, 4(72). <https://doi.org/10.3389/fnut.2017.00072>
- Chakona, G., 2020. Social circumstances and cultural beliefs influence maternal nutrition, breastfeeding and child feeding practices in South Africa. *Nutrition Journal*, 19(1).1-15.
- Chang S. M., Walker S. P., Grantham-McGregor, S., & Powell C.A (2002). Early childhood stunting and later behaviour and school achievement. *The Journal of Child Psychology and Psychiatry*, 43(6), 775–783.
- Chaudhury, S. & Hyman, M. (2019). Children's influence on consumption-related decisions in single-mother families: Research review and agenda. *Cogent Business and Management*, 6 (1), 1622178.
- Chikweche, T. & Fletcher R. (2010). Understanding factors that influence purchases in subsistence markets. *Journal of Business Research*, 63(6), 643–650.
- Chikweche, T. & Fletcher R. (2012). Revisiting the marketing mix at the bottom of Pyramid (BOP): From theoretical considerations to practical implications. *Journal of Consumer Marketing*, 29(7), 507–520.
- Chikweche, T., Stanton, J. & Fletcher, R. (2012). Family purchase decision making at the bottom of the pyramid. *Journal of Consumer Marketing*, 29(3), 202–213.

- Chipp, K., Corder, C. & Kapelianis, D. (2012). Where practice meets theory: Defining and reviewing the bottom of the pyramid for South African marketers. *Management Dynamics: Journal of the Southern African Institute for Management Scientists*, 21(1), 18–29.
- Chipp, K., Corder, C., & Kapelianis, D. (2013). The role of collectivism in defining the South African bottom of the pyramid. *Management Dynamics: Journal of the Southern African Institute for Management Scientists*, 22(1), 2–13.
- Choudhury, N., Mukherjee, S., & Datta, B. (2019). Constrained purchase decision-making process at the base of the pyramid. *Journal of Consumer Marketing*, 36(1), 178–188.
- Clark, S., Kabiru, C. W., Laszlo, S., & Muthuri, S. (2019). The impact of childcare on poor urban women's economic empowerment in Africa. *Demography*, 56(4), 1247–1272.
- Coetzee, D., Hildebrand, K., Boulle, A., Maartens, G., Louis, F., Labatala, V., Reuter, H., Ntwana, N. & Goemaere, E. (2004). Outcomes after two years of providing antiretroviral treatment in Khayelitsha, South Africa. *Aids*, 18(6), 887–895.
- Cole, T. J., Bellizzi, M. C., Flegal, K. M., & Dietz, W. H. (2000). Establishing a standard definition for child overweight and obesity worldwide: International survey. *BMJ*, 320(7244), 1240–1243. <http://dx.doi.org/10.1136/bmj.320.7244.1240>.
- Collishaw, A. (2017). Willingness-to-pay for a small quantity lipid-based nutrient supplement by mothers of young infants in Malawi. [Doctoral dissertation, University of Guelph]. <http://hdl.handle.net/10214/10404>
- Conceição, P. (2023). Human Development Report 2020 - The Next Frontier: Human Development and the Anthropocene.
- Crush, J., Frayne, B., & McLachlan, M. (2011). *Rapid urbanization and the nutrition transition in southern Africa*. African Food Security Urban Network.
- Dahana, W. D., Kobayashi, T., & Ebisuya, A. (2018). Empirical study of heterogeneous behavior at the base of the pyramid: The influence of demographic and psychographic factors. *Journal of International Consumer Marketing*, 30(3), 173–191.
- Daivadanam, M., Wahlström, R., Thankappan, K. R., & Ravindran, T. K. (2015). Balancing expectations amidst limitations: The dynamics of food decision-making in rural Kerala. *BMC Public Health*, 15(1), 1–13.

