

Consumer prioritisation of product-related attributes within the breakfast cereal category

by

Erin Hodgson

Submission in fulfilment with the requirements for the degree of

Masters in Consumer Science: Food Management

In the Faculty of Natural and Agricultural Science
University of Pretoria

Pretoria

13 May 2021



DECLARATION

I, Erin Hodgson, declare that this dissertation submitted for the degree of Masters in Consumer Science: Food Management at the University of Pretoria is my work and has not been submitted to any other tertiary institution for a degree. In all cases where secondary research was used, the original authors have been acknowledged according to the University's requirements and guidelines

Erin Hodgson



ABSTRACT

TITLE OF CONSUMER PRIORITISATION OF PRODUCT-

DISSERTATION: RELATED ATTRIBUTES IN THE BREAKFAST

CEREALS CATEGORY

COMPILED BY: ERIN HODGSON

SUPERVISOR: DR NADENE MARX-PIENAAR

CO-SUPERVISOR: DR BERTHA JACOBS

FACULTY: FACULTY OF NATURAL AND AGRICULTURAL

SCIENCE

DEPARTMENT: DEPARTMENT OF CONSUMER AND FOOD

SCIENCE

DEGREE: MASTERS IN CONSUMER SCIENCE: FOOD

MANAGEMENT

Keywords: Breakfast cereal, consumer-attributes, product-attributes, retailer-attributes,

category management

This study aimed at gaining empirical data regarding consumers' prioritisation of product, retailer and consumer attributes when selecting ready to eat (RTE) breakfast cereals. It is envisaged that the findings will assist industry role-players such as manufacturers, suppliers and retailers to revise and amend their current category management practices. In doing so retailers will not only provide better consumer experiences but also benefit their bottom line.

The study conformed to a quantitative approach using convenience, non-probability sampling, recruiting 395 respondents. Data collection in the form of an electronic self-administered questionnaire were facilitated using the Qualtrics platform. To draw meaningful conclusions, aligned with the research aim and objectives, the data were analysed using descriptive and



inferential statistics. Product attributes were analysed in terms of intrinsic and extrinsic dimensions, retailer attributes are explored in terms of selected marketing mix elements and consumer attributes were investigated in terms of selected sociodemographic characteristics.

The results of the study revealed that when selecting RTE breakfast cereals, consumers are prioritising extrinsic product attributes over intrinsic product attributes. In terms of the specific extrinsic attributes price (M=3.42) was identified as the most important factor closely followed by labelling (M=3.39), brand image (M=3.33) and packaging (M=3.29). Pack size (M =2.17) was identified as the least important factor when selecting RTE breakfast cereals. In terms of specific intrinsic attributes, results showed that the nutritional profile (M=3.30) was significantly more important compared to factors such as taste (M=2.41) and texture (M=2.39).

Regarding retailer attributes, results highlighted promotional activity (M=3.16) as the most important element to consider when convincing consumers to buy RTE breakfast cereals. Other retailer attributes that were identified as possible areas of interest included consumers' significant preference to shop for RTE breakfast cereals at grocery stores and the fact that they prioritise stores that provide a wide product assortment.

In terms of consumer attributes (sociodemographic characteristics), findings indicated that when considering intrinsic product attributes, consumers' gender is a significant influential factor. Results presented that females, in particular, were more likely to emphasise intrinsic attributes such as nutritional profile, health and safety compared to males. When considering extrinsic product attributes, results revealed that only household income can be considered as a significant influential factor. Results confirmed that the higher a consumers' household income becomes, the less emphasis is placed on price when purchasing RTE breakfast cereals.

In conclusion, it is believed that the findings of this study are beneficial to South African industry role-players. This information can be used to segment consumers and provides a basis for future cluster analysis. This could subsequently enhance assortment planning as part of a customercentric category management strategy, leading to a sustainable competitive advantage that increases both the role-players return on investment (ROI) as well the consumer's satisfaction and loyalty.



ACKNOWLEDGEMENTS

I would like to take this opportunity to acknowledge the following people for their guidance, contribution and assistance with the preparation of this dissertation.

Dr Nadene Marx-Pienaar, my supervisor, for her endless understanding and guidance. You have kept me motivated and engaged throughout my research process and kept my love and enjoyment for academic research alive.

Dr Bertha Jacobs, my co-supervisor, for her positive and uplifting support throughout my research process. You have been so patient and helpful and made this degree as smooth as possible.

The financial assistance of FoodBev Seta towards this research. The opinions expressed and the conclusion arrived at are those of the principal researcher and not necessarily attributed to FoodBev Seta.



TABLE OF CONTENTS

DECLARATION	2
ABSTRACT	3
ACKNOWLEDGEMENTS	5
LIST OF TABLES	10
LIST OF FIGURES	11
LIST OF ADDENDA	12
CHAPTER 1 THE STUDY IN PERSPECTIVE	13
1.1.Introduction	13
1.2. Problem statement	14
1.3. Justification	15
1.4. Research aim and objectives	16
1.5. Research design and methodology	17
1.6. Ethics	18
1.7. Presentation and structure of the research	18
1.8. Conclusion	19
CHAPTER 2 LITERATURE REVIEW	20
2.1. Breakfast cereals	20
2.1.1. The international breakfast cereal market	21
2.1.2. The South African breakfast cereal market	22
2.2. The consumer decision-making process	23
2.2.2. Types of consumer decisions	26
2.3. Factors influencing consumer decision-making of breakfast cereal p	products 28
2.3.1. Consumer attributes	28
2.3.1.1. Sociodemographic attributes	29
2.3.1.2. Purchase and consumption behaviour	36
2.3.2. Product attributes	36
2.3.2.1. Intrinsic factors	37
2.3.3.2. Extrinsic factors	40
2.3.3. Retailer attributes	46
2.3.3.1. Product assortment	46
2.3.3.2. Promotional activity	47
2.3.3.3. Retailer format	48



2	2.4. Category management	49
	2.4.1. Clustering	51
	2.4.1.3. Attribute-based clustering	54
2	2.5. Conceptual framework	55
2	2.6. Research aim and objectives	56
2	2.7. Conclusion	57
СН	APTER 3: RESEARCH DESIGN AND METHODOLOGY	58
3	3.1. Research design	58
3	3.2. The sample and sampling techniques	59
	3.2.1. The target population, sample and unit of analysis	59
	3.2.2. Sampling techniques	60
3	3.3. Development of the measurement instrument	61
3	3.4. Pre-testing	64
3	3.5. Operationalisation	64
3	3.6. Data collection	66
3	3.7. Data analysis	67
	3.7.1. Descriptive statistics	67
	3.7.2. Inferential statistics	68
3	3.8. Quality of the data	68
	3.8.1. Reliability	68
	3.8.2. Validity	69
3	3.9. Ethical considerations	70
3	3.10. Conclusion	71
СН	APTER 4: RESULTS AND DISCUSSION	72
4	l.1. The demographic characteristics of the sample	72
	4.1.1. Gender	74
	4.1.2. Age	74
	4.1.3. Ethnicity	75
	4.1.4. Level of education	7 5
	4.1.5. Geographic location	75
	4.1.6. Home language	76
	4.1.7. Average monthly household income	76
	4.1.8. Marital status	76
	4.1.9. Household size	76
	4.1.10. Household composition	77
4	l.2. Purchasing and consumption behaviour of the sample	77



4.3.1. The importance of product attributes in breakfast cereal purchase and consumption decisions (Objective 1)	80
4.3.1.1. The importance of intrinsic product attributes in breakfast cereal purchase and consumption decisions (Objective 1.1)	e 81
4.3.1.2. The importance of extrinsic product attributes in breakfast cereal purchase and consumption decisions (Objective 1.2)	e 84
4.3.2. Importance of retailer attributes in breakfast cereal purchase and consumption decisions (Objective 2)	90
4.3.3. The importance of consumer attributes in breakfast cereal purchase and consumption decisions (Objective 3)	1 92
4.3.3.1. Significant relationships between industry-relevant sociodemographic fact and important product attributes as a possible precursor for breakfast cereal purch and consumption decisions (Objective 3.1.).	
4.4 Conclusion	. 100
CHAPTER 5: CONCLUSION AND RECOMMENDATIONS	101
5.1. Introduction	. 101
5.2. Conclusion of results	. 102
5.2.1. The importance of product attributes in breakfast cereal purchase and consumption decisions (Objective 1)	102
5.2.1.1. The importance of intrinsic product attributes in breakfast cereal purchase and consumption decisions (Objective 1.1)	9 103
5.2.1.2. The importance of extrinsic product attributes in breakfast cereal purchase and consumption decisions (Objective 1.2)	e 104
5.2.1.3. The interaction of both intrinsic and extrinsic product attributes in breakfast cereal purchase and consumption decisions	st 106
5.2.2. The importance of retailer attributes in breakfast cereal purchase and consumption decisions (Objective 2)	107
5.2.3. The importance of consumer attributes in breakfast cereal purchase and consumption decisions (Objective 3)	1 108
5.2.3.1. Significant relationships between industry-relevant sociodemographic fact and important product attributes as a possible precursor for breakfast cereal purch and consumption decisions (Objective 3.1.)	
5.3. The study in retrospect	. 110
5.3.1 Achievement of the objectives set out for this research	111
5.3.2. Significance of the research findings	111
5.3.3 Limitations of the study	112
5.4. Recommendations for future investigation	. 113
5.4.1 Utilisation of store-level, POS and loyalty data to gather information on consumer behaviour	113



5.4.2. Development of an improved cluster analysis methodology and automated	
solution for consumer segmentation	114
5.4.2. Development of an improved assortment planning methodology and	
automated solution	114
5.5. Conclusion	115
ADDENDUM A: ETHICS APPROVAL	143
ADDENDUM B: PLAGARISM DECLARATION	144
ADDENDUM C: QUESTIONNAIRE	145



LIST OF TABLES

TABLE 2.1.	BMR SCALE OF HOUSEHOLD INCOME GROUPS	33
TABLE 3.1.	ATTRIBUTES WHICH INFLUENCE BREAKFAST CEREAL DECISION-MAKING	62
TABLE 3.2.	OPERATIONALISATION OF KEY CONSTRUCTS THAT COMPRISE AND INFORM THE STUDY	66
TABLE 4.1.	DEMOGRAPHIC CHARACTERISTICS OF THE SAMPLE	73
TABLE 4.2.	PURCHASE AND CONSUMPTION BEHAVIOUR OF THE SAMPLE	78
TABLE 4.3.	DESCRIPTIVE ANALYSIS OF INTRINSIC PRODUCT ATTRIBUTES	82
TABLE 4.4	DESCRIPTIVE ANALYSIS OF EXTRINSIC PRODUCT ATTRIBUTES	84
TABLE 4.5.	RANKING OF PRODUCT ATTRIBUTES BREAKFAST CEREAL PURCHASE AND CONSUMPTION DECISIONS (N = 259)	88
TABLE 4.6.	DESCRIPTIVE ANALYSIS OF RETAILER ATTRIBUTES	90
TABLE 4.7.	T-TEST AND ANOVA TABULATION BETWEEN INDUSTRY-RELEVANT SOCIO-DEMOGRAPHIC ATTRIBUTES AND IMPORTANT PRODUCT ATTRIBUTES	94
TABLE 4.8.	THE INFLUENCE OF GENDER IN CONSUMER PRIORITISATION OF SIGNIFICANT PRODUCT ATTRIBUTES	95
TABLE 4.9.	THE INFLUENCE OF HOUSEHOLD INCOME IN CONSUMER PRIORITISATION OF SIGNIFICANT PRODUCT ATTRIBUTES	97



LIST OF FIGURES

FIGURE 2.1.	CONCEPTUAL FRAMEWORK DETAILING THE FACTORS INFLUENCING THE SOUTH AFRICAN CONSUMER'S BREAKFAST CEREAL PURCHASE AND CONSUMPTION DECISIONS	55
FIGURE 3.1.	PLANOGRAM OF SOUTH AFRICAN BREAKFAST CEREALS UTILISED IN THE WEB-BASED QUESTIONNAIRE	64
FIGURE 4.1.	THE IMPORTANCE PLACED ON INTRINSIC VERSUS EXTRINSIC PRODUCT ATTRIBUTES IN BREAKFAST CEREAL PURCHASE AND CONSUMPTION DECISIONS.	81
FIGURE 4.2.	THE IMPORTANCE OF INTRINSIC PRODUCT ATTRIBUTES IN BREAKFAST CEREAL PURCAHSE AND CONSUMPTION DECISIONS (N = 259)	83
FIGURE 4.3.	THE IMPORTANCE OF EXTRINSIC PRODUCT ATTRIBUTES IN BREAKFAST CEREAL PURCAHSE AND CONSUMPTION DECISIONS (N = 259)	87
FIGURE 4.4	THE NUMBER OF UNIQUE RESPONSE MENTIONS PER PRODUCT ATTRIBUTE (N = 259)	98
FIGURE 4.5.	PLANOGRAM OF SOUTH AFRICAN BREAKFAST CEREALS	89
FIGURE 4.6.	THE IMPORTANCE OF RETAILER ATTRIBUTES IN BREAKFAST CEREAL PURCHASE AND CONSUMPTION DECISIONS (N = 259).	91



LIST OF ADDENDA

ADDENDUM A	ETHICS APPROVAL	143
ADDENDUM B	PLAGIARISM DECLARATION	144
ADDENDUM C	QUESTIONNAIRE	145



CHAPTER 1 THE STUDY IN PERSPECTIVE

This chapter provides the background, statement of the problem and the justification for the research conducted. The research aim and objectives are specified along with the research design and methodology.

1.1. Introduction

According to Kelloggs (2015), the demand for RTE breakfast cereals has 'never been bigger'. This is confirmed by the stable market trends and a significant year on year growth rate witnessed in 2020 (Statista, 2021). Breakfast cereals are made by processing cereal grains into a product that is traditionally eaten with milk, yoghurt or fruit (Lucas, 2018). This product category is characterised by high-profit margins, large advertising budgets, high market penetration and regular introductions of new products (Nevo, 2001; Kelloggs, 2015).

In emerging markets such as South Africa, sales of RTE breakfast cereals are also steadily increasing¹ with a growing demand for flavoursome, healthy and convenient breakfast products (Lucas, 2018; Kaur & Singh, 2014). Modern lifestyles often reflect time-poor consumers that shop for breakfast cereals as a matter of habit, presenting a routine purchase behaviour with little to no involvement (Simon, 2018).

For new RTE breakfast products wanting to penetrate the market, as well as current offerings that would like to increase their market share, understanding the decision-making and subsequent purchasing behaviour of these consumers is extremely important (Simon, 2018; Jones, 2014). Lindskog and Bregge (2002) also highlight that understanding what drives this behaviour is essential in terms of planning successful marketing segmentation strategies. Neglecting to investigate and understand consumer purchasing patterns and product preferences will result in ineffective category management strategies (Dewsnap & Hart, 2004; Hollander, Hertz & Klein Wassink, 2018).

To date, many retailers have adopted category management strategies in hope of driving category performance (O'Regan, 2009). This process organises product categories into strategic

¹ Recent reports show that this market is likely to grow by 8.4% before 2022 (Mordor Intelligence, 2019; Trader's Friend, 2019), and is estimated at a value of R4.3 billion which is dominated by Tiger Brands, Pioneer Foods and Kellogg's, who hold more than 70% (Mahomedy, 2016).



business units and customises the retailer's marketing mix to improve business performance and customer satisfaction (O'Regan, 2009; Hamister & Fortsch, 2016).

Category management acts as a proactive approach to the dynamic shift in consumer knowledge and expectations (O'Regan, 2009). Therefore, it is used to understand consumer behaviour and utilise this information to create a customer-centric approach to the retail experience (Varley, 2011:252; Beek, Kazen, Meijer & Kohn, 2008). Floorplanning, clustering, assortment planning and space planning, through the effective development of the marketing mix, are functions of category management that can be used to capitalise on profitable consumer segments (Dewsnap & Hart, 2004; Ramanlal Ambaram, 2013; Beek *et al.*, 2008). An in-depth understanding of consumer purchasing patterns and product preferences will, therefore, contribute to better category management strategies and a first-mover advantage within the South African market (Dewsnap & Hart, 2004; Hollander *et al.*, 2018; Sarli & Hon Tat, 2011; O'Regan, 2009). Unfortunately, to date very little research in terms of the consumer's prioritisation of specific attributes when selecting RTE breakfast cereals within a South African context has been conducted (Seema & Aparna, 2017; Koutra, Thespol & Ngugi, 2015; Hallström, Vereecken, Ruiz, Patterson, Gilbert, Catasta, Díaz, Gómez-Martínez, González Gross, Gottrand, Hegyi, Lehoux, Mouratidou, Widham, Åström, Moreno & Sjöström, 2011).

This study, therefore, aimed to investigate and describe the South African consumer's prioritisation of selected retailer, consumer, but particularly, product-related attributes when selecting RTE breakfast cereals. It is envisaged that the results could be used to facilitate improved category management practices such as clustering and, subsequently, consumer segmentation.

1.2. Problem statement

The global breakfast cereal market is anticipated to show significant growth during the forecasted period of 2021- 2028 according to Fortune Business Insights (2020). This is not only attributed to advances in production and technology but also a more educated and empowered consumer at the centre of the retail enterprise (Hollander *et al.*, 2018; Varley, 2011:256; Koutra *et al.*, 2015; Beek *et al.*, 2008). Specifically, within the RTE breakfast cereal category, consumers are showing increased expectations regarding personalised product offerings that feature attributes specifically designed to satisfy their dynamic needs and lifestyles. These purchasing patterns have resulted in evolving market behaviour, which if not addressed, could lead to unfavourable repercussions with regards to stakeholders' return on investment (ROI).



In South Africa, a similar surge in the sale of breakfast cereals is evident and is attributed to the affordability, convenience, availability and suitability for all family members (Kaur & Singh, 2014). As confirmed by Kelloggs (2015), Lucas (2018) and Kaur and Singh (2014), this category is growing at a significant rate, creating a highly competitive market for industry role-players. Therefore, the analysis of consumer buying behaviour enables the retailer to understand how their target market selects, buys, and uses their products (Ratneshwar, Shocker, Cotte & Srivastava, 1999).

However, breakfast cereal consumers have heterogeneous product preferences (Dominick, Bir, Widmar, Acharya, Wang & Wilcox, 2018) and little is known about how consumers prioritise the attributes that influence these purchase and consumption decisions within a South African context (Hallström *et al.*, 2011; Seema & Aparna, 2017; Nelson, Ranganathan, Sharma & Sands, 2016; Tripathi, Bhardwa & Poovammal, 2018). Industry stakeholders such as manufacturers and retailers need to be cognizant of these dynamics and proactively amend outdated marketing strategies and or category management, as failure to adapt could lead to an unsatisfied customer and a poorly performing bottom line (Hollander *et al.*, 2018; Beek *et al.*, 2008).

In essence, a deepened understanding is needed of how South African consumers prioritise product and retailer attributes when making a breakfast cereal purchase and consumption decision. This will not only reveal emerging pockets of opportunity but could ultimately be the reason for a stakeholders' competitive advantage (Lobaugh, Stephens & Simpson, 2019; Hollander *et al.*, 2018; Varley, 2011:59; Koutra *et al.*, 2015; Beek *et al.*, 2008).

Therefore, this study explores the South African consumer's prioritisation of product-related attributes to facilitate improved category management practices such as clustering and, subsequently, consumer segmentation.

1.3. Justification

The theoretical contribution of this research lies in the empirical evidence that is presented regarding the South African consumer's prioritisation of product-related attributes within the breakfast cereal category. The findings set an evidence-based scene that would allow for the strengthening of current consumer and retail theory in relation to the role of consumer, product and retailer attributes in breakfast cereal purchase and consumption decisions. This information will also provide the foreground for an amendment to the theory and methodology of category management, with specific emphasis placed on category-based clustering techniques. The most significant product-related attributes could, therefore, be used as inputs in the clustering algorithm selected, resulting in the most industry-relevant consumer segments.



On the other hand, this study's practical contribution is significant as it aids industry role players to improve their category management practices. This will benefit both the consumer and the retailer (Tripathi *et al.*, 2018; Hossain, 2017). It is believed that this study highlights the need for industry role-players to truly understand their target market's shopping behaviour as well as the need for improved category management practices such as consumer segmentation (clustering). By implementing category management practices backed with this consumer behaviour information, industry role-players will see increased turnover, profitability, stock movement and market share (Dominick *et al.*, 2018). This means that a measured improvement in category performance will be observed.

The findings furthermore present evidence that consumers cannot be targeted using a mass-market approach to satisfying their needs. Therefore, the information regarding the consumer's prioritisation of product and retailer attributes within the breakfast cereal category will help retailers first understand their target market and the methods to identify the consumer segments that comprise it. They will be able to utilise the information regarding the attributes that are most important to each consumer group and ensure that these are reflected using a personalised marketing mix, delivered at the right price, place and time using the right promotional tactics (Abril & Sanchez, 2015). This results in an enhanced customer shopping experience, customer satisfaction and loyalty (Jiang & Tuzhilin, 2009; Tripathi *et al.*, 2018).

The practice of category management is becoming accepted and implemented globally by food retailers (Dominick *et al.*, 2018). Therefore, the broad adoption of category management across South African retailers bridges the gap for scarce skills and job creation. This function assists retailers in increasing turnover, profitability, stock movement, market share and developing an understanding of consumer behaviour (Dominick *et al.*, 2018). Implementing a category plan for the breakfast cereal category will positively impact category performance (Dewsnap & Hart, 2004; Dominick *et al.*, 2018). The use of category management on a national scale is still relatively new, especially for third-party category management providers. Therefore, this study provides insights into the fact that distinct consumer preferences exist within product categories and that similar consumers can be grouped, analysed and understood opens up the door to further research and investigation within the industry. This will provide new training and job creation where manufacturers, suppliers, and retailers adopt these practices on a broader scale.

1.4. Research aim and objectives

The study aimed to explore and describe consumer prioritisation of product-related attributes within the breakfast cereal category.



Objective 1: To explore and describe consumer prioritisation of product-related attributes in breakfast cereal purchase and consumption decisions.

- **1.1.** To explore and describe the importance of intrinsic product attributes (i.e. nutritional profile, taste and texture) in breakfast cereal purchase and consumption decisions.
- **1.2**. To explore and describe the importance of extrinsic product attributes (i.e. pack size, branding, packaging, labelling, price, country of origin and brand image) in breakfast cereal purchase and consumption decisions.
- **Objective 2:** To explore and describe consumer prioritisation of retailer-related attributes in breakfast cereal purchase and consumption decisions.
- **2.1.** To explore and describe the importance of marketing mix attributes (i.e. retailer format, product assortment and promotional activity) in breakfast cereal purchase and consumption decisions.

Objective 3: To explore and describe the importance of consumer-related attributes in breakfast cereal purchase and consumption decisions.

3.1. To explore and describe underlying relationships between industry-relevant sociodemographic attributes (i.e. gender, age, household income and household size) and important product attributes as possible precursors for breakfast cereal purchase and consumption decisions.

1.5. Research design and methodology

The research included both exploratory and descriptive investigations. The exploratory investigation entailed exploring consumers' current prioritisation of product-related attributes (i.e. Intrinsic and extrinsic attributes). The descriptive investigation that followed aimed at gaining insight into the relationship between industry-relevant consumer attributes and important product attributes to describe possible influences that it might have on consumers' future selection of RTE breakfast cereal consumption. This study followed a quantitative approach. Primary data was collected in a single phase using a structured questionnaire to achieve the aim and objectives set for this study. The questionnaire commenced by collecting responses regarding consumers' prioritisation of product and retailer-related attributes and concluded with a triangulation of these responses.

The unit of analysis included South African male and female consumers between the ages of 21 and 65 from all income and population groups. These consumers had varying educational



backgrounds and levels of household income. For this investigation, there were 395 respondents in the study with a total of 259 usable responses. The small sample size was due to financial, time and lockdown restrictions.

The research utilised non-probability sampling because the number of consumers who meet the South African population's selection criteria is unknown (Kumar, 2014:356; Cooper & Schindler, 2014:358). Specifically, convenience sampling was employed to collect data from the respondents in the study. This method was applicable because available respondents were sent an electronic link to the questionnaire hosted on the Qualtrics system (Leedy & Ormrod, 2020:193; Kumar, 2014:129).

1.6. Ethics

The researcher implemented ethical practices throughout the study to achieve valid and reliable results. The University of Pretoria has a formal code of conduct where all potential research proposals are first evaluated. Before the research commenced, The University of Pretoria's Research Ethics Committee (Faculty of Natural and Agricultural Sciences) evaluated the study's scope, research proposal and measurement instrument. The committee provided ethical approval with the relevant approval number NAS074/2020 as reflected in Addendum A.

The investigation conducted primary research via an electronic self-administered questionnaire. The questionnaire required the respondent's consent to participate in the study before the questionnaire could be started (Kelley, 2003; Kumar, 2014:353). The cover letter informed the respondents that their identity would remain anonymous. The cover letter also guaranteed that the respondents could choose not to answer specific questions or drop out of the survey without repercussions. No risk of harm would come to the researcher or the survey respondents throughout the process (Kelley, 2003:353; Kumar, 2014:223).

The research objectively presented the study's findings and substantiated these using sources from the literature review (Kumar, 2014:355). The researcher also referenced all sources included in the literature review according to the Harvard method in the list of references. The study avoided plagiarism and recognised the sources used by attaching a signed plagiarism declaration located in Addendum B.

1.7. Presentation and structure of the research

Chapter 1 provides the background, statement of the problem and the justification for the research conducted. The research aim and objectives are specified along with the research design and methodology.



Chapter 2 presents a comprehensive literature review that delves into the main constructs that supported and informed the study. This chapter also includes the conceptual framework and objectives laid out for the study.

Chapter 3 specifies, describes, and justifies the research design and methodology used to conduct the study, specifically in terms of the research approach, purpose and time frame. The data collection process and data analysis are presented along with a discussion of the scale development, conceptualisation and operationalisation of the key constructs and the data analysis. Finally, the chapter describes the attention paid to the quality of the data as well as ethical considerations.

Chapter 4 presents the results of the study in terms of the formulated objectives and subobjectives. The data collected in this study details the influence of product, retailer and consumer attributes in breakfast cereal purchase and consumption decisions. Each attribute was analysed using descriptive statistics and industry-relevant sociodemographic attributes and important product attributes were further analysed using inferential statistics.

Chapter 5 presents the conclusions to each objective stipulated for the study. First, a summary of key findings is discussed concerning the research aim, which was to explore and describe consumer prioritisation of product-related attributes within the breakfast cereal category. The study's limitations are also specified, along with the significance of the research and recommendations for further investigation.

1.8. Conclusion

This chapter presents an introduction to the research topic, the problem the study seeks to address and the justification for the significance of the study. The research aim and objectives are specified along with a discussion of the research methodology with reference made to data collection and analysis. Finally, the research presentation is laid out to provide the reader with the structure of the thesis that follows.



CHAPTER 2 LITERATURE REVIEW

This chapter presents a comprehensive literature review that delves into the main constructs that supported and informed the study. First, the discussion commences by introducing RTE breakfast cereals and the evolving industry. Following this, the context of the modern-day consumer and the decision-making process are highlighted along with the role of product and retailer-related attributes within the RTE breakfast cereal category. The literature review concludes by presenting the role of category management and the benefits thereof for South African industry role-players. This chapter also includes the conceptual framework and objectives laid out for the study.

2.1. Breakfast cereals

Breakfast cereals are typically made from wheat, corn, rice, oats, and barley and are processed to be suitable for human consumption (Finnie & Atwell, 2016; Seema & Aparna, 2017). Types of breakfast cereals include; cold, ready-to-eat (RTE), hot, ready-to-cook (RTC) and other breakfast products such as cereal bars, pastries, and savoury breakfast foods (Simon, 2018). Various cereal processing techniques produce multiple flavours, textures, shapes, and nutritional profiles (Seema & Aparna, 2017).

RTE breakfast cereals comprise a well-established product category, achieving upwards of 90% household penetration (Simon, 2018). Studies have shown that consumption of breakfast cereal contributes to a healthy lifestyle (Hallstrom *et al.*, 2011; Wiles, 2017). This finding may be due to the product's contribution to consumer's daily nutritional intake of energy, fibre, complex carbohydrates and micronutrients, especially among children (Goglia, Spiteri, Menard, Dumas, Combris, Labarbe, Soler & Volatier, 2010; Seema & Aparna, 2017; Wiles, 2017).

The increased variety and availability of breakfast cereals have encouraged the consumption of healthy and innovative breakfast products, highlighting the opportunity for new food product development (Bogue & Yu, 2015; Nevo, 2001). However, the introduction of new products within this category has a market failure rate of approximately 80% (Bogue & Yu, 2015; Grunert, 2002). Product failure can occur when retailers lack current market information and understanding of their target market's attitudes and behaviours, leading to decreased consumer satisfaction and product acceptance (Hecht, Perez, Polascek, Thorndike, Franckle & Moran; 2020; Bogue & Yu, 2015). Therefore, the early stages of new food product development have been identified as



critical for new concept generation and gathering information on consumer behaviour (Hecht *et al.*, 2020; Boque & Yu, 2015).

When assessing the path to purchase, breakfast cereal is typically a planned purchase (Kelloggs, 2015). Consumers purchase breakfast cereals based on the needs and preferences of themselves and their family members (Kelloggs, 2015). Well-known brand names such as Kellogg's play a significant role in the consumer decision-making process as these are associated with nostalgia, familiarity, good taste and quality (Dominick *et al.*, 2018; Kelloggs, 2015). Most consumers believe that breakfast is the most important meal of the day (Flanigan & Maimone, 2016; Dominick *et al.*, 2018; Berning & Rabinowitz, 2017). Therefore, when considering all breakfast foods, cereal products perform the best in terms of unit movement, sales, number of shopping trips, repeat purchases, and household penetration (Kelloggs, 2015). Within this category, consumers value nutrition information and can be encouraged to make unplanned purchases with interactive promotions such as competitions, themed products, and seasonal items (Berning & Rabinowitz, 2015; Kelloggs, 2015).

Dominick *et al.* (2018) found that breakfast cereal consumers have different product preferences. Product preferences are defined as subjective partiality for a product that is measured by its utility to the consumer and allows for the ranking of products based on the levels of utility they provide (Thiyagaraj, 2015). Product preferences are driven by extrinsic and intrinsic product attributes that affect consumer product selection (Teas & Agarwal, 2000; Seema & Aparna, 2017). Industry role players, therefore, need to examine the consumer's prioritisation of product and retailer attributes during breakfast cereal decision-making (Bogue & Yu, 2015; Makhitha & Khumalo, 2019).

2.1.1. The international breakfast cereal market

Internationally, changing food habits and the influence of Western food culture are driving the highly saturated global breakfast cereal market (Mordor Intelligence, 2019; Euromonitor international, 2019). This market is estimated to grow by 4.5% by 2022 (Mordor Intelligence, 2019; Grand View Research, 2018). Given the fact that consumers live busy lives, portable products that require minimal preparation and are easy to eat are preferred (Flanigan & Maimone, 2016). As of 2020, during the global COVID-19 pandemic, the food and beverage industry has also seen high demand for household staples, healthy food items and products with longer shelf lives, such as RTE breakfast cereals (Grand View Research, 2018).

However, in some countries, the growth of this market has slowed down or declined in some countries due to the increase in consumption of alternative breakfast products such as snack bars (Euromonitor International, 2019; Lee, Moskowitz & Lee, 2007). This decline may also be



due to inflation and economic recessions (Lee *et al.*, 2007; Sckokai & Varacca, 2012) or demand for alternative breakfast products such as eggs or smoothies, which are often selected by health-conscious consumers who avoid breakfast cereals due to the presence of sugar and preservatives within the products (Grand View Research, 2018).

With this being said market leaders (whether they are confronted with positive or negative market trends) have to take note and adjust strategies if they want to survive and or retain a competitive edge. This challenge requires market leaders to innovate and personalise their product offerings to satisfy a diversified customer base (Mordor Intelligence, 2010).

2.1.2. The South African breakfast cereal market

Emerging economies in developing countries are noticing a shift in the purchasing behaviour and consumption patterns of their consumers (Grand View Research, 2018). The growth of the middle class and rapid urbanisation has resulted in lifestyle changes and increased demand for on-the-go, healthy and organic breakfast cereal products (Grand View Research, 2018; Simon, 2018).

The South African breakfast cereals market is a mature and competitive landscape dominated by industry leaders (Who Owns Whom, 2020). At an estimated value of R4.3 billion per year, the market share is dominated by Tiger Brands, Pioneer Foods, and Kellogg's, who hold more than 70% (Mahomedy, 2019). South African consumers' consumption of RTE breakfast cereals has increased by 10% between 2012 and 2017 and is likely to grow by 8.4% between 2018 and 2022 (Mordor Intelligence, 2019; Trader's Friend, 2019).

Nielson (2018a) presented that South African consumers are currently spending their shopping budget primarily on RTE breakfast cereals, sugar and milk products (Nielsen, 2018a). There has also been an increase in demand for convenient RTE breakfast options specifically among the middle to upper LSM, time-poor consumers. This market segment, furthermore shows the demand for more nutritious, low-energy value products, providing an opportunity for new food development and further industry growth (Mordor Intelligence, 2019; Trader's Friend, 2019; Nielsen, 2018b; Kaur & Singh, 2014; Euromonitor International, 2019).

The South African RTE breakfast cereal market landscape is characterised by new consumption situations, product innovation, dynamic consumer behaviour and core consumer segments (Kelloggs, 2015; Nevo, 2001). Lifestyle changes and the increased need for convenience, affordability, as well as nutritious options with an excellent taste and quality attributes, influence consumer purchases of RTE breakfast cereals in this market (Kaur & Singh, 2014).



On the other hand, this product category is also challenged by the low gross domestic product growth and high levels of unemployment that have affected this industry (Who Owns Whom, 2020). Some South African consumers have less disposable income due to increased petrol and electricity prices, the implementation of a sugar tax and the increased value-added tax (VAT). These market conditions have resulted in a decreased average shopping trip spend at an average of R210 per trip (Nielsen, 2018a; Mahomedy, 2019; Euromonitor International, 2019). South African consumers have also decreased their purchase frequency to approximately 1.2 shopping trips per week, with a top-up shop completed once every two weeks (Nielsen, 2018a).

2.2. The consumer decision-making process

A consumer is an individual who identifies a need or desire and fulfils this by making a purchase (Solomon, 2015:29; Statt, Priest & Carter, 2013). The consumer then uses and disposes of the product, thereby completing the consumption process (Solomon, 2015:29; Stankevich, 2017). Researchers view a consumer as a rational, problem-solving individual who can store and evaluate inputs to deliver a reasoned action in the form of a decision, encompassed by the term 'consumer behaviour' (Simon, 2018).

Consumer behaviour can be described as the mental, emotional and physical behaviour exhibited by a customer or group of customers as they select, purchase, use and dispose of products or services to satisfy their wants and needs (Qazzafi, 2019; Statt *et al.*, 2013; Hibić & Poturak, 2016; Stankevich, 2017). A need refers to the difference between a consumer's ideal state and actual state, whereas a want arises from cultural and social influences (Solomon, 2015:29). Consumer behaviour incorporates the consumer's buying decisions and consumption patterns (Statt *et al.*, 2013). To satisfy their wants and needs, consumers embark on a decision-making process that is characterised by the amount of effort or time required to make the final product choice (Stankevich, 2017).