- Dewey, K. G. & Adu-Afarwuah, S. (2008). Systematic review of the efficacy and effectiveness of complementary feeding interventions in developing countries. *Maternal and Child Nutrition*, 4(s1), 24–85.
- DiCicco-Bloom, B. & Crabtree, B. F. (2006). The qualitative research interview. *Medical Education*, 40(4), 314–321.
- Dinica, I. & Motteau, D. (2012). *The market of the bottom of the pyramid: Impact on the marketing-mix of companies: A quantitative study of three African countries*. [Master's thesis, Umea School of Business, Umea Universitet]. *Small wonders of the Indian market*. Online. Accessed January, 22(2012),430-438.
- Drewnowski, A. & Eichelsdoerfer, P. (2010). Chapter 58-The economics of obesity: Why are poor people fat? In Laurette Dubé, Antoine Bechara, Alain Dagher, Adam Drewnowski, Jordan Lebel, Philip James, Rickey Y. Yada (Eds.), *Obesity prevention* (727–743). Academic Press.
- DuPlessis, H. M., Bell, R., & Richards, T. (1997). Adolescent pregnancy: Understanding the impact of age and race on outcomes. *Journal of Adolescent Health*, 20(3), 187–197.
- Elliot, S., Powell, R., & Brenton, J. (2015). Being a good mom: Low-income, black single mothers negotiate intensive mothering. *Journal of Family Issues*, 36(3), 351–370.
- Elliott, L. (2015). Human security/environmental security. *Contemporary Politics*, 21(1), 11–24.
- Engel, J., Kollat, D. T., & Blackwell, R.D. (1973). *Consumer behavior* (2nd ed.). Holt.
- Everett-Murphy, K., De Villiers, A., Ketterer, E. & Steyn, K. (2015). Using formative research to develop a nutrition education resource aimed at assisting low-income households in South Africa adopt a healthier diet. *Health Education Research*, 30(6), 882–896.
- Faber, M. & Wenhold, F. (2007). Nutrition in contemporary South Africa. *Water SA*, 33(3), 393–400.
- Farris, A. R., Misyak, S., O'Keefe, K., VanSicklin, L. & Porton, I. (2019). Understanding the drivers of food choice and barriers to diet diversity in Madagascar. *Journal of Hunger & Environmental Nutrition*, 15(3), 388–400.
- Fernald, L. C., Kariger, P., Engle, P. & Raikes, A. (2009). Examining early child development in low-income countries. *World Bank, Washington, DC*. © *World Bank*. <https://openknowledge.worldbank.org/handle/10986/28107> License: CC BY 3.0 IGO.

- Flax, V.L., Thakwalakwa, C., Schnefke, C.H., Phuka, J.C. and Jaacks, L.M., (2021). Food purchasing decisions of Malawian mothers with young children in households experiencing the nutrition transition. *Appetite*, 156,104855.
- Flood, D., Chary, A., Colom, A. and Rohloff, P. (2018). Adolescent rights and the “first 1,000 days” global nutrition movement: A view from Guatemala. *Health and Human Rights*, 20(1), 295–301.
- Flurry, L. A. (2007). Children’s influence in family decision-making: Examining the impact of the changing American family. *Journal of Business Research*, 60(4), 322–330.
- Gay, L., Airasian, P. & Mills, G. (2012). *Educational research: Competencies for analysis and application^{ns}* (10th ed.). Pearson.
- Gottlieb, G. (1991). Experiential canalization of behavioral development: Theory. *Developmental Psychology*, 27(1), 4.
- Grantham-McGregor, S., Cheung, Y. B., Cueto, S., Glewwe, P., Richter, L., Strupp, B. & International Child Development Steering Group. (2007). Developmental potential in the first 5 years for children in developing countries. *The Lancet*, 369(9555), 60–70.
- Grobbelaar, S. (2022). Learning From Each Other: Lessons From Innovation for Inclusive Development Literature. *IEEE Engineering Management Review*, 50(4), 71-78.
- Gupta, S. & Pirsch, J. (2015). The BOP consumer’s ethical evaluation of target marketing. *Journal of Global Scholars of Marketing Science*, 25(4), 358–378.
- Gupta, V. & Khilji, S. E. (2013). Revisiting fortune at base of the pyramid (BoP). *South Asian Journal of Global Business Research*, 2(1), 8-26.<https://doi.org/10.1108/20454451311303257>
- Hammond, A. L., Kramer, W. J., Katz, R. S., Tran, J. T., & Walker, C. (2008). The next 4 billion: Characterizing BOP markets. *Development Outreach*, 10(2), 7–26.
- Hatch, G., Becker, P., & van Zyl, M. (2011). *The dynamic African consumer market: Exploring growth opportunities in sub-Saharan Africa*. Accenture.
- Hawkes, C. & Ruel, M. T. (2011). Value chains for nutrition [2020 conference brief]. International Food Policy Research Institute. www.ifpri.org/sites/default/files/publications/2020anhconfpaper04.pdf

- Hildreth, J. R., Vickers, M. H., Wall, C. R., & Bay, J. L. (2021). First 1000 days: New Zealand mothers' perceptions of early life nutrition resources. *Journal of Developmental Origins of Health and Disease*, 12(6), 883–889.
- Humphrey, J. & Robinson, E. (2015). *Markets for nutrient-rich foods: Policy synthesis from three country studies*, IDS Evidence Report 161. Institute of Development Studies Evidence Report, (161).
- Humphrey, J.; Agnew, J. & Henson, S. (2015). *Making markets work more effectively for reducing malnutrition: The state of business models for nutrition as strategy* [Mimeo]. Institute of Development Studies Bulletin.
- Hunter-Adams, J., Battersby, J. & Oni, T. (2019). Food insecurity in relation to obesity in peri-urban Cape Town, South Africa: Implications for diet-related non-communicable disease. *Appetite*, 137, 244–249.
- Hunter-Adams, J., Myer, L. & Rother, H. A. (2016). Perceptions related to breastfeeding and the early introduction of complementary foods amongst migrants in Cape Town, South Africa. *International Breastfeeding Journal*, 11(1), 1-9. <https://doi.org/10.1186/s13006-016-0088-3>
- Hunter-Adams, J. and Rother, H.A., (2016). Pregnant in a foreign city: A qualitative analysis of diet and nutrition for cross-border migrant women in Cape Town, South Africa. *Appetite*, 103, 403-410.
- Kaminer, D. & Eagle, G. (2010). *Traumatic stress in South Africa*. Wits University Press.
- Igumbor, E. U., Sanders, D., Puoane, T. R., Tsolekile, L., Schwarz, C., Purdy, C., Swart, R., Durão, S. and Hawkes, C., (2012). “Big food”: The consumer food environment, health, and the policy response in South Africa. *PLoS Medicine*, 9(7), e1001253.
- Italy, Nutrition and Consumer Protection Division (AGN), Agriculture and Consumer Protection Department (AG). (2014). Measurement of dietary diversity for monitoring the impact of food-based approaches. In B. Thompson & L. Amoroso, (Eds.), *Improving diets and nutrition: Food-based approaches* (pp. 284–290). CABI.
- Jama, N. A., Wilford, A., Haskins, L., Coutsoydis, A., Spies, L., & Horwood, C. (2018). Autonomy and infant feeding decision-making among teenage mothers in a rural and urban setting in KwaZulu-Natal, South Africa. *BMC Pregnancy and Childbirth*, 18, Article 52. <https://doi.org/10.1186/s12884-018-1675-7>
- Kaminer, D. & Eagle, G. (2010). *Traumatic stress in South Africa*. Wits University Press.

- Kayser, O., Klarsfeld, L. and Brossard, S. (2014). *Marketing nutrition for the base of the pyramid: Introducing successful practices for improved access to nutritious complementary foods: Key lessons from case studies*. Global Alliance for Improved Nutrition. Hystra Hybrid Strategies Consulting. [Introducing successful practices for improved access to nutritious complementary foods \(gain-health.org\)](http://www.gain-health.org)
- Khalid, M. and Jespersen, E., (2014). Human Development Report Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience Published for the United Nations Development Programme. New York, USA: UNDP One United Nations Plaza, 229.
- Kiger, M. E. & Varpio, L. (2020). Thematic analysis of qualitative data: AMEE Guide No. 131. *Medical Teacher*, 42(8), 846–854.
- Kolk, A., Rivera-Santos, M., & Rufin, C. (2014). Reviewing a decade of research on the “Base/Bottom of the pyramid” (BOP) concept. *Business & Society*, 53(3), 338–377.
- Kpoor, A. (2014). Household maintenance and decision-making in lone female parent families in Ghana. *Journal of Family Issues*, 35(14), 1959–1979.
- Lambert, V. A. & Lambert, C. E. (2012). Qualitative descriptive research: An acceptable design. *Pacific Rim International Journal of Nursing Research*, 16(4), 255–256.
- Lappeman, J., Ransome, K., & Louw, Z. (2019). Not one segment: Using global and local BoP characteristics to model country-specific consumer profiles. *European business review*, 31(3), 317-336.
- Lappeman, J., Chigada, J., & Pillay, P. (2019). Rethinking share-of-wallet at the bottom of the pyramid: Using financial diaries to observe monthly category trade-offs. *Journal of Consumer Marketing*, 36(1), 50–63. <https://doi.org/10.1108/JCM-11-2017-2438>
- Lappeman, M. & Swartz, L. (2019). Rethinking obstetric violence and the “neglect of neglect”: The silence of a labour ward milieu in a South African district hospital. *BMC International Health and Human Rights*, 19(1), 1–11.
- Lappeman, M. (2020). *Stillbirths at Khayelitsha Hospital: Issues in the provision of care* [Doctoral dissertation, Stellenbosch University]. SUNScholar. <http://hdl.handle.net/10019.1/109071>
- London, T., Hart, S. L., & Kacou, E. (2011). *Business strategies for the bottom of the pyramid (Collection)*. FT Press.