Based on the consumption process, marketers aim to understand consumer behaviour within the value co-creation process. Value co-creation is defined by the fact that the consumer decision-making process creates value for both the consumer and the retailer (Vargo & Lusch, 2004). This term means that manufacturers, suppliers and retailers offer products that the consumer will want and will satisfy their needs across the entire consumption process, creating hedonic value to the consumer and monetary value for the industry role-player (Solomon, 2015:29). According to Solomon (2015:29), businesses can capitalise on this knowledge by understanding the consumption process:



- Pre-consumption: involves why and how consumers decide that they want or need a product.
- **Consumption:** involves the decision evaluation and the purchase experience centred around the role that the consumer plays in the process.
- Post-consumption: the consumer compares actual performance with expected performance.

Varying decision-making processes occur when different consumers purchase products to satisfy their needs (Solomon, 2015:29). Consumers will also consider the risk associated with the decision. Perceived risk refers to the belief that whether or not purchasing a product will lead to negative consequences. Combining these factors means that the consumer decision-making process can be very simple or very complex (Solomon, 2015:29). Food products such as breakfast cereals generally fall within the low-risk category due to the purchase's habitual nature (Simon, 2018). Although the consumer decision-making process might seem somewhat complex, the evidence presents that all consumers go through basic steps when purchasing to determine what products and services will best fit their needs. The consumer decision-making process involves five basic steps.

Step 1: Need recognition

Need recognition is the first step in the consumer decision-making process. This stage occurs when the consumer identifies a significant difference between the actual and desired state of a particular need (Munthui, 2009; Hibić & Poturak, 2016). Internal or external stimuli identify needs. Factors such as promotional activity act as external stimuli (Munthui, 2009; Tanner & Raymond, 2012). Maslow's hierarchy of needs acts as internal stimuli where the need for food, a physiological need, would be the internal stimuli for a consumer to recognise the need for a breakfast cereal (Munthui, 2009; Tanner & Raymond, 2012).

• Step 2: Information search and identification of alternatives

This stage occurs when the consumer has recognised an unsatisfied need and begins to search for information and identify alternatives (Munthui, 2009; Hibić & Poturak, 2016). The quality and accuracy of the information that the consumer will use depend on the consumer themselves and the product they would like to purchase (Munthui, 2009). The higher the cost of the product and the lower the purchase frequency, the more information is required to make a product selection (Munthui, 2009). This stage allows the consumer to simplify the purchasing decision criteria by determining the available brands and criteria used to evaluate the products as well as develop value perceptions (Alsibai, 2014). When purchasing food products, consumers may search for



information passively or actively (Alsibai, 2014). A passive search occurs when a consumer remembers their previous experiences with a product or brand. This process typically occurs with frequently purchased products (Alsibai, 2014). Consumers may also undertake an active search where they obtain information from internal, external, personal, commercial, public or experiential sources (Munthui, 2009; Alsibai, 2014).

Step 3: Evaluation of alternatives

This stage occurs when the consumer processes information to determine a brand and product selection (Munthui, 2009). The complexity of the evaluation process will depend on the product to be purchased. The consumer's experience with the product category, the importance of the product, the risk of making a wrong decision, the complexity of the alternatives and the urgency to make the decision influence this process (Munthui, 2009). The consumer uses a set of evaluation criteria to select the product that satisfies the need in the best way or offers the most benefits (Alsibai, 2014; Hibić & Poturak, 2016). The first aspect of the evaluation process is the identification of attributes (Munthui, 2009). Objective factors such as brand, price and packaging as well as subjective factors such as brand image and perceived quality are essential to the evaluation (Alsibai, 2014). The consumer's beliefs and attitudes influence the evaluation process (Munthui, 2009). The consumer's opinion about the product attributes as well as the benefits of the product influences the final purchase decision. In contrast, attitudes influence how much a consumer will like or dislike the product (Munthui, 2009).

Step 4: The purchase decision

At this stage, the consumer decides to buy a particular product (Munthui, 2009; Alsibai, 2014). Two scenarios can arise between the purchase intention and the purchase decision (Munthui, 2009; Alsibai, 2014; Hibić & Poturak, 2016). Firstly, the attitude of others is considered by the consumer at this point. This scenario often links with product attributes such as price and quality. For example, consumers may be more likely to purchase an expensive product due to the status associated with it (Alsibai, 2014; Hibić & Poturak, 2016). Unpredictable situational factors may also affect the purchase decision, such as out of stocks or price changes (Munthui, 2009; Alsibai, 2014; Hibić & Poturak, 2016).

• Step 5: Post-purchase evaluation

In this stage, the consumer analyses the extent to which the purchase decision satisfied the identified need (Munthui, 2009). This evaluation considers the consumer's expectations and the perceived performance of the product (Munthui, 2009; Hibić & Poturak, 2016). The consumer is likely to store this information to be utilised next time they make a similar purchase decision



(Munthui, 2009). If the consumer is satisfied with the purchase, they will be more likely to purchase the product again, resulting in brand loyalty (Munthi, 2009). However, almost all extensive purchase decisions result in a certain level of cognitive dissonance. This term refers to the state of uneasiness or inconsistent attitudes towards a purchase decision (Munthui, 2009). Consumers purchasing breakfast cereal products are unlikely to experience cognitive dissonance due to the low risk, cost and involvement nature of the purchase decision (Solomon, 2015:30).

Within the context of this study, consumers with certain sociodemographic attributes prioritise product and retailer attributes when making a breakfast cereal purchase and consumption decision (Camilleri, 2018:71). Each of these attributes has multiple dimensions which are prioritised differently by different segments of consumers and are effective at different stages in the consumer decision-making process. Where sociodemographic factors influence Step 1 and 2, product attributes play a larger role in Step 3 and retailer attributes influence Step 4 and 5 most significantly (Munthui, 2009; Hibić & Poturak, 2016).

2.2.2. Types of consumer decisions

Habitual decisions

Habitual or routine decisions involve minimal effort from the consumer. These decisions are considered low-involvement due to the low-risk and low-cost nature of the products, the high purchase frequency and the familiarity of the product category or brands available (Solomon, 2015:352; Tanner & Raymond, 2018:92). Food purchases are a significant example of routine decisions, especially within the breakfast cereal category (Solomon, 2015:352). When making a breakfast cereal purchase decision, consumers will have a few options to select. However, as they become more familiar with this purchase decision, they become less involved in the decision-making process (Lamb, Hair, McDaniel, 2018:92). This shift is highlighted by the fact that repeated choices within the RTE breakfast cereal category are often a result of habitual buying behaviour rather than strong brand loyalty (Solomon, 2015:352).

Solomon (2015:352) suggest that consumers buy brands because they are familiar with them because they are not highly involved with the product and are unlikely to evaluate the product after purchase and consumption. This contradiction means that due to the habitual nature of the decision, it may be challenging for marketers to influence consumer behaviour in the RTE breakfast cereal category (Solomon, 2015:352). For this reason, retailers need to consistently market breakfast cereal products through an attractive marketing mix that is influenced by product and retailer attributes (Solomon, 2015:352).



Limited decisions

Limited decisions involve a moderate amount of effort from the consumer rather than the automatic behaviour associated with habitual choices. These decisions are considered moderate-involvement due to the average risk and cost nature of the products, the moderate frequency and familiarity of the product category or brands available (Solomon, 2015:339; Tanner & Raymond, 2012). To make limited decisions, consumers rely on simple rules to select a product and may require slightly more information before they make a purchase (Tanner & Raymond, 2012). Breakfast cereal consumers often rotate between their favourite products from a particular brand based on promotional activity. Therefore, they are more inclined to exhibit limited decision-making when trying out a new product variant due to the brand's consistent quality offering (Solomon, 2015:339).

• Extensive decisions

Extensive decision making involves the most consumer effort and a complex decision-making process (Solomon, 2015:339). These decisions are considered high-involvement due to the high risk and cost nature of the products, the low purchase frequency and possibly little familiarity with the product category or brands available (Solomon, 2015:339; Tanner & Raymond, 2012). Extensive decisions often require the consumer to move throughout the entire five-step consumer decision-making process, and it is, therefore, unlikely that this type of decision-making would be utilised when making a breakfast cereal purchase and consumption choice (Solomon, 2015:339; Alsibai, 2014; Hibić & Poturak, 2016). Understanding the consumer and what drives their behaviour is becoming more critical for businesses today due to rapidly changing consumer markets (Statt et al., 2013). Marketing decisions are made based on understanding and predicting consumer behaviour that will significantly contribute to its success (Stankevich, 2017; Qazzafi, 2019). Therefore, industry role-players need to understand consumer behaviour (Statt et al., 2013; Stankevich, 2017; Hibić & Poturak, 2016) and learn how to use this knowledge to influence consumer decision-making (Stankevich, 2017). This understanding is achieved by knowing how different attributes influence consumer decision-making and identify the correct consumer segments to target with a compelling marketing mix (Statt et al., 2013).



2.3. Factors influencing consumer decision-making of breakfast cereal products

Current studies on consumer behaviour, focusing on food purchases and consumption, are extensive and of significant importance to industry role-players (Simon, 2018). However, the attributes that influence breakfast cereal product selection and use are not detailed within a South African context (Hallström *et al.*, 2011; Seema & Aparna, 2017). Studies of consumer behaviour assist markers in understanding and identifying how consumers make purchase decisions (Simon, 2018). This knowledge is imperative for retailers to understand their target market and develop product offerings to satisfy their needs (Simon, 2018). Understanding the factors that influence consumer decision-making within the breakfast cereal category will also assist with successful marketing mix determination and implementation (Simon, 2018).

The increasing market failure rates of products and decreased brand loyalty has raised the question of whether consumers make conscious product choices or whether they passively accept the choices retailers make for them (Grunert, 2002). Previous studies have shown that the predominant attributes affecting breakfast cereal decision making are consumer, product and retailer attributes. Each of these dimensions has individual indicators that contribute to a breakfast cereal purchase and consumption decision (Simon, 2018; Prasad & Reddy, 2007; Golub & Binkley, 2005; Ares & Gambaro, 2007).

Studying the influence of these factors on consumer decision-making allows industry role players to understand the consumer's needs and wants (Simon, 2018). This knowledge will ensure that the correct marketing mix targets specific customer segments (Simon, 2018) and increases the retailer's market size and penetration (Vilčeková & Sabo, 2013). A customer or market segment refers to a group of consumers who have similar characteristics, needs and wants (Camilleri, 2018:70). Customer segmentation can be done according to a range of variables such as consumer attributes (sociodemographic attributes) product attributes (such as intrinsic and extrinsic attributes) and retailer attributes (such as marketing mix attributes) (Camilleri, 2018:71). By segmenting their customers, retailers can understand them better and tailor their marketing activities to target each segment effectively and exceed their customer's requirements.

2.3.1. Consumer attributes

Consumer attributes include sociodemographic attributes that play a significant role in the consumer decision-making process (Simon, 2018). The term demographics refers to an individual distribution of characteristics within a particular population such as age, gender or household income (Simon, 2018). Household factors refer to dimensions such as household size



and composition (Martins, 2007). Collectively, these factors are referred to as sociodemographic factors. Retailers, suppliers and manufacturers can utilise consumer attributes for segmentation purposes (Trinh, Dawes & Lockshin, 2009). Due to the rise of loyalty schemes, demographic variables are easy to access, identify and measure when providing a description of the target market and consumer behaviour (Trinh et al., 2009; Brijs, Swinnen & Vanhoof, 2004). Segmentation based on these variables is the most common method used as customers can be grouped according to these factors to predict their purchase behaviour (Brijs et al., 2004). The demographic profile of a market affects its growth potential because demographic changes are slow-moving and only become relevant to the retailer when assessing the overall potential of a product category (Varley, 2011:47). However, Trinh et al. (2009) reported that demographic factors alone might not be an adequate base for market segmentation. These variables produce significant relationships when considering sociodemographic attributes and purchasing patterns for various product categories (Trinh et al., 2009). Some researchers also criticise segmentation based on demographics alone, as this method may fail to provide a direct link between sociodemographic factors and purchase behaviour, highlighting the need for attributes relating to consumer preferences to be supplemented into the segmentation process (Brijs et al., 2004).

2.3.1.1. Sociodemographic attributes

Sociodemographics can cause changes to the general patterns of product selection and consumption (Simon, 2018) and are also essential predictors of customer spending patterns (Vilčeková & Sabo, 2013). Sociodemographic attributes also influence the consumer's evaluation of intrinsic and extrinsic product attributes resulting in a product purchase (Li, Jervis & Drake, 2015). Various studies investigated the influence of demographics on consumer decision-making within the breakfast cereal category. Prasad and Reddy (2007) identified that demographics influenced the needs and subsequent product selection of consumers. Similarly, Golub and Binkley (2005) found that sociodemographic attributes influenced a consumer's consumption of healthy breakfast cereals, and Ares and Gambaro (2007) indicated demographics affected consumer acceptance for functional foods such as breakfast cereals. Simon (2018) found that sociodemographic attributes influence a consumer's product selection as breakfast cereals are selected to suit their lifestyles and needs at a specific time in their lives. An investigation into the role of demographics and consumer involvement in decision making revealed that in the case of low involvement products (such as breakfast cereals), the influence of demographics was moderate (Simon, 2018).



Gender

Studies suggest that gender influences consumer attitudes towards food product selection (Chambers, Lobb, Butler & Traill, 2008; Rappoport, Peters, Downey, McCann & Huff-Corzine, 1993; Monneuse, Bellisle & Koppert, 1997). However, Beneke and Carter (2014) found that gender differences were less impactful on food selection than demographic factors such as household income and age. In the areas of price, value, quality and willingness to purchase, females exhibited more favourable views of the products (Beneke & Carter, 2014).

Fundamental differences exist among gender groups concerning food product selection and consumption (Chambers *et al.*, 2008). Ares and Gambaro (2007) noted that demographic factors such as gender act as key determinants of consumer functional food product acceptance, such as RTE breakfast cereals. Hallström *et al.* (2011) found that males were more likely to be regular breakfast consumers than females. This behaviour may link to females wanting to control their weight by skipping breakfast. Females were also influenced by their parent's concern for health and daily routine, which led to a decrease in breakfast consumption for this gender (Hallström *et al.*, 2011). Similarly, Golub and Binkley (2005) found that the presence of a female head in the household positively influenced the purchase of healthier breakfast cereals with a specific focus on fibre content.

The study conducted by Simon (2018) found that females were more health-conscious than males. The females reported higher scores by stating that breakfast cereals were safe to eat and could prevent disease if consumed regularly. They noted that breakfast cereal choices were significant due to the health effects and could also be used to manage unhealthy body conditions with no side effects (Simon, 2018). The female respondents agreed that eating high fibre RTE breakfast cereal products assisted them with managing their hunger and weight as well as reducing cholesterol and improving digestion. They also knew to identify that breakfast cereals contain unnatural ingredients (Simon, 2018).

Simon's study also showed that females exhibited higher risk factors than male respondents, which refer to the perception of physical, financial, social, psychological and time risk (Simon, 2018). Females were more likely to like the taste of breakfast cereal, assess the nutritional value when selecting a breakfast cereal and consider the quality of the breakfast cereal product (Simon, 2018). They were also more likely to choose breakfast cereals that are easy and quick to prepare. Females preferred breakfast cereals that were low-priced to provide the best value for money and were favoured by their family and friends (Simon, 2018). They also were likely to check the packaging design, illustration and style of the breakfast cereal before purchase (Simon, 2018).



In terms of behavioural factors, male and female respondents reported similar scores (Simon, 2018). Both genders believed that the benefits promoted by RTE breakfast cereal brands were real and that their physical performance improves when consuming these products. They noted that eating breakfast cereals could repair the damage caused by an unhealthy diet and can assist with improving their mood. They also specified that their food habits changed with age (Simon, 2018). In terms of economic factors, female respondents provided higher scores than male respondents. They viewed RTE breakfast cereals as not too expensive but were purchasing less expensive cereals than they were previously. These respondents were also more likely to check the prices of substitutes (Simon, 2018). However, when it comes to health benefits and quality, female consumers were willing to spend more on these products. These respondents were more likely to check the prices of substitutes (Simon, 2018).

Age

Golub and Binkley (2005) state that age is a significant determinant of food selection. Simon (2018) also points out that food preferences change with age. Within the breakfast cereal category, age contributes to consumer product selection and consumption (Koutra *et al.*, 2015). In South Africa, the youth age group at age 15-34 comprise most of the population at 35.1% (StatsSA, 2019). The number of children at age 0-14 (28.8%) is like that of adults aged 25-59 (27.1%), while the elderly who are older than 60 years make up 9% of the population (StatsSA, 2019).

When considering this information, breakfast cereal products typically cater to specific age groups and target markets. For example, children's breakfast cereals may include more sugar than those designed for adults. This may be because children often select breakfast cereals based on taste, while adults consider other factors such as nutritional value (Schi & Price, 1998). Similarly, Golub and Binkley (2005) found that households with children and adolescents between the ages of six and seventeen purchased breakfast cereals more frequently than other families. They were also more likely to buy unhealthy breakfast cereal products. Furthermore, as consumers age, their awareness of functional foods and health benefits increases (Poulson, 1999). Poulson (1999) found that middle-aged women are more likely to consume functional foods and purchase new food innovation products than other age groups.

Chambers *et al.* (2008) noted that families play a significant role in educating children about food consumption and eating habits. This study found fundamental differences between the food selection of age groups as well as the reasons for these choices (Chambers *et al.*, 2008). Elderly consumers over the age of 60 were more likely to purchase healthier food products (Chambers



et al., 2008). Their breakfast cereal purchases also focus on nostalgia for products such as Froot Loops, Coco Pops and the sugar-coated Frosted Flakes (B2B Market Research, 2019).

On the other hand, consumers between the ages of 18 and 30 focused more on food preparation time and the price of products (Chambers *et al.*, 2008). Millennials have received the term 'cereal killer' as this generational cohort is decreasing their consumption of traditional breakfast cereals and embracing on-the-go snack options that better suit their fast-paced lifestyles (B2B Market Research, 2019). This development represents a threat to the breakfast 33 cereal industry and challenges industry role-players to develop innovative new products to appeal to the changing needs of consumers (B2B Market Research, 2019).