- Madhavan, S., Clark, S. and Schmidt, S., 2021. Single mothers coping with food insecurity in a Nairobi slum. *Urban Studies*, 58(13), 2703-2720.
- Majumder, M. (2012). A critical approach in understanding bottom of the pyramid propositions. *Journal of Management and Public Policy*, 3(2), 18-25.
- Mamacos. E. (2021, March 17). What is Single 'arent's Day, and why should we care? *News24*. <https://www.news24.com/parent/family/parenting/what-is-single-parents-day-and-why-should-we-care-20210317>
- Marshall, B., Cardon, P., Poddar, A. & Fontenot, R. (2013). Does sample size matter in qualitative research? A review of qualitative interviews in IS research. *Journal of Computer Information Systems*, 54(1), 11–22.
- Marshall, M. N. (1996). Sampling for qualitative research. *Family Practice*, 13(6), 522–526.
- Masebo, W. (2019). Accessing ART in Malawi while living in South Africa: A thematic analysis of qualitative data from undocumented Malawian migrants. *Global Public Health*, 14(5), 621–635.
- Maxwell, J. A. (2013). *Qualitative research design: An interactive approach*. Sage.
- Millington, A. (2019, March 19). South Africa has just been ranked the unhealthiest country on earth [Trending]. *Business Insider South Africa*. <https://www.businessinsider.co.za/most-unhealthy-countries-in-the-world-ranked-2019-3>
- Modjadji, P. & Madiba, S. (2019). The double burden of malnutrition in a rural health and demographic surveillance system site in South Africa: A study of primary schoolchildren and their mothers. *BMC Public Health*, 19(1), 1–11.
- Morgan, F. W., Schuler, D. K., & Stoltman, J. J. (1995). A framework for examining the legal status of vulnerable consumers. *Journal of Public Policy & Marketing*, 14(2), 267–277.
- Morse, J. M. & Field, P. A. (1995). *Nursing research: The application of qualitative approaches*. Nelson Thornes.
- Morse, J. M. (2000). Determining sample size. *Qualitative Health Research*, 10(1), 3–5.
- Muchiri, J. W., Gericke, G. J., & Rheeder, P. (2011). Needs and preferences for nutrition education of type 2 diabetic adults in a resource-limited setting in South Africa: Original research. *Health SA Gesondheid*, 17(1), 1–13.

- Mukherjee, S. & Pal, D. (2014). Implications of transaction cost on the consumer choice heuristics: A grounded theory analysis at the Indian bottom of the pyramid. *International Journal of Business and Emerging Markets*, 6(4), 298–315.
- Mukherjee, S., Jebarajakirthy, C., & Datta, B. (2020). Retailer selection compulsion in the subsistence markets. *Journal of Retailing and Consumer Services*, 52, 101904.
- National Research Council (US) & Institute of Medicine (US) Committee on Integrating the Science of Early Childhood Development. (2000). The developing brain. In J. P. Shonkoff & D. A. Phillips (Eds.). *From neurons to neighborhoods: The science of early childhood development* (Chapter 8). National Academies Press. <https://doi.org/10.17226/9824>
- Onwuegbuzie, A. J. & Leech, N. L. (2007). Sampling designs in qualitative research: Making the sampling process more public. *Qualitative Report*, 12(2), 238–254.
- Oodith, P. & Parumasur, S. (2013). Tapping into the bottom of the pyramid (BoP) market in South Africa: Possible? And how? *Corporate Ownership & Control*, 11(1), 280–294.
- Panda, D., Masani, S., & Dasgupta, T. (2022). Packaging-influenced-purchase decision segment the bottom of the pyramid consumer marketplace? Evidence from West Bengal, India. *Asia Pacific Management Review*, 27(2), 145–153.
- Paranjothy, S., Broughton, H., Adappa, R., & Fone, D. (2009). Teenage pregnancy: Who suffers? *Archives of Disease in Childhood*, 94(3), 239–245.
- Parker, W-A., Steyn, N. P., Levitt, N. S., & Lombard, C. J. (2012). Health promotion services for patients having non-communicable diseases: Feedback from patients and health care providers in Cape Town, South Africa. *BMC Public Health*, 12(1), 1-10.
- Pathak, V., Jena, B., & Kalra, S. (2013). Qualitative research. *Perspectives in clinical research*, 4(3).
- Patnaik, J., & Bhowmick, B. (2020). Promise of inclusive innovation: A Re-look into the opportunities at the grassroots. *Journal of Cleaner Production*, 259, 121124.
- Peters, D. H., Garg, A., Bloom, G., Walker, D., Brieger, W., & Rahman, H. (2008). Poverty and access to health care in developing countries. *Annals of the New York Academy of Sciences*, 1136(1), 161–171.
- Prahalad, C. K. (2004). *The fortune at the bottom of the pyramid*. Wharton Business Publishing.

- Prahalad, C. K. (2011). Bottom of the pyramid as a source of breakthrough innovations. *Journal of Product Innovation Management*, 29(1), 6–12. <https://doi.org/10.1111/j.1540-5885.2011.00874.x>
- Prahalad, C. K., & Hammond, A. (2002). Serving the world's poor, profitably. *Harvard Business Review*, 80(9), 48–57.
- Prahalad, C. K., & Hart, S. L. (2002). The fortune at the bottom of the pyramid. *Business Strategy Review*, 26, 2–14.
- Radey, M., Lowe, S., Langenderfer-Magruder, L., & Posada, K. (2022). Showing everybody's true colors: Informal networks of low-income single mothers and their young children during the COVID-19 pandemic. *Children & Youth Services Review*, 137, Article 106479.
- Ramathuba, D. U., Khoza, L. B., & Netshikweta, M. L. (2012). Knowledge, attitudes and practice of secondary school girls towards contraception in Limpopo Province. *Curationis*, 35(1): 1–7.
- Ray, C., Campbell, K., & Hesketh, K. D. (2019). Key messages in an early childhood obesity prevention intervention: Are they recalled and do they impact children's behaviour? *International Journal of Environmental Research and Public Health*, 16(9), 1550.
- Sandelowski, M. (1995). Sample size in qualitative research. *Research in Nursing & Health*, 18(2), 179–183.
- Sandelowski, M. (2000). Whatever happened to qualitative description? *Research in Nursing & Health*, 23(4), 334–340.
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students* (5th ed.). Financial Times/Prentice Hall.
- Sayre, R. K., Devercelli, A. E., Neuman, M. J., & Wodon, Q. (2015). *Investing in early childhood development: Review of the World Bank's Recent Experience (World Bank Study)*. World Bank. <https://openknowledge.worldbank.org/handle/10986/20715>
- Schultz, D. E. (2001). Marketers: Bid farewell to strategy based on old 4Ps. *Marketing News*, 35(2), 7.
- Seelos, C. & Mair, J. (2007). Profitable business model and market creation in the context of deep poverty: A strategic view. *Academy of Management Perspectives*, 21(4), 49–63.

- Sen, G. (1999). *Engendering poverty alleviation: Challenges and opportunities*. Google Scholar. [https://scholar.google.com/scholar?q=Sen,+G.+\(1999\).+Engendering+poverty+alleviation:+Challenges+and+opportunities&hl=en&as_sdt=0&as_vis=1&oi=scholart](https://scholar.google.com/scholar?q=Sen,+G.+(1999).+Engendering+poverty+alleviation:+Challenges+and+opportunities&hl=en&as_sdt=0&as_vis=1&oi=scholart)
- Shah, A. M. (2012). Business strategies in the emerging markets. *Journal of Asia-Pacific Business*, 13(1), 4–15.
- Shiu, E., Hair, J., Bush, R., & Ortinau, D. (2009). *Marketing research*. McGraw-Hill Education.
- Shonkoff, J.P., Phillips, D.A. and National Research Council, 2000. The developing brain. In *From neurons to neighborhoods: The science of early childhood development*. National Academies Press (US).
- Simpson, J. & Lappeman, J. (2017). Survivors. In J. Simpson & J. Lappeman, *Marketing in South Africa* (4th ed., pp. 17–28). Van Schaik.
- Simpson, J. (2017). An overview of the South African consumer market. In J. Simpson & J. Lappeman (Eds.), *Marketing in South Africa* (4th ed., pp. 3–12). Van Schaik.
- Singh, D. P., Paul, J., & Sharma, P. (2022). Segmenting the bottom of the pyramid consumers: Theoretical approach. *International Journal of Market Research*, 64(3), 397-419.
- Singh, A. & Kathuria, L. M. (2016). Understanding drivers of branded food choice among low-income consumers. *Food Quality and Preference*, 52, 52–61.
- South Africa, National Department of Health & Medical Research Council. (2016). Key indicator report. In *South African demographic and health survey*. National Department of Health.
- South African History Online. Khayelitsha township. (2013). <https://www.sahistory.org.za/place/khayelitsha-township> .Accessed 13 June 2021
- Srivastava, A., Mukherjee, S., & Jebarajakirthy, C. (2020). Aspirational consumption at the bottom of pyramid: A review of literature and future research directions. *Journal of Business Research*, 110, 246-259.
- Steyn, N.P., Bradshaw, D., Norman, R., Joubert, J., Schneider, M., Steyn, K. and Fourie, J., (2006). *The medical research council technical report on dietary changes and the health transition in South Africa: implications for health policy*. Cape Town: Medical Research Council.