Ethnicity

Ethnicity has been shown to influence food product selection and consumption choices in various parts of the world (Cullen Baranowski, Watson, Nicklas, Fisher, Donnell, Baranowski, Islam & Missaghian, 2007). Ethnicity also plays a role in income and access to food (specifically healthy food). Previously disadvantaged ethnic groups may have lower incomes and this, therefore, affects food selection and consumption across various product categories (Treuhaft & Karpyn, 2010). Tee (2014) found that breakfast intake in South Africa is influenced by race. Black African consumers were more likely to have a lower breakfast intake and nutritional quality than White, Coloured or Indian consumers in South Africa (Tee, 2014). This may be due to historical inequalities that restricted Black consumers' access to education, healthy food products and wealth. This meant that this ethnic group is still more likely to select cheaper carbohydrate options for breakfast such as maize or bread as well as opt for brands based on promotional availability, cheaper pack sizes and product variants according to Ronquest-Ross, Vink and Sigge (2015).

Level of education

Levels of education in South Africa denote primary, secondary and tertiary education (Macha & Kadakia, 2017). Consumer knowledge influences their breakfast cereal purchasing and consumption patterns (Simon, 2018; Golub & Binkley, 2005; Hallström *et al.*, 2011; Bogue & Yu, 2009). Level of education and healthy breakfast cereal have a positive correlation (Simon, 2018; Golub & Binkley; Hallström *et al.*, 2011). This relationship similarly exists between the level of education and consumers' acceptance of functional foods (Bogue & Yu, 2009).

Simon (2018) found that higher levels of education and product information resulted in breakfast cereal purchases with higher fibre content. Similarly, in households where the shopper had a higher level of education, healthier breakfast cereal products were purchased, specifically in terms of lower sugar and higher fibre contents (Golub & Binkley, 2005). Hallström *et al.* (2011)



found that adolescents with parents with high education levels were more likely to be breakfast consumers. Adolescents with a parent with a low education level were more influenced by their daily routine and the price of food when selecting breakfast cereal products (Hallström *et al.*, 2011). Golub and Binkley (2005) also investigated the relationship between the level of education and household composition. They expected that highly educated consumers with children would purchase more healthy breakfast cereals. However, the combination of these factors did not have a significant effect on the purchase and consumption of healthy breakfast cereal products.

Household income

Household income refers to the money obtained to cover living costs and assists consumers in making food-related decisions (Golub & Binkley, 2005). Simon (2018) notes that disparities in consumption patterns exist concerning variations in household income. However, this study found that health, risk and behavioural attributes do not change significantly with differences in household income. However, different family incomes affected the respondents' evaluation of economic factors. This behaviour relates to the prices of breakfast cereals, purchase frequency, evaluation of substitutes, discount behaviour and attitudes towards product benefits and quality (Simon, 2018). Household incomes in South Africa are broken up into income groups called the BMR scale, according to Standard Bank (2016), as seen in Table 2.1.

TABLE 2.1. BMR SCALE OF HOUSEHOLD INCOME GROUPS

Household income group	Monthly income bracket	Description
Low income	R0- R1 708	Lowest
Low income	R1 708 - R7 417	Second lowest
Middle income	R7 417 - R16 875	Low emerging middle
Middle income	R16 875 - R34 333	Emerging middle
Middle income	R34 333 - 58 917	Realised middle
High income	R58 917 - R126 000	Emerging affluent
High income	R126 000 - R201 167	Affluent
High income	>R201 167	Wealthy

Higher household income is associated with healthier breakfast cereal purchases (Golub & Binkley, 2005). These consumers are more likely to purchase breakfast cereals containing less sugar and more fibre than lower-income individuals (Golub & Bunkley, 2005). However, higher-income groups exhibit a more negative attitude towards purchasing private label breakfast cereal brands (Beneke & Carter, 2014). This study found that high-income consumers had a higher risk profile and favoured brand leaders such as Kellogg's over private label brands. These respondents viewed private label brands as inferior to name brands in terms of pricing, value and



quality more than consumers other income groups (Beneke & Carter, 2014). On the other hand, Jones, Chern and Mustiful (1996) found that lower-income consumers are highly influenced by their income and product prices and are more likely to purchase the lowest-priced products in the breakfast cereal category. These consumers have shown an elastic demand for cold and hot cereals and an inelastic demand for cereal-based snack products. This behaviour highlights the fact that breakfast cereal consumers make rational purchasing decisions based on the consumer demand theory, which focuses on the utility derived from the product (Jones *et al.*, 1996).

Marital status

According to Blake, Wethington, Farrell, Bisogni and Devine (2011), marital status influences consumer food product selection. Similarly, Ricciuto, Tarasuk and Yatchew (2006) note that studies have indicated variations in food product selection and consumption due to marital and family status. These differences specifically occur with higher instances of consumption of healthy food products and greater compliance with dietary guidelines.

Household size and composition

Ricciuto *et al.* (2006) specify that food purchase and consumption decisions are influenced by the family context regarding household size and composition. Studies have also identified the fact that household size significantly affects food expenditure (Sobhani & Babashahi, 2020). The household composition also influences food product selection, specifically in terms of adherence to dietary guidelines (Sobhani & Babashahi, 2020).

Households consist of family and non-family members who occupy a housing unit or typical dwelling and share resources (Niehof, 2011; Koekemoer, 2006). A household is an arrangement of co-residence where household members share consumption and production of resources (Hall & Mokomane, 2018). As of 2018, household growth in South Africa has surpassed population growth, where the number of households has increased by 2.4% annually (Stats SA, 2018). Approximately one-quarter (25.7%) of South African households consist of single-person households, with 62% composed of three or fewer members (Stats SA, 2018). A family refers to a social group that is related by blood or marriage, non-marital union, adoption or other affiliation (Hall & Mokomane, 2018). Families structure interlinks with household type. The following household types and distribution in South Africa are described by Hall and Mokomane (2018) as follows:

- Single-person household (22%): A family with one member.
- Couple (10%): A household where two members live together as partners or a married couple.



- The nuclear family (19%): A household where two members live together as partners or a married couple with one or more children and no other members.
- Lone parent (11%): A household with one adult member and their child/children with no other members.
- Extended (36%): A household that has a structure that does not fit into the above systems, but all members are related.
- Composite (2%): A household with a minimum of one unrelated member.

Hallström *et al.* (2011) found that consumers living in a traditional nuclear family structure were more likely to consume breakfast than consumers living in single-parent households. As of 2018, nuclear households make up 39% of households, which has increased significantly from 2017 (Stats SA, 2018). 38% of households have two generations living together, while 14% had three generations (Stats SA, 2018). 5% of households were skipped generations where grandparents and grandchildren lived together, and 38% of households in South Africa were headed by females (Stats SA, 2018).

Multiple family members influence the food product decision-making process (Kumpel, Bruns, Haudrup Christensen and Romero Mikkelsen, 2007). Nowadays, children are highly involved in this process and act as independent consumers who form a primary, influencing, and future market segment (Wilson & Wood, 2004; Kumpel *et al.*, 2007). Children specifically affect the product type, brand and colour of food products that are purchased, especially when the item is for their food consumption (Belch & Willis, 2002; Foxman, Tansuhaj & Ekstrom, 1989; Lee & Beatty, 2002). When selecting breakfast cereal products, children are more likely to be influenced by taste and familiarity as well as advertising techniques (e.g. character toys in the cereal box) (Kumpel *et al.*, 2007).

Although children may not always actively participate in the purchase decision, parents fulfil the role of shoppers and purchase items for the child as the consumer (Kumpel *et al.*, 2007). This behaviour may occur because reciprocal socialisation has become more prevalent where family communication and decision making have become more inclusive, and parents are more aware and receptive to their children's opinions (Kumpel *et al.*, 2007). Therefore, a market segment exists that is more advanced, influential, and informed than the generation before them (Kumpel *et al.*, 2007).



2.3.1.2. Purchase and consumption behaviour

• The household shopper

The household shopper refers to the individual who engages with the activities involved in purchasing the product (TROC Global, 2020; Anthony, 2017). They evaluate the options, are influenced by the retail marketing mix and complete the transaction (TROC Global, 2020). On the other hand, consumers use and dispose of the product that was purchased. They can also be the shopper in some cases (TROC Global, 2020). Consumers can even exhibit different shopper behaviour in various retail stores (Anthony, 2017; Odunitan-Wayas, Okop, Dover, Alaba, Micklesfield, Puoane, Uys, Tsolekile, Levitt, Battersby, Victor, Meltzer & Lambert, 2018). Consumers and shoppers also have different brand relationships. For example, consumers are more likely to be brand loyal, whereas a traditional shopper focuses more on brand or product utility when purchasing a product for another household member (Anthony, 2017).

Purchase and consumption frequency

Purchase or consumption frequency refers to the number of times a product or brand is purchased/ consumed within a specified period (typically weekly or monthly) (Dawes, 2006; Castetbon, Harris & Schwartz, 2011). Many factors influence the frequency at which consumers purchase or consume certain products, such as household and demographic factors (Wahyudi, Kuwornu, Gunawan, Datta & Nguyen, 2019) as well as retailer attributes like promotional activity (Castetbon *et al.*, 2011).

• Consumption occasion

The terms meal pattern or meal type are used to describe consumer's eating patterns as meals (such as breakfast, lunch or dinner) or smaller eating occasions (such as a snack) (Leech, Worsley, Timperio & McNaughton, 2015). Therefore, the term eating/consumption occasion refers to any time where food or drink is ingested and incorporates all different meal types (Leech *et al.*, 2015). Consumers generally eat certain types of food at certain times of the day (Spence, 2017). Breakfast foods are no longer only consumed in the morning, and industry role-players like manufacturers, suppliers and retailers have become more interested in breaking into the profitable and growing market for breakfast foods that are consumed across the day for various reasons (Spence, 2017).

2.3.2. Product attributes

Products consist of attributes that consumers use as intrinsic or extrinsic cues to shape their opinions and decisions (Symmank, 2018; Veale, Quester & Karunaratna, 2006). Intrinsic product factors refer to features that form an integral component of the product that cannot be changed



without altering the essence of the product itself (Swanepoel, 2015; Piqueras-Fiszman & Spence, 2015; Li, Jervis & Drake, 2015; Veale *et al.*, 2006). These cues include the material characterisation and nutritional composition of a food product (Symmank, 2018). Intrinsic food product factors include nutritional profile, appearance, smell, taste, texture, and mouthfeel, which work together to influence the sensory perception of the product (Symmank, 2018; Veale *et al.*, 2006). These attributes are evaluated in the consumer's decision-making process and impact the consumer's consumption experience (Samsudin, Chick, Azman & Bachok, 2017; Grunert, 2002; Symmank, 2018).

Extrinsic factors are the surrounding factors that are related to but do not form part of a physical product (Samsudin *et al.*, 2017; Li *et al.*, 2015). When altered, these cues will not change the physical product (Swanepoel, 2015; Piqueras-Fiszman & Spence, 2015). Extrinsic product cues such as branding, packaging, price, and country of origin influence how consumers evaluate food products (Mueller & Szolnoki, 2010). These factors influence the consumer's food product selection and act as indicators of quality and value (Teas & Agarwal, 2000; Grunert, 2002).

Product attributes as a whole play a significant role in the consumer's purchasing decision (Akpinar, Aykin, Sayin & Ozkan, 2009) by creating different consumer responses and, together, shape food product purchase and consumption decisions (Symmank, 2018). This means that these factors influence a consumer's decision to purchase the product or not (Swanepoel, 2015). Both intrinsic and extrinsic factors influence food purchase and consumption decisions at different times and in different ways. Studies have shown that consumer's reliance on intrinsic and extrinsic product attributes may vary when assessing a product (Veale *et al.*, 2006). They may also not always be able to evaluate these cues accurately before or even after a purchase decision due to factors such as a lack of understanding or self-confidence or inaccessibility and misrepresentation of information by retailers (Veale *et al.*, 2006). This discovery means that industry role-players need to understand the role of these cues in product assessment and how they influence the consumer to purchase the product (Veale *et al.*, 2006; Enneking, Neumann and Henneberg, 2007). They also need to understand the consumer's prioritisation of these attributes and their importance when making a breakfast cereal purchase and consumption decision (Swanepoel, 2015).

2.3.2.1. Intrinsic factors

When making a buying decision, consumers with in-depth, objective knowledge of a product can easily distinguish between product attributes that are integral to the purchase decision and those that are not (Veale *et al.*, 2006; Wirtz & Mattila, 2003). Similarly, a product expert is more likely to place value on the brand and advertised product benefits when gathering product information



than seek advice from others (Veale *et al.*, 2006). For these consumers, the application of this expertise results in a bias towards intrinsic product attributes (Veale *et al.*, 2006).

Nutritional Profile

The nutritional quality or profile of a food product is defined as the value of this product to the consumer's health, growth development and overall well-being. This extends to the effects of the food and its ingredients on the consumer (Köpke, 2005). According to Wiles (2017), breakfast cereals are positively associated with high micronutrient content and overall nutritional benefits. However, these products can be highly processed and contain high levels of energy, sugar and sodium, particularly in the case of children's cereals.

Modern consumers are becoming increasingly knowledgeable about the health aspects of the food they consume (Gracia & Barreiro-Hurlé, 2019). As a result, they are starting to demand healthier food products. Industry role-players need to become aware of this to reduce or eliminate the unhealthy components of food products (e.g. high saturated fat content) or add beneficial ingredients (e.g. vitamins and minerals) to the products in their assortment. This will also assist with the ability of food products to utilise statements and claims regarding their nutritional quality (Gracia & Barreiro-Hurlé, 2019). According to Dominick *et al.* (2018), breakfast cereals are offered at a wide variety in terms of nutritional profiles, which ultimately influences consumer purchasing behaviour. Studies have shown that a negative relationship exists between cereal purchases and the energy content per serving of a breakfast cereal (Dominick *et al.*, 2018). Fibre was also highlighted as an important nutritional factor, while sugar content had a more significant influence over the taste of the product. Therefore, consumer preferences for these dimensions of the nutritional profile were dependent on the ratio of one to the other (Dominick *et al.*, 2018). Dominick *et al.* (2018) also noted that studies have shown that consumer purchase frequency and brand loyalty increase as the nutritional quality of the breakfast cereals they buy increases.

Taste

Taste is a sense where the chemical properties of the food in the mouth are identified by the brain using the information provided by taste buds (Bradbury, 2004). Taste is combined with a food product's aroma to contribute to the final taste and overall acceptance of the food product by the consumer (Swanepoel, 2015; McWilliams, 2008:52). Taste is a central, intrinsic product attribute that strongly influences food choice (Clark, 1998; Klopčič *et al.*, 2020) and is often the most influential factor in food product selection (Brown, 2008:2). Consumers use the sense of taste to evaluate food quality, food caloric content and the presence of flavour enhancers such as salt (Briand & Salles, 2017). When combined with other sensory characteristics such as



texture and aroma, good taste is a requirement for breakfast cereal products to excel in competitive markets (Heiniö, Noort, Katina, Alam, Sozer, de Kock, Hersleth & Poutanen, 2016). The components of sugar, fat, and flavourings added to breakfast cereal products directly influence their taste. This composition differs between whole grain and refined products (Heiniö et al., 2016).

Taste is also a significant determinant of child acceptance of food products (Blissett & Fogel, 2013). Product acceptance of children within the breakfast cereal category links with high levels of processing, energy, sugar and sodium content (Wiles, 2017). Wiles (2017) also noted that products marketed towards children might influence their taste perceptions by including licenced characters on the product packaging.

Texture

The texture of a food product is defined by Dar and Light (2014) as all rheological and structural attributes that can be perceived by mechanical, tactile, visual, and auditory receptors. Texture can also be referred to as the mouthfeel of a product and is strongly linked to consumer acceptance of food products (McWilliams, 2008:52). Texture, together with appearance, taste, and aroma, comprises the sensory attributes of a food product (Costell & Duran, 2000). The texture of cereal product forms during processing and, when consumed, is associated with the freshness and quality of the product (Heiniö *et al.*, 2016).

Breakfast cereal is evaluated based on the type of product and forms a key component of new food product analysis (Smewing, 2015). Dry breakfast cereals and bars contribute to the crispness or brittleness of products. Strength or hardness is associated with grains and extruded breakfast cereals, while elasticity associates with kernels and cereal endosperm products (Smewing, 2015). Consistency and adhesiveness describe porridge breakfast cereals and tenderness links with flaked cereal products. It is also important to note that acoustic sounds made in conjunction with cereal texture are essential for consumer enjoyment (Snewing, 2015).

Texture and sensory processing are significant determinants of child acceptance of food products (Blissett & Fogel, 2013). Changes in oral physiology caused by ageing are also associated with impaired food texture perception in elderly consumers (Song, Giacalone, Johansen, Frøst & Bredie, 2016). These changes are related to impaired dental and oral health, decreased masticatory efficiency, and difficulties swallowing and result in texture preference changes to softer food products (Song *et al.*, 2016).



2.3.3.2. Extrinsic factors

Consumers are often not able to judge a food product fairly without access to contextual information through sensory inputs that are present at particular times in the decision-making process (Piqueras-Fiszman & Spence, 2015). Extrinsic factors can increase levels of acceptability or unacceptability of a product. Therefore, when consumers have uncertainty regarding product quality, they base their decisions on extrinsic attributes due to missing sensory perception (Akdeniz *et al.*, 2013; Symmank, 2018).