- Subrahmanyam, S., & Gomez-Arias, J. (2008). Integrated approach to understanding consumer behavior at bottom of pyramid. *Journal of Consumer Marketing*, 25(7), 402–412.
- Tajfel, H. & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. G. Austin (Eds.), *Psychology of intergroup relations* (pp. 7–24). Nelson Hall.
- Temple, N. J. & Steyn, N. P. (2011). The cost of a healthy diet: A South African perspective. *Nutrition*, 27(5), 505–508.
- Thomas, D. R. (2003). *A general inductive approach for qualitative data analysis*. University of Auckland, New Zealand
- Thompson, B., & Amoroso, L. (Eds.). (2014). *Improving diets and nutrition: food-based approaches*. The Food and Agriculture Organization of the United Nations and CABI.
- Thomson, E. S., Laing, A. W., & McKee, L. (2007). Family purchase decision-making: Exploring child influence behaviour. *Journal of Consumer Behaviour*, 6(4), 182–202.
- Thorpe, J. & Reed, P. (2016). Addressing market constraints to providing nutrient-rich foods: An exploration of market systems approaches (IDS Evidence Report No. 172). Institute of Development Studies.
- Tinson, J., Nancarrow, C., & Brace, I. (2008). Purchase decision-making and the increasing significance of family types. *Journal of Consumer Marketing*, 25(1), 45–56.
- Trotter II, R. T. (2012). Qualitative research sample design and sample size: Resolving and unresolved issues and inferential imperatives. *Preventive Medicine*, 55(5), 398–400.
- Tzioumis, E. & Adair, L. S. (2014). Childhood dual burden of under- and overnutrition in low- and middle-income countries: A critical review. *Food and Nutrition Bulletin*, 35(2), 230–243.
- Uauy, R. & Monteiro, C. A. (2004). The challenge of improving food and nutrition in Latin America. *Food and Nutrition Bulletin*, 25(2), 175–182.
- Ülger, G. & Ülger, B. (2012). Children in family purchase decision-making: Children's role in food product purchases from mothers' point of view. *Journal of Marketing Communications*, 18(4), 297–320.
- Uttam, K., & Rahul, T. (2023). Consumer behavior from the lens of Bottom of the Pyramid: literature review and future agenda. *Management Review Quarterly*, 1-31.

- Varman, R. & Costa, J. A. (2008). Embedded markets, communities, and the invisible hand of social norms. *Journal of Macromarketing*, 28(2), 141–156.
- Venugopal, S. & Viswanathan, M. (2017). The subsistence marketplaces approach to poverty: Implications for marketing theory. *Marketing Theory*, 17(3), 341–356.
- Viswanathan, M. & Venugopal, S. (2015). Subsistence marketplaces: Looking back, looking forward. *Journal of Public Policy and Marketing*, 34(2), 228–234.
- Viswanathan, M., Gajendiran, S., & Venkatesan, R. (2008). Understanding and enabling marketplace literacy in subsistence contexts: The development of a consumer and entrepreneurial literacy educational program in South India. *International Journal of Educational Development*, 28(3), 300–319.
- Viswanathan, M., Rosa, J. A. & Harris, J. E. (2005). Decision making and coping of functionally illiterate consumers and some implications for marketing management. *Journal of Marketing*, 69(1), 15–31.
- Viswanathan, M., Rosa, J., & Ruth, J. (2010). Exchanges in marketing systems: The case of subsistence consumer-merchants in Chennai, India. *Journal of Marketing*, 74(3), 1-17.
- Viswanathan, M., Umashankar, N., Sreekumar, A., & Goreczny, A. (2021). Marketplace literacy as a pathway to a better world: evidence from field experiments in low-access subsistence marketplaces. *Journal of Marketing*, 85(3), 113-129.
- von Grebmer, K., Saltzman, A., Birol, E., Wiesmann, D., Prasai, N., Yin, S., Yohannes, Y., Menon, P., Thompson, J., & Sonntag, A. (2014). *Synopsis of 2014 Global hunger index: The challenge of hidden hunger*. IFPRI Issue Brief 83. Welthungerhilfe, International Food Policy Research Institute, & Concern Worldwide. <http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/128364>
- Vorster, H. H. (2010). The link between poverty and malnutrition: A South African perspective. *Health SA gesondheid*, 15(1), a435. <https://doi.org/10.4102/hsag.v15i1.435>
- Vorster, H. H., Kruger, A., & Margetts, B. M. (2011). The nutrition transition in Africa: Can it be steered into a more positive direction? *Nutrients*, 3(4), 429–441.
- Walker, S. P., Wachs, T. D., Gardner, J. M., Lozoff, B., Wasserman, G. A., Pollitt, E., Carter, J. A., & International Child Development Steering Group (2007). Child development: Risk factors for adverse outcomes in developing countries. *The Lancet*, 369(9556), 145–157.