Pack size

Pack size refers to the volume of product contained in the packaging (Silayoi & Speece, 2007). Pack size is an element of packaging along with graphics, colour, form, flavour and packaging material. These factors are typically analysed first by the consumer as the primary visual components of the product (Hassan, Leng & Peng, 2012; Smith & Taylor, 2010; Silayoi & Speece, 2007). Pack size acts as a leading visual attribute that assists consumers in making a purchase decision (Castro, Majmundar, Williams & Baquero, 2018; Hassan et al., 2012). This intrinsic cue is an essential factor in breakfast cereal product selection (Dominick et al., 2018). Consumers evaluate product pack size to make judgments about the value for money when comparing price with product volume (Silayoi & Speece, 2007; Hendrickson, 2016). To do this, consumers often use the height of the container to simplify volume assumptions (Raghubir & Krishna, 1999). The majority of consumers either purchase a standard-sized box, family-sized box or bagged refill (Dominick et al., 2018). Larger pack sizes reflect better value to consumers and are more easily noticed on shelves. However, consumers from smaller households still tend to purchase single or standard size products (Hassan et al., 2012; Silayoi & Speece, 2007). For industry roleplayers, it is essential to note that products should be available in different pack sizes due to shifts in market demand and the consumer's desire for variety (Hassan et al., 2012; Rundh, 2005).

Branding

A brand is composed of tangible and intangible factors that create an identity, reputation and consumer awareness (Sammut-Bonnici, 2015). Product branding elicits an emotional response and aids consumers by decreasing decision-making time and effort. Consumers repeatedly purchase products and exhibit discriminatory purchase behaviour towards products that are relevant to them and meet their needs (Mazibuko, 2010).

The breakfast cereal category in South Africa consists of products that are produced locally and imported. In order of consumer preference, Kelloggs, Special K, Jungle Oats, Cheerios, and Weetbix are some of the most popular brands in the category (Mazibuko, 2010; Sckokai &



Varacca, 2012). One of the main goals of branding is to generate brand-loyal customers (Swanepoel, 2015). This concept is defined by consumers who purchase a product repeatedly and insist on buying a specific brand due to brand satisfaction (Solomon, 2015:64; Swanepoel, 2015). Brand loyalty also stems from the branding indication of a consistent quality (Solomon, 2015:64). This means that the type of brand (national or private label) as well as the brand name act as a heuristic device used by consumers to deduce quality and product acceptability (Swanepoel, 2015; Broyles, Schumann & Leingpibul, 2009). Overall, brand loyalty reduces the decision-making effort required to make a purchase and places the decision within the habitual, low involvement category (Swanepoel, 2015). Dominick *et al.* (2018) found that the majority of breakfast cereal consumers purchased a variety of brands and cereal types, while only 7% of respondents were brand loyal. However, Sckokai and Varacca (2012) found that most consumers are brand loyal but not product type-loyal. This behaviour was due to their high level of price sensitivity which causes consumers to switch between products of the same brand with similar nutritional profiles (Sckokai & Varacca, 2012).

Food products are available to consumers in a variety of brands such as manufacturer (national) brands and private label (retailer) brands which differ in terms of price, packaging, promotional activity and quality. These brands compete with each other within product categories (Parumasur & Roberts-Lombard, 2012:314-315). Retailers use private label cereal brands as a method of differentiation to appeal to price-sensitive and value-conscious consumers and boost store traffic and consumer loyalty (Dhar, Hoch & Kumar, 2001; Sckokai & Varacca, 2012). Using private-label branding is incredibly successful in staple grocery categories such as RTE breakfast cereals and results in improved category performance (Dhar *et al.*, 2001). Golub and Binkley (2005) found that consumers were more willing to purchase private label brands that had a lower sugar content and higher fibre content. Manufacturers can also use product innovation to develop brand-loyal consumers (Sckokai & Varacca, 2012).

Packaging

Food packaging contains, protects and presents the contents of the product through the production, handling and transportation processes to deliver the product in the state that it was at the time of production (Mutsikiwa, Marumbwa & Mudondo, 2013). Food product packaging provides various roles to both the retailer and the consumer (Silayoi & Speece, 2005). Packaging delivers a communication role by aiding consumer decision-making by communicating information about the product at the point of sale (Silayoi & Speece, 2005; Hawkes, 2013). The logistical role protects the product during distribution to prevent damage or loss (Silayoi & Speece, 2005; Macedo, Sousa-Gallagher, Oliveira & Byrne, 2013). Packaging plays a functional role in extending the shelf life of products and minimising food waste (Macedo *et al.*, 2013;



Hawkes, 2013; Mutsikiwa *et al.*, 2013). Packaging also plays a marketing role to differentiate the product and brand from competitors (Silayoi & Speece, 2005).

Consumers evaluate elements of packaging, which affects their acceptance of the product (Swanepoel, 2015). Consumers make assumptions about the product according to its packaging. For example, consumers associate larger products with being good value for money (Swanepoel, 2015). Food product packaging also uses various attributes such as graphics, colour, form, size and material (Hassan *et al.*, 2012; Ampuero & Vila, 2006) to highlight the originality of the product and encourage the consumer to make a purchase (Silayoi & Speece, 2005; Ampuero & Vila, 2006). These extrinsic cues create expectations of the food product in the consumer's mind and significantly influence product selection (Silayoi & Speece, 2005; Ampuero & Vila, 2006). Therefore, marketing success depends on the ability of the packaging to visually inform and encourage consumers at the point of purchase and consumption (Hassan *et al.*, 2012).

In terms of food product graphics, a vivid image captures the consumer's attention by allowing the product to stand out from the competition (Silayoi & Speece, 2005). Product photography is also often used as an indication of product quality (Hassan *et al.*, 2012). High-cost products generally make use of vertical straight lines, squares, clear outlines, and symmetrical composition with a central element for the consumer to focus on (Ampuero & Vila, 2006). On the other hand, low-cost products typically use horizontal and oblique lines, circles, curves, and asymmetrical compositions with multiple elements (Ampuero & Vila, 2006).

Similarly, packaging colour plays a vital role in food purchase decisions and may link to a positive shopping experience (Hassan *et al.*, 2012; Silayoi & Speece, 2005). Ampuero & Vila (2006) noted that products targeted towards higher LSM consumers were typically darker in colour, whereas more affordable products directed towards price-sensitive consumers were usually lighter in colour. Packaging shape also affects food purchase decisions (Silayoi & Speece, 2005). Unique packaging shapes often attract children within food product categories (Hassan *et al.*, 2012). Packaging material is also becoming more important to consumers as they demand more ecofriendly and convenient solutions (Hassan *et al.*, 2012). Finally, information on the product packaging includes the nutritional table, ingredients, country of origin, brand, supplier and expiry dates which all play a pivotal role in decision-making (Hassan *et al.*, 2012). This information reduces consumer uncertainty and increases the credibility of the product (Silayoi & Speece, 2005).



Labelling

The Foodstuffs, Cosmetics, and Disinfectants Act (R146) defines a food label as 'any tag, brand, mark, pictorial, graphic or other descriptive matter, which is written, printed, stencilled, marked, embossed, impressed upon, or permanently attached to a container of foodstuff, and includes labelling to promote its sale or disposal' (Koen, Blaauw & Wentzel-Viljoen, 2016). This Act stipulates mandatory and optional information presented on product labels (Van der Colff, Van der Merwe, Bosman, Erasmus & Ellis, 2015). Food labels contain valuable information such as the nutritional table, ingredients, allergens etc., that assist consumers in making product selection (Swanepoel, 2015). Consumers primarily use product labels to find information on product allergens, nutritional quality, storage, handling, preparation and ingredients (Koen *et al.*, 2016). This means that labelling influences consumer behaviour in terms of product acceptance (Ares & Deliza, 2010).

Food labels play an essential role in the consumer decision-making process (Mutsikiwa *et al.*, 2013). Breakfast cereal consumers are also becoming more interested in product label information as they become more interested in nutrition and health (Silayoi & Speece, 2005). Satia, Galanko and Neuhouser (2005) and Koen *et al.* (2016) found reading food labels is significantly associated with healthier diet practices. In South Africa, most consumers have a positive attitude and understanding of food labels. However, some feel dissatisfied with the levels of comprehensibility, readability, and the provision of food labels of breakfast cereal products (Van der Colff *et al.*, 2015; Bosman, Van der Merwe, Ellis, Jerling & Badham, 2014). Koen *et al.* (2016) and Campos, Doxey, and Hammond (2011) specifically noted that women, younger and middle-aged consumers were the most likely to read food labels. Similarly, men and teenagers with low education levels were less likely to use food labels when making food purchasing decisions (Satia *et al.*, 2005).

Price

The price of a product refers to the monetary sacrifice perceived by consumers that are made to purchase and consume a product according to Du Plessis, Rousseau, Boshoff, Shlers, Engelbrecht, Joubert and Sanders (2008:147). Therefore, the price refers to the value assigned to a product for sale (The Economic Times, 2020). This value depends on product costs, the target market and the ability of the consumer to pay for it, among other factors (The Economic Times, 2020). Pricing influences consumer decision-making with regards to the acquisition, consumption and disposal of a product (Hoyer, MacInnes & Pieters, 2013:19).

Pricing denotes quality, differentiation and enhances the product or brand image by influencing the consumer's hedonic expectations of the item (The Economic Times, 2020; Li *et al.*, 2015).



For fast-moving consumer goods (FMCG), the consumer focus on price versus the product is approximately 3-20% depending on the product category (Hendrickson, 2016). This evaluation refers to price sensitivity which is defined by Kagan (2019) as the degree to which the price of a product affects consumer purchasing behaviour. Retailer format, pack size differences, and shelf space are factors that may influence consumer price sensitivity as well as the amount of time spent analysing product prices (Hendrickson, 2016).

Product price acts as a determining factor in breakfast cereal purchase decisions (Chaudhury, 2010). Low food product prices increase consumer satisfaction and retailer patronage (Blut *et al.*, 2018). Low regular and promotional prices also can have a positive impact on category performance (Dhar *et al.*, 2001). Within the breakfast cereal category, consumers are price sensitive (Golub & Binkley, 2005; Dhar *et al.*, 2001; Li, Jaenicke & Anekwe, 2018). This notion translates to the nutritional quality and health benefits of breakfast cereals. High nutrition breakfast cereals are more price elastic than low nutrition breakfast cereals. This behaviour means that price changes will affect the performance of high nutrition cereals more (Lin *et al.*, 2017; Golub & Binkley, 2005).

Country of Origin

The globalisation of food markets has exposed consumers to a wide variety of foreign products to choose from (Kalicharan, 2014). Country of origin is an external product cue that refers to the place in which the product was manufactured or produced (Kalicharan, 2014). Consumer awareness of this product attribute is increasing due to the legal requirement of this information on packaging. This information also allows consumers to evaluate food products based on quality and increases consumer bias (Lim, Darley & Summers, 1994; Thakor & Katsanis, 1997; Balabanis & Diamantopoulos, 2004; Kalicharan, 2014; Maheswaren, 2004; Baker & Ballington, 2002). A product's country of origin directly affects the consumer's attitudes, behaviours, purchasing intention (Kalicharan, 2014). Consumers consider country-specific factors such as ingredient quality, production expertise, and the intensity of internal competition when evaluating food product quality (Kalicharan, 2014; Thakor & Katsanis, 1997).

Knowing the country of origin of a specific product contributes to the consumer's perception of its quality (Swanepoel, 2015). Consumers are also willing to pay more for products that are locally produced or manufactured in certain countries (Verbeke & Roosen, 2009; Swanepoel, 2015). Consumers evaluate country of origin subjectively, although their analysis may not always be accurate (Magier-Łakomy & Boguszewicz-Kreft, 2015). Four dimensions describe this salient product attribute and determine consumer attitudes about the product. Innovativeness is evaluated based on the country's use of new technology and advanced methods of production. Design refers to the appearance, style, colours and product variants available in the specified



nation. Prestige also plays an integral role in product evaluation as the exclusivity, status and brand reputation within the context of the country of origin influence consumer attitudes towards the product. Finally, workmanship is vital because the product reliability, durability, manufacturing quality and craftsmanship contribute to the overall product perception (Magier-Łakomy & Boguszewicz-Kreft, 2015).

Riley, Bowen, Krause, Jones, and Stonehouse (2016) noted that older consumers found the country of origin to be an essential product attribute after price. Consumers typically prefer food produced in their own country due to inferences made about the quality, safety, or the notion that locally produced foods are better for the local economy. However, this does appear to differ from country to country (Riley *et al.*, 2016).

Brand Image

Brand image is created through product branding and refers to the conceptualisation of the brand in the consumer's mind, which affects the perception of the sensory attributes of the product (Li et al., 2015; Wijaya, 2013; Išoraitė, 2018). This means that the brand image is a collection of feelings and attitudes that consumers have towards a brand (Schmitt, 2012). Brand image is associated with reputation and credibility and acts as a guideline to consumers who will try the product (Wijaya, 2013). Hoyer et al. (2013:108) note that brand image represents what the brand stands for, how consumers view the brand and what the brand can offer that achieves a competitive advantage. The dimensions of the brand image include brand identity, personality, association, behaviour, attitude, competence and benefit, which contribute to brand loyalty and switching (Wijaya, 2013). The brand image also acts as an indication of the quality and allows the manufacturer to charge a premium for its products (Vraneševic' & Stančec, 2003).

Brand competition is intensifying, highlighting the need for breakfast cereal products to stand out and deliver a unique experience (Išoraitė, 2018; Mazibuko, 2010). Consumers who may have no experience with a particular product are more likely to trust a familiar or well-known brand because this provides some assurance of the quality, dependability and performance of the product, ultimately reducing the risk perception of the purchase (Schiffman & Kanuk, 2010:202). Mazibuko (2010) also found that in the current economic climate, South African consumers were not willing to switch brands of breakfast cereals due to the high-cost implications. These consumers trust frequently purchased, familiar brands due to consistent high quality and a long-term relationship established with the brand (Mazibuko, 2010).



2.3.3. Retailer attributes

A retailer typically refers to a business that seeks to provide a solution to the needs of as many customers as possible. This is achieved through a wide range of product categories, each with a unique product assortment (Varley, 2011:4). Retail forms are the last point in the supply chain that sells to the consumer for personal or household use (Hameli, 2018). Retailers act as middlemen between the supplier and the consumer and, therefore, can influence the marketing mix to encourage consumers to make a purchase (Hameli, 2018).

Currently, the top role players in the South African market are Woolworths Holdings Ltd, Pick n Pay Holdings Ltd, Massmart Holdings Ltd, Shoprite Holdings Ltd and Spar Group Ltd (Makhitha & Khumalo, 2018). Larger retailers are also expanding into new markets such as townships and rural sectors (Makhitha & Khumalo, 2018). This growth has resulted in an intensified level of competition, highlighting the need for retailers to differentiate themselves against their competitors (Makhitha & Khumalo, 2018).

Consumers perceive retailer-related attributes through their experience in-store (Skippari, Nyrhinen & Karjaluoto, 2017). For retailers to survive and compete effectively in the market, they need an understanding of these attributes and how they interact with consumer needs and their decision-making process (Makhitha & Khumalo, 2018; Beneke, Hayworth, Hobson, & Mia, 2012). These attributes also influence the store image, which is evaluated when consumers choose to patronise a store (Ness, Gorton & Kuznesof, 2002; Mafini & Dhurup, 2015).

According to Ghosh, Tripathi and Kumar (2010), consumers select a retailer based on the store format, product assortment, store atmospherics and the overall marketing mix. Through their purchasing patterns, consumers shape the retailer's offerings, decisions and behaviour, ultimately affecting the category marketing mix (Dawson, 2013). Retailers pursue a variety of activities such as promotional exercises, assortment planning and merchandising to encourage consumers to purchase specific products (Dawson, 2013). These retailers often attribute their success to customer centricity and delivering the products consumers want at the right time, price, place and in the right quantities (Dawson, 2013).

2.3.3.1. Product assortment

The assortment refers to the product range carried by a retailer at a particular time to maximise sales and satisfying consumer needs (Kok, Fisher & Vaidyanathan, 2009; Lee & Kunz, 2001; Blut *et al.*, 2018; Dhar *et al.*, 2001). An assortment is defined in terms of width and depth, which must be managed by the category buyer (Lee & Kunz, 200; Blut, Teller & Floh, 2018; Varley, 2011:67). The width refers to the number of categories within a store, and the depth refers to the



various product variations such as pack sizes, pack types, product forms, flavours and formulas etc. within each category (Lee & Kunz, 2001; Blut *et al.*, 2018; Trinh *et al.*, 2009; Varley, 2011:67). The breakfast cereal product assortment differs in flavour, ingredients, nutritional quality, processing method, ease of preparation, convenience and child-friendliness (Morgan, Metzen & Johnson, 1979). This provides a heterogeneous range of product variants that will appeal to different types of consumers. For example, various pack sizes may be suited to different household sizes (Trinh *et al.*, 2009).

Blut *et al.* (2018) found that the size of the assortment and quality of products offered strongly affect the consumer patronage and intention to purchase but does not influence consumer satisfaction. If the category's sales are evenly distributed across brands, this indicates that the retailer has been effective in meeting the needs of their target market (Dhar *et al.*, 2001). However, with staple categories, the assortment may have become saturated, highlighting the need for retailers to reduce the number of brands offered and the number of SKUs offered per brand (Dhar *et al.*, 2001). It was also found that the consumer's intention to purchase staple grocery products such as breakfast cereals was not reduced when fewer brands were offered as long as their favourites were present (Dhar *et al.*, 2001).

2.3.3.2. Promotional activity

Promotion is defined as the coordination of efforts by a seller to provide information and persuasion to sell goods and services while promoting an idea (Belch & Belch, 2018). This includes an announcement of sales, special offers and exclusive brand deals (Van der Vvyer, 2008) that contributes significantly to store image and satisfaction (Visser, du Preez & Van Noordwyk, 2006; Nazish, Rizvi & Malik, 2011). Promotional activities inform the consumer about the company and its products with an emphasis on product features, benefits, and quality (Roman & Zgiep, 2013; Sisodiya & Sharma, 2018). Advertising, product packaging, sales promotions and personal selling form part of the promotion element of the marketing mix (Roman & Zgiep, 2013).

Blut *et al.* (2018) found that promotional activity, specifically price promotions, positively influence retailer patronage and purchase intention. Dhar *et al.* (2001) found that promotion responsiveness was greater with consumers who regularly purchased from a particular category. Retailers who used feature ads and product displays throughout the store influence category traffic, specifically within grocery staple categories with a high rate of market penetration and purchase frequency (Dhar *et al.*, 2001). Product packaging design and branding have the most significant impact on breakfast cereal advertising. However, this effect varies along with the age group being targeted. (Berning & Rabinowitz, 2017). Children between the ages of six and twelve



are more likely to respond to the advertising of breakfast cereals that are high in sugar (Golub & Binkley, 2005).

2.3.3.3. Retailer format

Retailers adopt specific store formats to ensure the success of their business (Huddleston, Whipple, Mattick & Lee, 2008). Retailers select a store format as a selling vehicle that influences consumer product selection, specifically in terms of product availability (Dawson, 2013). The retailer uses store format to create consumer expectations through a strategic communication process (Dawson, 2013). In-store product selection is also affected by store format (Dawson, 2013). A consumer's store choice is a dynamic, cognitive process that involves information processing to make a selection at a particular time and place (Sinha & Banerjee, 2004; Leszczyz, Sinha & Timmermans, 2000; Sinha, Mathew & Kansal, 2005). Various South African food retailers may adopt the following store formats.

Supermarket/general retailer: A supermarket is a medium-sized self-service food retailer that offers a wide assortment of food products and a smaller assortment of general merchandise items (Sinha *et al.*, 2005; Huddleston *et al.*, 2008; Varley, 2011:9). This store format implements a wide range of product categories to appeal to a mass market of consumer needs (Varley, 2011:9). The self-service nature of this type of store allows a grocery store to minimise costs, increase product variety and volume, decrease prices (Sinha *et al.*, 2005). National and private label brands provide the consumer with a moderate array of products (Huddleston *et al.*, 2008). Traditional promotion methods are typically used for this store format, such as coupons and discount price promotions, targeting a mass-market consumer (Huddleston *et al.*, 2008).

Hypermarket/superstore: This large store format offers a broad and deep assortment of grocery, clothing and general merchandise products (Sharma & Bhardwaj, 2015; Trans & Green, 2009; Sinha *et al.*, 2005). Hypermarkets generally offer more product lines and variety and lower prices to consumers (Sinha *et al.*, 2005).

Speciality store: This store format offers a smaller number of product categories than other retailer types (Varley, 2011:10). A narrow but deep assortment is shown to provide the consumer with more choice within the available product categories. Speciality stores place a focus on a particular product type (e.g. organic), product attribute (e.g. quality), or product category (e.g. health supplements) (Huddleston *et al.*, 2008). The target market of speciality stores is typically composed of high-income consumers who are willing to pay premium prices for the products (Huddleston *et al.*, 2008; Scarpi, 2005).



Convenience store: Convenience stores have a narrow product assortment with a focus on convenience items such as ready-made meals and single-pack general merchandise (USDA, 2017; Varley, 2011:117).

Street vendor/spaza shop: Spaza shops or street vendors sell similar food products as those found in a local supermarket but in a smaller quantity. This is to accommodate the income and cash flow capabilities of their shoppers (Charman, Bacq & Brown, 2019). These store formats sell small quantities of general merchandise such as tobacco and toiletry products as well as groceries such as non-perishables and fresh produce (Charman *et al.*, 2019). These stores generally have a narrow assortment offered at a low price.

2.4. Category management

Mantrala & Kamran-Disfani (2017) define a category as 'a manageable group of products that are perceived to be related and substitutable in fulfilling a particular consumer need'. Category management is the process of grouping complementary and competing brands together as strategic business units based on their similarities, operational convenience and how they are purchased and consumed (Morgan, Kaleka & Gooner, 2007; Varley, 2011:59; Dhar *et al.*, 2001; Dussart, 1998). Resources allocated to manage the category then maximise the return on investment (ROI), sales, unit movement, brand loyalty and customer satisfaction (Morgan *et al.*, 2007; Varley, 2011:59).

Retailers, manufacturers and suppliers have begun to focus on category performance through the development of an effective category management process (Dhar *et al.*, 2001). Category management used by industry role players aims to understand the way consumers shop for products within a specific category as their behaviour drives category performance (Dewsnap & Hart, 2004; Varley, 2011:59). Marketing information assists retailers in understanding and meeting the needs of the modern consumer, who is increasingly demanding and highly complex to understand (Dewsnap & Hart, 2004; Dussart, 1998). Overall, category management works across interlinked business functions to integrate buying, marketing and merchandising (Dussart, 1998; Corsten, Hopf, Kasper & Thielen, 2017). The benefits of this practice are as follows:

Customer-centric focus: Category management aims to move away from product centricity to adopt a customer-centric approach (Informatica, 2011). This practice is a customer-led approach that focuses on obtaining a deep understanding of the consumer's needs and providing a product assortment to satisfy them (Varley, 2011:59). Category management results in a strong customer focus and an improved understanding of the target market. This knowledge enables retailers to focus the product assortments and promotion activities on the consumer (Dupre & Greun, 2004).



Through this process, customer satisfaction and loyalty increase as the retailer offers the right product at the right time, place, price and promotion tactic to the correct consumer segments (Dupre & Greun, 2004). Category management also investigates the consumer's decision-making process and relationship with each product category (Varley, 2011:59). A customer-centric approach results in the effective use of assets, impactful marketing and cross-selling opportunities, consistent customer experience across all retail channels and improved service efficiency. Retailers will experience enhanced product development and customer understanding from generated insights (Informatica, 2011).

Supply chain integration and collaboration: The fast-moving consumer goods (FMCG) industry has undertaken category management as a strategy and relies on the cooperation of all members of the supply chain (Dupre & Greun, 2004; Dussart, 1998). Category management focuses on the retailer's categories rather than the manufacturer brands in a shift from brand management to category management (Dupre & Greun, 2004; Dussart, 1998). As a demand management function that manages the product assortments and introduction of new products, category management works together with supply management to improve sourcing, purchasing and supply (Dewsnap & Hart, 2004). It is essential that suppliers play an active role in the direction of the category and that both parties work together to achieve mutual goals (Varley, 2011:59). The function of category management encourages retailers to think about where they want to be in the future, who their competitors are and what they want to achieve in a particular product category, along with the help from trade partnerships (Dhar et al., 2001; Varley, 2011:59).

Maximisation of role player sales, units movement and profits: Dupre & Greun (2004) state that category management maximises a retailer's sales and profits using the optimal mix of brands, SKUs, and pricing strategies. Performance of the category links to customer satisfaction through long-term performance objectives (Varley, 2011:59). These factors are determined based on the target market's perspective and historical sales data (Dupre & Greun, 2004). Retailers can also increase category volume by increasing foot traffic and the probability of purchase within the category by customers who are already shopping in the store (Dhar *et al.*, 2001). Retailer profitability will increase as the category management function results in the deranging of poorly performing SKUs so that profitable products receive the focus (Dussart, 1998; Corsten *et al.*, 2017; Dupre & Greun, 2004).

Improved resource allocation and utilisation: By developing clear strategies for targeting specific segments of consumers, retailers can retain scarce resources. (Dupre & Greun, 2004). Retailers are also able to manage micro (shelf) and macro (floor) space on individual levels to maximise their return on investment (ROI) and minimise their resource utilisation Dupre & Greun, 2004).



However, some natural barriers to category management exist that industry role-players should consider:

- Retailers may aim to protect themselves against supplier opportunism (Dupre & Greun, 2004).
- The internal structure of the retailer may be resistant to change and not in alignment with the goals and application of category management within the business (Dupre & Greun, 2004).
- Retailers and suppliers may not want to share data to assist with the category management function (Dupre & Greun, 2004).
- The complete adoption of the category management process within a retailer or supplier requires restructuring. This change highlights shortcomings (e.g. skills shortages, information technology inadequacies and a lack of a clear strategic roadmap) that need to be resolved for this process to work effectively (Varley, 2011:59).
- The implementation of category management may reduce the variety offered to customers too much, resulting in switching behaviour and a worsened customer experience (Varley, 2011:59).
- Category management poses a threat to smaller suppliers as retailers typically choose category captains (the leading supplier) or category partners (a few suppliers) to work with collaboratively (Varley, 2011:59).
- Smaller retailers may also not have the resources or category width to justify a category management approach (Varley, 2011:59).

2.4.1. Clustering

Cluster analysis divides data into groups based on the correspondences and patterns detected (Madhumitha & Kathiresan, 2018; Tripathi *et al.*, 2018; Bouchachia, 2012). This technique allows for the identification of previously undiscovered groups within the data set and facilitates the identification of insights from the generated clusters (Madhumitha & Kathiresan, 2018; Prasad & Malik, 2011; Shrivastava & Arya, 2012; Dhillon & Modha, 2001). Retail clustering can be executed using manual or machine learning methods to process large data sets effectively and timeously (Tripathi *et al.*, 2018). This process is adaptable to changes over time and identifies characteristics that distinguish groups from each other (Prasad & Malik, 2011; Shrivastava & Arya, 2012).

Retailers have been investing in business intelligence strategies as part of the category management function for improved customer insights (Tripathi *et al.*, 2018; Ngai, Xiu & Chau, 2009). However, the inability to identify patterns and knowledge hidden in the data has prevented these organisations from capitalising on category management opportunities (Ngai *et al.*, 2009).



Access to data from customers, competitors and strategic alliances has allowed for the use of clustering and extensive data analysis to deliver enhanced customer insights and lifetime value through increased satisfaction (Tripathi *et al.*, 2018; Ngai *et al.*, 2009).

Category-based clustering uses data inputs to create store groupings per product category based on similarities in consumer characteristics, preferences and buying patterns (Pollack, 2018; Tripathi *et al.*, 2018). This method allows retailers to develop customer-centric assortment plans and merchandising strategies based on the predominant consumer segments within each cluster (Falck, 2018). The clustering inputs within the retail environment can include performance data per product (sales, units, profit etc.), loyalty data (shopper demographics and purchasing patterns, product attributes and location information (geographic location, competitors, climate etc.) (Carr, 2013). The assortment planning function uses the results of the cluster analysis to tailor the product range and provide a personalised shopping experience for consumers (Carr, 2013; Gilbert, 2017).

2.4.1.1. Customer segmentation using cluster analysis

The term 'clustering' refers to the grouping of variables based on similar characteristics. Therefore, it is possible to apply clustering algorithms to ensure efficient and effective customer segmentation (Hossain, 2017). The term 'consumer/market segmentation' involves the division of a heterogeneous market into smaller homogeneous markets defined by their identifying needs, purchasing behaviour and characteristics (Hossain, 2017; Herbert, 2008; Trinh *et al.*, 2009; Cooil, Aksoy & Keiningham, 2008; Brijs *et al.*, 2004). Consumer segmentation involves collecting information about the target market and grouping consumers according to their buying behaviour, lifestyles, attitudes, and values so that retailers can offer the right mix of products using the most effective marketing strategies (Sarli & Hon Tat, 2011; Cooil *et al.*, 2008; Trinh *et al.*, 2009). The analysis of market segments in terms of stability, responsiveness to targeted marketing initiatives, size, growth potential, and accessibility is also essential (Cooil *et al.*, 2008). Effective market segmentation uses the variables included in the cluster analysis such as performance, demographic, geographic, psychographic, behavioural and benefit-related data (Trinh *et al.*, 2009; Cooil *et al.*, 2008; Brijs *et al.*, 2004).

Cluster analysis can be used for consumer segmentation to aid retailers in understanding their complex target market and provide a more tailored product offering (Tripathi *et al.*, 2018). By dividing the target market into groups of consumers with homogeneous needs and wants, the retailer can position themselves to appeal to each of these groups. This application of cluster analysis produces a decree of within-group homogeneity. This phenomenon indicates that the consumers who fall within the cluster will respond in a similar way to the retailer's marketing



efforts, ultimately allowing businesses to effectively allocate resources to each segment (Cooil *et al.*, 2008). This practice directly leads to the reduction of advertising costs and the increase in the effectiveness of advertising strategies to solicit a profitable consumer response (Sarli & Hon Tat, 2011). Customer segmentation is beneficial to the retailer as this ensures customer satisfaction and optimised profit due to the increased understanding of customer behaviour (Hossain, 2017). Financial benefits for the retailer of customer segmentation include increased profits, higher ROI on marketing initiatives, increased customer retention rates, increased customer wallet share and increased accuracy and predictability of forecasting data and customer portfolios (PWC, 2009).

2.4.1.2. CRM facilitated by cluster analysis

Competitive industry role-players focus on a highly personalised and customised experience for consumers (Impact Analytics, 2017). To gain insight into the consumer behaviour of each cluster, retailers analyse large data sets to avoid the traditional one-size-fits-all approach (Impact Analytics, 2017; Prasad & Malik, 2011). Customer relationship management (CRM) utilises the insights generated from category-based clustering within the scope of category management (Tripathi *et al.*, 2018). CRM is the process of using information technology in implementing marketing plans to acquire, retain, and grow customer segments. This practice has become imperative to companies in the competitive retail environment as required for customer-led approaches (Oliveira, 2012; Janakiraman & Umamaheswari, 2014; Rygielski, Wang & Yen, 2002). CRM focuses on building relationships and customer loyalty by moving away from product-centric strategies to consumer-centric strategies using data generated from customer data analytics (Oliveira, 2012; Janakiraman & Umamaheswari, 2014; Rygielski *et al.*, 2002).

With the rise of market saturation in the food retail industry, it has become more challenging to attract and retain customers. This change has led retailers to adopt a customer-centric strategy to grow with customer satisfaction and loyalty as the primary goals (Oliveira, 2012). CRM facilitates a customer-centric approach to category management where retailers become more familiar with their consumers in terms of their characteristics and purchase behaviour and can, therefore, target them effectively (Tripathi *et al.*, 2018). Analysing and understanding the consumer behaviour of the target market forms the foundation of a retailer's CRM strategy and allows them to retain a competitive advantage (Ngai *et al.*, 2009). Retailers who implement CRM strategies have experienced benefits such as lower customer acquisition costs, customer service improvements, as well as improved customer satisfaction, retention, and loyalty (Oliveira, 2012). Customer profitability increases through the identification and targeting of profitable market segments (Oliveira, 2012). Retailers can also provide higher levels of customer service due to the enhanced data integration and knowledge gained from the cluster analysis (Oliveira, 2012).



2.4.1.3. Attribute-based clustering

Attribute clustering is a commonly used clustering method in the retail industry and is particularly useful within a product category where distinct consumer preferences exist for specific attributes (Hodgson, 2020). Product, consumer or retailer attributes are grouped based on performance data within a particular product category (Hodgson, 2020; Hanumanth, Sastry & Prasada Babu, 2013). This clustering method uses attributes as the input criteria for the clustering algorithm. The input criteria are coded numerically for the algorithm to group preference for similar characteristics together (Hanumanth *et al.*, 2013). The outputs of this process within the retail industry include (DotActiv, 2020):

- The retailer or supplier can select the relevant attributes to include in the cluster analysis based on their individualised goals.
- The optimal number of clusters is calculated for each specific product category and retail environment.
- The generated clusters can be analysed, geographically mapped and profiled to improve stakeholder understanding and leverage this information within the business.
- Stakeholders have an improved understanding of the similarities between stores within
 a cluster and the differences between stores in different groups, based on the attributes
 included in the cluster analysis.
- The cluster plan facilitates the assortment planning function where a targeted product range per cluster is developed.



2.5. Conceptual framework

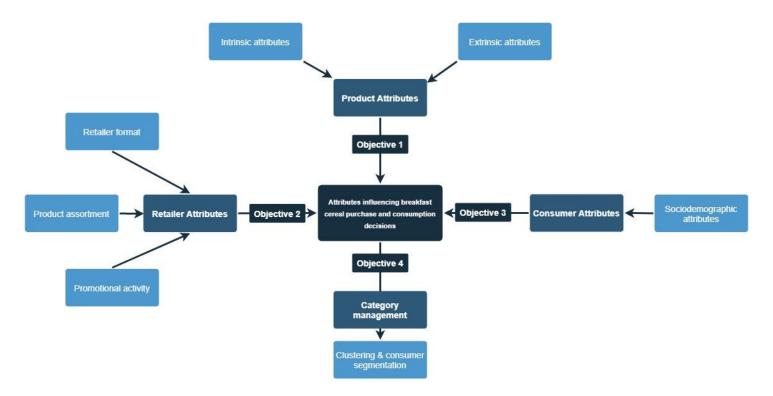


FIGURE 2.1. CONCEPTUAL FRAMEWORK DETAILING THE FACTORS INFLUENCING THE SOUTH AFRICAN CONSUMER'S BREAKFAST CEREAL PURCHASE AND CONSUMPTION DECISIONS

The conceptual framework focuses on the primary constructs supporting and informing the study and their interaction (Rocco & Plakhotnik, 2009). The South African consumer's evaluation and prioritisation of product and retailer attributes influence their breakfast cereal purchase and consumption decisions (Dewsnap & Hart, 2004). Product attributes are comprised of intrinsic and extrinsic factors which influence the African consumer's intention to purchase breakfast cereal (Li et al., 2015; Samsudin et al., 2002; Mueller & Szolnoki, 2010; Teas & Agarwal, 2000; Grunert, 2002). Retailer attributes influence the South African consumer's intention to purchase breakfast cereal using the retailer's format, product assortment and promotional tactics to encourage a purchase decision (Dewsnap & Hart, 2004). Consumer attributes consider sociodemographic factors such as age, gender, population group, level of education, household net income as well as household size and composition (Larsen, 2010; Trinh et al., 2009). These factors are inputs in the consumer decision-making process indicated by the one-sided arrows pointing towards the consumer's decision that results in a product selection (Lusk & McCluskey, 2018).