- Weidner, K. L., Rosa, J., & Viswanathan, M. (2010). Marketing to subsistence consumers: Lessons from practice. *Journal of Business Research*, 63(6), 559–569.
- Werner, E. E. (2000). Protective factors and individual resilience. In J. P. Shonkoff & S. J. Meisels (Eds.), *Handbook of early childhood intervention* (pp. 115–132). Cambridge University Press. <https://doi.org/10.1017/CBO9780511529320.008>
- Williamson, O. E. (1983). Credible commitments: Using hostages to support exchange. *The American Economic Review*, 73(4), 519–540.
- Williamson, O. E. (1985). *The economic institutions of capitalism*. Free Press.
- Woodruffe, H. R. (1997). Compensatory consumption: Why women go shopping when they're fed up and other stories. *Marketing Intelligence & Planning*, 15, 325–334. <http://dx.doi.org/10.1108/02634509710193172>
- Woolcock, M. & Narayan, D. (2000). Social capital: Implications for development theory, practice and policy. *The World Bank Research Observer*, 15(2), 225–249.
- World Health Organization. (2016). *World health statistics 2016: monitoring health for the SDGs sustainable development goals*. World Health Organization.
- World Health Organization. (2017). *Global diffusion of eHealth: making universal health coverage achievable: report of the third global survey on eHealth*. World Health Organization.
- Yin, R. K. (2003). Designing case studies. *Qualitative Research Methods*, 5(14), 359–386.
- Yurdakul, D., Atik, D., & Dholakia, N. (2017). Redefining the bottom of the pyramid from a marketing perspective. *Marketing Theory*, 17(3), 289–303.

Addendum 1.1 Ethics Committee approval letter



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16/10/2020

Dominique Jacobs

School of Management Studies

University of Cape Town

REF: REC 2020/10/006

THE DECISION-MAKING PROCESS OF YOUNG URBAN SOUTH AFRICAN SINGLE MOTHERS AT THE BOTTOM OF THE PYRAMID WHEN PURCHASING BABY FOOD

We are pleased to inform you that your ethics application has been approved. Unless otherwise specified this ethical clearance is valid until 31-Oct-2021 .

Your clearance may be renewed upon application.

Please be aware that you need to notify the Ethics Committee immediately should any aspect of your study regarding the engagement with participants as approved in this application, change. This may include aspects such as changes to the research design, questionnaires, or choice of participants.

The ongoing ethical conduct throughout the duration of the study remains the responsibility of the principal investigator.

We wish you well for your research.

2020.10.16
09:38:27 +02'00'

Signed by candidate

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Addendum 1.2 Discussion Guide

PROJECT MISSION

Investigate how young South African single mothers with children between the ages of 6 months to 24months (until the age of 2yrs old), at the Bottom of the Pyramid (BOP) purchase food for their baby's and what influences their decision-making.

Detailed Study Objective:

- To identify the factors that amplify and perpetuate the vulnerability of young single mothers when purchasing baby nutrition.
- To understand what the effects of young single mother's vulnerability are on their food/nutrition selection for baby's.

1. Welcome and introductions - 5 mins

- Moderator introduction
- Explain format for session
- No right or wrong answers
- Put respondent at ease and reassure them of the confidentiality of their response
- Importance of honesty
- Video/audio recording
- MRS Code of Conduct

Explanation of the format of the research “ –We are going to be chatting for about 45-50min, hearing about how and why you choose certain products, and looking at what you buy ...”

Respondents introduce themselves

- Name, age and hobbies
- Number of children
- Who else is in your household?
- Source of income

2. Day in a life: Their Typical Day - 10 mins

- *What's the hardest part of being a single mother? Probe Fully.*
- What is your typical day like as a single mother, from in the morning when you wake up to at night when you go to bed?
 - Likes & Dislikes*
 - What specific tasks do you enjoy doing ?
 - What specific tasks do you hate doing ?
 - What are you good at ?
 - What are you bad at ?
 - What motivates you ?
 - What are your values ?
 - Pastime Activities*
 - What are your interests/hobbies ?
 - What are your favourite things ?
 - If you had 30 minutes free, what would they do ?