These decision-making inputs were used as marketing information to facilitate improved category management recommendations (Dewsnap & Hart, 2004). The factors that had the most significant influence over the consumers' purchasing decision were used to inform customercentric category management functions of clustering, assortment planning and space planning



(Tripathi *et al.*, 2018; Pollack, 2018). These recommendations were also provided to set an evidence-based scene for the use of category management by South African food retailers to offer a customer-centric shopping experience (Sarli & Hon Tat, 2011; Cooil *et al.*, 2008; Trinh *et al.*, 2009).

2.6. Research aim and objectives

The study aimed to explore and describe consumer prioritisation of product-related attributes within the breakfast cereal category.

Objective 1: To explore and describe consumer prioritisation of product-related attributes in breakfast cereal purchase and consumption decisions.

- **1.1.** To explore and describe the importance of intrinsic product attributes (i.e. nutritional profile, taste and texture) in breakfast cereal purchase and consumption decisions.
- **1.2**. To explore and describe the importance of extrinsic product attributes (i.e. pack size, branding, packaging, labelling, price, country of origin and brand image) in breakfast cereal purchase and consumption decisions.
- **Objective 2:** To explore and describe consumer prioritisation of retailer-related attributes in breakfast cereal purchase and consumption decisions.
- **2.1.** To explore and describe the importance of marketing mix attributes (i.e. retailer format, product assortment and promotional activity) in breakfast cereal purchase and consumption decisions.
- **Objective 3:** To explore and describe the importance of consumer-related attributes in breakfast cereal purchase and consumption decisions.
- **3.1.** To explore and describe underlying relationships between industry-relevant sociodemographic attributes (i.e. gender, age, household income and household size) and important product attributes as possible precursors for breakfast cereal purchase and consumption decisions.



2.7. Conclusion

This chapter discussed the three primary influences on consumer decision-making within the breakfast cereal category. Sociodemographic attributes comprise the consumer attributes which influence breakfast cereal purchase and consumption decisions. These influence the consumer's prioritisation of intrinsic and extrinsic product attributes as well as retailer attributes which assist the consumer in making a final decision. The analysis of the consumer's prioritisation of product and retailer attributes will assist retailers with attaining an in-depth knowledge of consumer behaviour within the product category and utilise this information for the improvement of category management practices, category-based clustering and consumer segmentation.



CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

This chapter specifies, describes, and justifies the research design and methodology used to conduct the study, specifically in terms of the research approach, purpose and time frame. The research approach specifies the target population, nature of the sample, and the sampling techniques, method and location. The use of the measurement instrument details its development; pre-testing of the questionnaire is explained in detail. The type of survey and relevant sections of the questionnaire used for the primary constructs that inform the study are conceptualised and visualised in the operationalisation table. The data collection process and data analysis are then presented. The data analysis methods also detail the approaches, utilisation of software and means of reporting the results. Finally, the chapter describes the attention paid to the quality of the data collected concerning reliability and validity and ethical considerations.

3.1. Research design

The research design can be described as the strategy that specifies the methods needed to collect and analyse the information required to conclude a research investigation (Swanepoel, 2015). This research employed a quantitative, empirical design. Leedy and Ormond (2013:4) state that a quantitative design allows the exploration of underlying relationships between specific variables in a study, enabling clarification, possible forecasting and directing of the phenomena under investigation (Leedy & Ormrod, 2013:94). Hence this study aimed at investigating consumer prioritisation of product attributes ras this relates to RTE breakfast cereal selection. This design was applicable as the conclusions drawn could furthermore be used to direct future category management strategies (Kumar, 2014:6; Mishra & Alok, 2017:4).

The study utilised an exploratory-descriptive approach. As noted by Swanepoel (2015) and Bearden, Ingram and Laforge (2007:103-111), this approach is useful for exploring and describing the nature of the phenomenon under investigation.

Exploratory research aims to investigate a previously undefined or unexplored topic (Kumar, 2014:92). This study was explorative because little is known about South African consumers' prioritisation of product (intrinsic and extrinsic) and retailer (marketing mix) related attributes and how they might be influenced by consumer (sociodemographic) attributes. The resultant investigation therefore aimed at exploring consumers' decision-making in hope of identifying



specific attributes that are deemed as important when selecting RTE breakfast cereals. The information gathered set an evidence-based scene for the use of improved, customer-centric category management within the breakfast cereal category. These findings also highlighted avenues for future research that aligns with the format of exploratory research (Kumar, 2014:92).

On the other hand, descriptive research systematically describes a phenomenon or a sample of a population (Kumar, 2014:92; Mishra & Alok, 2017:2). It is believed that this study utilised the information gathered to not only understand the consumer behaviour of the sample but to describe possible areas of concerns and underlying relationships that could be viewed as influential in terms of RTE breakfast cereal selection (Walliman, 2018:113). Hence, the use of descriptive research not only allowed the researcher to describe the South African consumer's prioritisation of specific product-related attributes but to also highlight the significance of specific consumer and retailer related attributes, (i.e. the significance of selected sociodemographic characteristics in relation to prioritisation of product-related attributes).

It is envisaged that by presenting an in-depth understanding of the South African RTE breakfast cereal consumer and how they prioritise product attributes industry role-players can be aided in developing improved category management practices. Industry role-players can thus leverage these insights to develop a personalised marketing mix to benefit both themselves and their target market. In terms of a time frame, this study was cross-sectional as it investigated consumer behaviour within the breakfast cereal category at a very specific point of time i.e. between July and September of 2020.

3.2. The sample and sampling techniques

3.2.1. The target population, sample and unit of analysis

A population is a group of individuals with similar characteristics (Zikmund & Babin, 2007:265). Therefore, the target population of this study included all individuals who currently live in South Africa. In more detail, the unit of analysis can be detailed as the smallest criteria to be included in the study that make up the collective of these criteria (Swanepoel, 2015). The unit of analysis included South African male and female consumers between the ages of 21 and 65 from all income and population groups. These consumers had varying educational backgrounds and levels of household income.

A sample comprises a subsection of the larger population that the researcher aims to examine, according to Salkind (2012:85) and Cooper and Schindler (2014:84). Therefore, the sample of this study included consumers who met the following criteria:



- Individuals who currently reside in South Africa. The research used this geographic location to draw the sample, and the investigation focused on South African consumer behaviour within the breakfast cereal product category.
- Individuals who were between the ages of 21 and 65. These consumers formed part
 of the economically active population (StatsSA, 2019). They were also of an age where
 they were likely to be purchasing breakfast cereal for themselves or households and
 making food purchase and consumption decisions, noted by Thiruvenkadam &
 Panchanatham (2016).
- Individuals who understood English so that they could answer survey questions accurately and provide an account of their breakfast cereal purchase and consumption decision-making.
- Individuals who had access to a cell phone/computer to complete the web-based survey electronically.

The sample size refers to the number of respondents who participated in the study (Swanepoel, 2015). For this investigation, there were 395 respondents in the study. Sampling allows for a manageable number of consumers to be selected from the target population from which conclusions can be drawn (Leedy & Omrod, 2013:114; Swanepoel, 2015). The small sample size was due to financial, time and the 2020 COVID 19 - lockdown restrictions.

3.2.2. Sampling techniques

Leedy and Ormrod (2013:206) and Swanepoel (2015) note that sampling is an essential research process as it is not possible to collect data from a population in its entirety. The research utilised non-probability sampling because the number of consumers who meet the South African population's selection criteria is unknown (Kumar, 2014:356; Cooper & Schindler, 2014:358). Specifically, convenience sampling was employed to collect data from the respondents in the study. Convenience sampling is a form of non-probability sampling that involves recruiting respondents who are easy to access and are readily available to participate in the study (Swanepoel, 2015). This method was applicable because respondents who fit the qualification criteria were sent an electronic link to the questionnaire hosted on the Qualtrics system (Leedy & Ormrod, 2020:193; Kumar, 2014:129). This sampling method has proved to be cost and time-effective when utilised with web-based surveys (Bhat, 2019).

The use of non-probability sampling means that the chance of selecting a specific unit of the population is unknown, as noted by Swanepoel (2015). Therefore, due to the use of this sampling technique, generalisations about the wider population could not be made. However, the aim of this investigation was not to represent the wider South African population but to provide insights



into how "time poor" South African consumers prioritise product and retailer attributes when making a breakfast cereal purchase and consumption decision. The investigation intended to set an evidence-based scene for the use of these insights to assist industry role-players in improving their marketing mix and create a platform for further research into the use of attribute prioritisation within category management.

3.3. Development of the measurement instrument

The research utilised a questionnaire survey method that allowed for the collection of primary, quantifiable data (Cooper & Schindler, 2014:85). Kumar (2014:129) notes that this consists of a list of questions that respondents must interpret and answer. A structured questionnaire was selected for the following reasons as noted by Kumar (2014:129) and Cooper and Schindler (2014:227).

- This measurement instrument provided access to a broad audience of respondents in various geographic locations across South Africa that would have otherwise been inaccessible without an increase in cost.
- This survey method provided greater respondent anonymity as no name, or contact information was captured to encourage higher response rates, especially for sensitive questions such as household income or education level.
- This approach did not require field workers or incentives, which kept the costs of the study low.

Swanepoel (2015) mentions basic guidelines that should be adhered to when developing a questionnaire that will yield the best quality data. Therefore, careful attention was paid to avoiding ambiguous or complex academic jargon and leading questions when constructing the questionnaire. Each (consumer, product and retailer) attribute that was tested as an individual objective in the study was assessed in a single section of the questionnaire. Each construct was assigned between three and four times to achieve a more accurate average sentiment from the respondents (Swanepoel, 2015). Scales that had previously been tested for internal consistency were also utilised to assess each construct, as seen in Table 3.1.



TABLE 3.1. ATTRIBUTES WHICH INFLUENCE RTE BREAKFAST CEREAL DECISION-MAKING

QUESTION	SCALE ITEM	REFERENCE			
Q13	Household member responsible for grocery shopping	(Odunitan-Wayas et al., 2018)			
Q14	Breakfast cereal purchase frequency	(Dominick et al., 2018)			
Q15	Breakfast cereal consumption frequency	(Dominick et al., 2018)			
Q16	Breakfast cereal consumption occasion	(Dominick et al., 2018)			
Q17	How important are the following product attributes when you select a breakfast cereal?				
	Single- serving size (e.g. 50g)	(Dominick et al., 2018)			
	Standard box size (e.g. 500g- 1.5kg)	(Dominick et al., 2018)			
	Refill bag size (e.g. 2-5kg)	(Dominick et al., 2018)			
	Case pack size (e.g. 16 pack)	(Dominick et al., 2018)			
	Fruity taste	(Lee et al., 2007; Lal Dar & Light, 2014).			
	Natural taste	(Lee et al., 2007; Lal Dar & Light, 2014).			
	Sweet taste	(Lee et al., 2007; Lal Dar & Light, 2014).			
	Savoury taste	(Lee et al., 2007; Lal Dar & Light, 2014).			
	Smooth texture	(Lee et al., 2007; Lal Dar & Light, 2014).			
	Crunchy texture	(Lee et al., 2007; Lal Dar & Light, 2014).			
	Chewy texture	(Lee et al., 2007; Lal Dar & Light, 2014).			
	Creamy texture	(Lee et al., 2007; Lal Dar & Light, 2014).			
	Energy (KJ) value	(Fotopoulos et al., 2009)			
	Vitamin and mineral content	(Fotopoulos et al., 2009)			
	Sugar content Sugar content	(Fotopoulos et al., 2009)			
	Protein content	(Fotopoulos et al., 2009)			
	Fibre content	(Fotopoulos et al., 2009)			
	A national brand (e.g. Kellogg or Jungle)	(Fotopoulos et al., 2009)			
	House brand (e.g. Pick n Pay no name)	(Fotopoulos et al., 2009)			
	A brand I frequently purchase A brand I am familiar with	(Fotopoulos et al., 2009) (Fotopoulos et al., 2009)			
	Hygienic packaging	(Waheed, Khan & Ahmad, 2018)			
	Attractively designed packaging	(Waheed et al., 2018)			
	Convenient packaging	(Waheed et al., 2010)			
	Colourful packaging	(Waheed et al., 2010)			
	Informative packaging	(Waheed et al., 2018)			
	Environmentally friendly packaging	(Waheed et al., 2018)			
	A brand I am highly aware of	(Anselmsson, Vestman Bondesson & Johansson, 2014)			
	A brand that makes good quality products	(Anselmsson et al., 2014)			
	A brand that makes a good impression	(Anselmsson et al., 2014)			
	A brand that stands out	(Anselmsson et al., 2014)			
	Best before/use-by/sell-by date (date coding)	(Koen, Blaauw & Wentzel-Viljoen, 2016)			
	Statements/ claims (e.g. Organic or natural)	(Koen et al., 2016).			
	Allergens	(Koen et al., 2016).			
	Nutritional table	(Koen et al., 2016).			
	Ingredients	(Koen et al., 2016).			
	Expensive price	(Fotopoulos et al., 2009)			
	Cheap price	(Fotopoulos et al., 2009)			
	Good value for money	(Fotopoulos et al., 2009)			
	Affordable price	(Fotopoulos et al., 2009)			
	Locally produced	(Fotopoulos et al., 2009)			
	Clearly marked country of origin	(Fotopoulos et al., 2009)			
	Prestigious country of origin	(Magier-Łakomy & Boguszewicz-Kreft, 2015)			
040	Country of origin associated with good quality products	(Magier-Łakomy & Boguszewicz-Kreft, 2015)			
Q19	Which of the following do you prefer when shopping for breakfast cereals?	(Cinho Mothou 9 Vancal 2005)			
	Shopping at a discount retailer (e.g. Makro or Save Cash and Carry) Shopping at a hypermarket (e.g. Checkers Hyper or Pick n Pay Hyper)	(Sinha, Mathew & Kansal, 2005) (Sinha <i>et al.</i> , 2005)			
	Shopping at a hypermarket (e.g. Checkers Hyper of Pick in Pay Hyper) Shopping at a grocery store (SPAR, Checkers, or Pick in Pay)	(Sinha et al., 2005) (Sinha et al., 2005)			
		(Sinha et al., 2005) (Sinha et al., 2005)			
	Shopping at a speciality store (e.g. Woolworths or Dischem) Shopping at a convenience store (e.g. Kwik SPAR or Total garage)	(Sinha et al., 2005)			
	Shopping at a convenience store (e.g. kwik SFAR or Total garage) Shopping at a Spaza shop or street vendor	(Sinha et al., 2005)			
		, ,			
	A store with a wide range of breakfast cereal flavours to choose from	(Beneke & Carter, 2014)			
	A store with a wide variety of breakfast cereal types to choose from (e.g. oats, corn	(Beneke & Carter, 2014)			
	and rice-based cereals) A store with a deep assortment of breakfast cereal variants (e.g. Special K and	(Beneke & Carter, 2014)			
	A store with a deep assortment of breaklast cereal variants (e.g. Special K and Special K protein)	(Deliene & Callel, 2014)			
	A store with frequent promotions	(Che Wel et al., 2012)			
	Is from a store with informative advertisements	(Che Wel et al., 2012)			
	A store with a loyalty program	(Che Wel <i>et al.</i> , 2012)			
	· 7 · 9 r · 0 ·	(= = = = = = = = = = = = = = = = = = =			



The questionnaire was built using the Qualtrics online platform and was designed to meet the ethical requirements for studies conducted on human participants to produce reliable and valid results. The use of this online platform allowed for the use of different types of questions to be utilised in the online questionnaire. Forced response questions were utilised to reduce missing data instances with the addition of 'prefer not to say' options on any sensitive questions. Zikmund and Babin (2007:231) mention that questionnaires can utilise either open-ended or fixed-alternative questions. The survey predominantly used fixed-alternative questions to facilitate ease of completion by providing respondents with specific options to choose from (Cooper & Schindler, 2014:200). The survey used one open-ended question to give respondents more detail to justify their product selection (Kumar, 2014:129). The survey consisted of three sections that made use of different types of questions.

Section A: collected sociodemographic information from the respondents, including age, sex, ethnicity, level of education, geographic location, home language, average household net income, marital status, household size and composition to profile the sample and determine the influence of consumer attributes on breakfast cereal decision-making (Li *et al.*, 2015; Trinh *et al.*, 2009). A combination of linear numeric, visual analogue and dichotomous scales were used to capture demographic information.

Section B: collected information regarding breakfast cereal decision-making, purchase and consumption behaviour. Respondents provided information regarding the household member responsible for grocery shopping and the frequency of breakfast cereal purchases and consumption. Data was collected on the importance respondents place on the product and retailer-related attributes using a five-point Likert-type scale adapted from the Food Choice Questionnaire as explored by Kaur and Singh (2014), Carrillo, Varela, Salvador and Fiszman (2010) & Dominick *et al.* (2018). Respondents also ranked each product-related attribute in order of importance and provided insights into their purchase and consumption behaviour.

Section C: collected information about respondent's in-store decision-making and purchase behaviour by providing a planogram as a heat-map type question. Respondents clicked on the product on the planogram that they were most likely to purchase and give a reason for this selection as a form of triangulation to assess the consistency of answers provided in Section B, as seen in Figure 3.1 below.





FIGURE 3.1. PLANOGRAM OF SOUTH AFRICAN BREAKFAST CEREALS UTILISED IN THE WEB-BASED QUESTIONNAIRE

3.4. Pre-testing

Thirty respondents who represented the unit of analysis within the target population and the research environment pretested the questionnaire. A critical examination of the respondent's understanding of the survey aimed to identify any ambiguous, offensive or biased questions to ensure the highest response rate possible (Kumar, 2014:11; Cooper & Schindler, 2014:108). The following changes were made to the questionnaire. Two spelling errors were corrected as well as the addition of both 'myself and my spouse/partner' who are responsible for household grocery shopping. A 'prefer not to answer' option on sensitive demographic questions such as household income was also added to increase response rates.