Goals and Challenges

- What's important to you in life?
- What are your goals? What's driving or speeding your need to change?
- What are the things that you do to achieve your goals?
- What are your biggest challenge(s) in life?
- What are the things that you do to overcome your challenges?
- What do you need to know to embrace change?

Source of Information

- Who do you turn to for advice or information?
- What could cause a reliable source of information to lose priority?
- What kind of news article would interest you ?

Perceived Value of Money

- What does money mean to you ?
- What would you spend R350 on ?
- What is the value or benefit you foresee once you make a decision?

- What are all the things that you could do different to make your life as a single mother better than your current life? Probe Fully.

3. General Shopping Behaviour - 5 mins

Bounded Rationality

- Thinking about the general household products that your family need on a daily basis, how do you decide what to buy? What are all the products that you buy? Probe Fully across categories food/drinks/snacks/personal care /medicinal products

-How do you choose where to buy? Probe

-How easy is it for you to get the products that you want? Probe

-Do you use a grocery list. Probe what to consider when making the list

-How much time goes into making one

-How far do you travel to do your household shopping

What information do you look at when buying. Probe why?

How much time do you spend on deciding what to buy when shopping ?

Does money play a role in making your purchase choice- On average, how much do you spend per month on shopping for general household products? (Probe: Whole Family vs. Children Only products)

Are the products you need and buy available close to where you live (Probe. How many other shops are near you, what made you choose the store you are using?)?

- What is important to you when buying household products? (Probe: Availability vs. Popularity/Price vs. Brand Image/ Health Benefits vs. Quantity)

- How often do you go shopping for household products? (Probe: Whole Family vs. Children Only products) And Why?

- Where do you shop for general household products? (Probe: Store types and store names, do they shop across a range of different outlets for different types of products/brands?) (Probe: Whole Family vs. Children Only products)

- Why do you prefer to shop at these places? How do you decide where to shop? (Probe Fully)

Opportunistic Behaviour

-Are the prices the same at major retailers as the shop near you for your shopping

Lock in effect

-What keeps you shopping where you are now. Probe.

-Are you able to buy everything you need where you shop

-Can you buy on credit at the shop where you do your grocery shopping

-How important are brands. Probe what are your favourite brands which brands are affordable to you and which brands do you buy no matter the cost. Why?

Transactional Cost

-Are there any transport cost to get where you buy your general shopping Probe are there any additional cost that you incur because of where you shop.

4. Children Nutritional Products Shopping Behaviour - 15 mins

- What comes to mind when I say Nutrition? Probe Fully.

- How important is Nutrition to your baby? And Why? Probe: Health, Growth etc.

- What types of baby products would you consider to be nutritional? (Probe Fully across categories: food/drink/snacks/personal care/medicines products etc.?)

5. Post Purchase Experience - 10 mins

- In your opinion, how would you know that the nutritional product for children is worth buying? Probe Fully.

- Can you think of an occasion where you bought baby nutritional product but were later disappointed with your purchase? This could have been any across categories. Please can you tell me about this product and what were you disappointed about? How did it make you feel? What did you do, if any, to address your disappointment? What did you do differently the next time you had to buy from that category? Probe Fully.

6. In-Home Exploration - 5 mins

I'd now like us to have a look at all of the children products you have here in your home.

- What made you choose this product/brand over others on the market? Probe Fully.

-Would you choose this brand if you had all the money in the world?

-Are there any other brands that you know but can't afford?

Thank Respondent and End the Interview.

Addendum 1.3 Consent Letter



UCT Commerce Faculty Student Consent form

CONSENT TO USE PERSONAL INFORMATION:

I give permission to UCT Commerce Faculty student (UCF) to make use of any of my personal information and/or experiences shared during the interview.

UCF in return promises to treat all the shared information and personal details private and confidential by all staff and research end-users.

It is recorded on a database and/or in a paper file. You have the right to see any information that we hold about you, and to have your details removed. We may compile statistical information for monitoring purposes but this will never include references to a particular individual. There may be times when a member of staff/research end-users might need to discuss some of your personal details with other faculty members. In order to do this, we need your permission.

Consent: I have read and understood the information above, and I give my written consent for UCF to hold personal information about me, and for research end-users to share information with other faculty members where it is necessary.

Name: _____

Signature: _____

Date: _____