3.5. Operationalisation

Operationalisation involves defining and measuring the key constructs and objectives that support and inform the study (Kumar, 2014:50). Key constructs identified for this study included the South African consumer's prioritisation of specific product attributes (Objective 1) but also retailer attributes (Objective 2) when making a breakfast cereal purchase and consumption decision. The consumer attributes utilised to profile the sample and investigate underlying relationships between consumer attributes (sociodemographic characteristics) and important product attributes (Objective 3) are also highlighted in Table 3.2. Each construct is further broken down into measurable dimensions, indicators and applicable questionnaire items to ensure the study adhered to the research aim and objectives (Kumar, 2014:50).



TABLE 3.2. OPERATIONALISATION OF THE KEY CONSTRUCTS THAT COMPRISE AND INFORM THE STUDY

OBJE	ECTIVE	CONSTRUCT	DIMENSIONS	INDICATORS	QUESTIONNAIRE ITEMS			
1.	To explore and describe consumer prioritisation of product attributes in breakfast cereal purchase and consumption decisions.							
1.1.	To explore and describe the importance of intrinsic product factors in breakfast cereal purchase and consumption decisions.	Product attributes	Intrinsic attributes	Nutritional profile	-Energy (KJ) value -Vitamin and mineral content -Sugar content -Protein content -Fibre content			
				Texture	-Smooth texture -Crunchy texture -Chewy texture -Creamy texture			
				Taste	-Fruity taste -Natural taste -Sweet taste -Savoury taste			
	To explore and describe the importance of extrinsic product factors in breakfast cereal purchase and consumption decisions.		Extrinsic attributes	Pack size	-Single-serving pack size -Standard box pack size -Refill bag pack size -Case pack size			
				Branding	-National brand -House brand -A brand I frequently purchase -A brand I am familiar with			
				Packaging	-Hygienic packaging -Attractively designed packaging -Convenient packaging -Colourful packaging -Informative packaging -Environmentally friendly packaging			
				Brand image	-A brand I am highly aware of -A brand that makes good quality products -A brand that makes a good impression -A brand that stands out			
				Labelling	-Best before, use-by and sell-by date (date coding) -Statements/claims -Allergens -Nutritional table -Ingredients			
				Price	-Expensive price -Cheap price -Good value for money -Affordable price			
				Country of origin	-Locally produced -Clearly marked country of origin -Prestigious country of origin -Country of origin associated with good quality products			
2.	, , , , , , , , , , , , , , , , , , , ,							
	To explore and describe the importance of marketing mix factors in breakfast cereal purchase and consumption decisions.	Retailer attributes	Marketing Mix attributes	Product assortment	A retailer with a wide range of breakfast cereal flavours to choose from A retailer with a wide range of breakfast cereal types to choose from A retailer with a deep assortment of breakfast cereal product variants to choose from			
				Promotional activity	- A retailer with informative advertisements -A retailer with attractive promotions -A retailer with a loyalty program			
				Retailer format	-Shopping at a discount retailer -Shopping at a hypermarket -Shopping at a grocery store -Shopping at a speciality store -Shopping at a convenience store -Shopping at a spaza shop or street vendor			
3.	•	•		es in breakfast cereal purchase an	<u> </u>			
3.1.	To explore and describe the importance of industry-relevant sociodemographics in relation to important product attributes as possible precursors for breakfast cereal purchase and consumption decisions.	Consumer attributes	Sociodemographic attributes	Gender	What is your gender?			
				Age	How old are you?			
				Population group	Which population group do you belong to? What is your highest level of education?			
				Level of education	What is your highest level of education? Please indicate your city of residence			
				Geographic location Home language	What is your home language?			
				Total monthly household income	What is your approximate household monthly income?			
				Marital status	What is your marital status?			
				Number of household consumers	How many people live in your household?			
				Number of dependent children	How many children under the age of 18 live in your household?			



3.6. Data collection

Before distribution, the structured questionnaire was reviewed by the researcher and supervisors to ensure that the questions were clear and easily understood while meeting the objectives of the study. This investigation used an electronic, self-administered questionnaire on the Qualtrics online platform to collect data from the target population, which was suitable for use within quantitative research according to Cooper and Schindler (2014:294) as discussed and justified in Section 3.3.

Respondents were targeted by the principal researcher across the nine provinces of South Africa using convenience, non-probability sampling between July and September of 2020. Due to the nature of electronic data collection for this study, it was possible to reach respondents across the country. The Qualtrics online platform not only allowed for the development of the measurement instrument but also the distribution of the questionnaire via a generated link. Qualtrics allows for the survey distribution via an anonymous link, emails, personal links, social media, an offline app and a QR code. This study utilised an anonymous link, emails and social media to distribute the survey via platforms such as Whatsapp, Instagram, Facebook, Linkedin and Email to reach as wide of an audience as possible. Once the questionnaire was completed on the platform, it was available to be reviewed and tested by the researcher as if they were one of the respondents. This allowed for any immediate errors to be identified before pre-testing and publishing the survey.

However, this method of data collection posed some challenges. As online surveys are limited to computer literate respondents who have electronic devices such as a mobile phone, tablet or computer, the respondent criteria reflected this. This criterion meant that the survey excluded consumers with lower income and education levels as highlighted by Kumar (2014:132) rates also decreased after specific lengthy or complicated questions where there was no opportunity for interviewer explanation (Kumar, 2014:132; Cooper & Schindler, 2014:328).

A cover letter accompanied the questionnaire to meet the ethical requirements of the research, inform the respondents about the study and aim to decrease the dropout rate (Kumar, 2014:132; Kelley, 2003). The cover letter encouraged the respondents to complete the questionnaire and therefore, increase the completion rate by informing them about the study as well as their rights with regards to their participation (Kumar, 2014:208). The cover letter provided a brief description of the research and the main objectives. The cover letter specified the credentials and contact details of the principal researcher, project supervisor and co-supervisor as well as the name and logo of the University of Pretoria (Kumar, 2014:208; Kelley, 2003). The letter specified the intended use of the data within the context of the study and that the respondent's identity would



be kept anonymous. This section of the questionnaire also established the approximate time to complete the survey, and that the respondents could drop out at any time without penalty (Kumar, 2014:208; Kelley, 2003). The cover letter informed the respondents that their participation in the study was voluntary. No risk or harm would come to them as the researcher and supervisors had legal and professional responsibilities ensuring this (Kumar, 2014:208; Kelley, 2003). Please refer to Addendum C for a full copy of the questionnaire and consent form (cover letter).

The study aimed to gather a minimum of 271-384 responses with a confidence level of 90-95% respectively, and a margin of error of 5% (Qualtrics, 2020) from an estimated South African population of 58, 62 million in mid-2020 (Stats SA, 2020). 395 respondents participated in the study with 259 completing the entire survey. This means that the completion rate was 66% and the dropout rate was 34%.

3.7. Data analysis

A combination of Qualtrics, Microsoft Excel and SPSS was used to complete the data analysis for this research. Data analysis refers to the use of statistical techniques to investigate variables as well as their relationship, effect or patterns of involvement with an environment as specified by Cooper and Schindler (2014:406). Swanepoel (2015) notes that quantitative data requires conversion from raw data into numerical format after which satistical analysis can be applied. Therefore, Qualtrics was used to code the data that was collected via the electronic survey during the data collection phase of the research. The coded version of the data was downloaded from this platform and translated into a Microsoft Excel sheet that was then cleaned to remove blank answers. Next, the excel document containing the raw data was imported into SPSS to complete the data analysis and generate meaningful findings. The data collection process of this study produced quantitative data that the researcher analysed per Objective 1-3. The research supervisors at the Department of Consumer and Food Sciences reviewed the data analysis for this study. The study utilised two methods of statistical data analysis, namely, descriptive statistics and inferential statistics.

3.7.1. Descriptive statistics

Leedy and Ormrod (2013:179) and Zikmund and Babin (2007; 325) state that descriptive statistics allow for pattern recognition and statistical inferences to be made about the sample under investigation. The consumer, product and retailer attributes were analysed using descriptive statistics in the form of measures of central tendency (mean), frequencies, percentages and measures of variability (standard deviation and variance) as recommended by Cooper and Schindler (2014:398). The use of descriptive statistical analysis also allowed for an investigation into the South African consumer's prioritisation of product and retailer attributes as



well as for a description of the sample and their purchasing behaviour. The results of the descriptive analysis were displayed in graphical and tabular format to facilitate the understanding of the reader and conclude the research objectives (Cooper & Schindler, 2014:403; Walliman, 2011:113).

Descriptive analysis was also utilised in terms of contextual analysis of the open-ended question at the end of Section C in the questionnaire (Figure 3.1) (Vaismoradi, Turunen & Bondas, 2013). This method of text analysis involves the systematic coding and categorising of tags in a text to identify patterns in the frequency between words (Vaismoradi *et al.*, 2013; Popping, 2015). Therefore, the responses to the open-ended question were analysed using context analysis to highlight themes in the responses as a method of triangulating the influences on breakfast cereal purchase and consumption decisions.

3.7.2. Inferential statistics

Cooper and Schindler (2014:658) state that inferential statistics involve the estimation of population values and the assessment of statistical hypotheses. Industry-relevant sociodemographic attributes were analysed using a t-test (gender) and one-way ANOVA (age, household income and size) to identify significant relationships that might exist between these constructs and consumers prioritisation of product-related attributes. This is because a t-test is suitable to analyse two dimensions and a one-way ANOVA is suitable to analyse three or more dimensions at a time using inferential statistics (Kumar, 2014:303). For dimensions to be considered statistically significant and, therefore, possible precursors of decision-making, a level of significance of less than or equal to 0.05 had to be obtained (Cooper & Schindler, 2014:459). Where statistically significant relationships were identified a post-hoc Fisher's Least Significant Difference (LSD) test was performed to provide more detail pertaining to the topic under investigation (Cooper & Schindler, 2014:458).

3.8. Quality of the data

The quality of the data presented as part of this study was integral to its success (Kumar, 2014:347). Therefore, the research conducted aimed to produce information that was reliable and valid.

3.8.1. Reliability

The study utilised reliability to ensure that the results reflected the respondent's answers to the research question rather than the researcher's bias and overall viewpoint (Cooper & Schindler, 2014:260). Reliability refers to the consistency, stability, predictability and accuracy of the measurement instrument used in a study (Kumar, 2014:361). This measure of the quality of data



ensured that the measurement instrument performed consistently for the duration of the study (Salkind, 2018:100). The following aspects ensured the reliability of the research.

The fundamental constructs of the study were defined using peer-reviewed, scientific literature sources and business publications. This practice allowed for a complete conceptualisation and operationalisation of each construct, its dimensions and indicators (Salkind, 2018:29). Following this, when constructing the measurement instrument, multiple indicators were used to measure each construct. The researcher also evaluated the wording of the questionnaire items to ensure each was a reliable measure of the research question and applicable sub-objective (Kumar, 2014:361). This consideration meant that the questionnaire presented the scale items clearly and understandably without the use of jargon or ambiguous questions (Kumar, 2014:138; Salkind, 2014:131). The questionnaire also used everyday language and excluded leading, loaded, and double-barrelled questions to decrease the survey dropout rate and ensure each item was correctly answered (Kumar, 2014:138). The measurement instrument was also pre-tested by respondents from the target audience to ensure that the questions were clear and unambiguous. The questionnaire was subsequently adapted to provide complete respondent understanding (Salkind, 2018:123).

The internal reliability of a construct can be measured using the Cronbach Alpha value. This value should be greater than 0.7 for the questionnaire to be considered reliable (Kaur & Singh, 2014; Devlin, 2017:139). The measurement scale used for this research was, therefore, adapted using reliable scales.

3.8.2. Validity

Validity is the degree to which the measurement instrument evaluates the constructs intended (Kumar, 2014:159; Salkind, 2018:105; Leedy & Ormrod, 2020:118). Two types of validity exist, internal and external validity (Cohen, Manion & Morrison, 2018:252; Leedy & Ormrod, 2020:129). The study adhered to internal validity by ensuring that the relationships observed between the constructs were trustworthy and unbiased by other factors (Walliman, 2018:104). The study adhered to external validity when generalising the findings of the investigation to different contexts or situations (Kumar, 2014:160).

Theoretical validity

The study implemented theoretical validity through the conceptualisation and operationalisation of the key constructs. This research included a conceptual framework that provided structure to the study and allowed for the deduction of conclusions aligned with the objectives laid out for the study (Kumar, 2014:197; Cohen *et al.*, 2018:252). The research also incorporated a thorough



review of current, peer-reviewed scientific literature sources and business publications to use theory to describe and conclude the results of the study (Cohen *et al.*, 2018:252).

Measurement validity

Content, criterion, face, and construct validity comprise measurement validity (Swanepoel, 2015). Content and face validity occur before data collection, whereas criterion and construct validity are established post data collection (Leedy & Ormrod, 2020:129).

Content validity: The research aimed to achieve content validity by covering the phenomenon under investigation within the measurement instrument (Kumar, 2014:347). Therefore, the study included all primary constructs in the operationalisation table so that each scale item was tailored to the relevant research objective (Cohen *et al.*, 2018:252). Content validity is a non-statistical type of measurement validity that focuses on the sampling ability of the measurement instrument (De Vos, Strydom, Fouche & Delport, 2011). Therefore, existing scales previously tested for content validity were adapted in the questionnaire (De Vos *et al.*, 2011).

Construct validity: Construct validity is a statistical type of measurement validity that measures the contribution of each construct to the overall phenomenon (Kumar, 2014:347). The primary constructs of this study were the product, consumer and retailer attributes as well as category management. Each construct in the research was defined using an extensive, unbiased literature search and measured in the questionnaire (Cohen *et al.*, 2018:252).

Criterion validity: The research implemented criterion validity by relating the study's results to the external criterion as the study discussed the results and made conclusions (Cohen *et al.*, 2018:252). Criterion validity consists of predictive and concurrent validity (Kumar, 2014:347; Cohen *et al.*, 2018:252). Predictive validity refers to the ability of the measurement instrument to predict a specific outcome. Therefore, the pilot study results were compared to that of the main study to determine criterion validity.

3.9. Ethical considerations

De Vos et al. (2011) describes ethics as moral principles which provide rules and behavioural expectations about correct conduct. Swanepoel (2015) also highlights that ethics are a moral principle that guides the research process from beginning to end. The researcher implemented ethical practices throughout the study to achieve valid and reliable results. Before the research commenced, The University of Pretoria's Research Ethics Committee (Faculty of Natural and Agricultural Sciences) evaluated the study's scope, research proposal and measurement instrument. The committee provided ethical approval with the relevant approval number



NAS074/2020 that can be found in Addendum A. The study aimed to minimise researcher bias and uphold integrity throughout the process. The investigation conducted primary research via an electronic self-administered questionnaire. The questionnaire required the respondent's consent to participate in the study before the questionnaire could be started (Kelley, 2003; Kumar, 2014:353).

Before completing the questionnaire, the cover letter needed to be read by the respondents who were required to specify whether they agreed to the terms and conditions and would like to participate in the study or did not before the survey's remaining questions could be answered. Therefore, after reading the cover letter and agreeing to participate in the study, all respondents participated voluntarily in the research. The cover letter informed the respondents that their identity would remain anonymous as Kelley (2003) and Kumar (2014:223) recommend in terms of ethical requirements for survey research. Therefore, no name, identity number or contact information was collected from the respondents to decrease their concern with being associated with their answers. The cover letter also guaranteed that the respondents could choose not to answer specific questions or drop out of the survey without repercussions. No risk of harm would come to the researcher or the survey respondents throughout the process (Kelley, 2003; Kumar, 2014:223). The research objectively presented the study's findings and substantiated these using sources from the literature review (Kumar, 2014:355). The researcher also referenced all sources included in the literature review according to the Harvard method in the list of references. The study also avoided plagiarism and recognised the sources used by attaching a signed plagiarism declaration located in Addendum B.

3.10. Conclusion

The research design and methodology implemented for this study were carefully selected after consideration of all available options. This was done to ensure that valid and reliable results were obtained that were in line with the objectives and limitations of the study such as limited time and financial resources, and access to respondents during the nationwide COVID-19 lockdown. Respondents who matched the unit of analysis were targeted across South Africa using an electronic, self-administered questionnaire to collect and analyse data regarding the consumer's prioritisation of product and retailer attributes when making a breakfast cereal purchase and consumption decision. A high level of quality and ethical standards were also adhered to throughout the study to ensure acceptable research standards and the useability of the results by industry role-players.



CHAPTER 4: RESULTS AND DISCUSSION

This chapter presents the results of the study in terms of the formulated objectives and subobjectives. The data collected in this study details the influence of product, retailer and consumer
attributes in breakfast cereal purchase and consumption decisions. Each attribute was analysed
using descriptive statistics. The descriptive statistics entailed the use of measures of central
tendency (mean), frequencies, percentages and measures of variability (standard deviation and
variance) which are represented in both graphical and tabular form as well as a contextual
analysis for interpretation of the open-ended question. Industry-relevant sociodemographic
attributes and important product attributes were further analysed using inferential statistics. The
inferential statistics entailed the use of t-tests and analysis of variance (ANOVA) and where
significant relationships were identified, a Fisher's post-hoc LSD test was performed. These
results are presented in tabular form.

4.1. The demographic characteristics of the sample

Selected sociodemographic characteristics that were considered relevant to the investigation were included in Section A of the questionnaire. The respondent's gender, age, ethnicity, level of education, geographic location, home language, monthly household income, marital status, household size and household composition were collected as seen in Table 4.1. to provide a profile of the sample.



TABLE 4.1. DEMOGRAPHIC CHARACTERISTICS OF THE SAMPLE (N = 259)

Dimension	Frequency	Percentage
Gender		
Male	101	39%
Female	158	61%
Age	100	0170
21-30 years		T
<u> </u>	164	63%
31-40 years	34	13%
41-50 years	20	8%
51-60 years	29	11%
61 + years	12	5%
Population group		
White	220	85%
Black African	19	7%
Indian/Asian	19	7%
Coloured	1	0%
Level of education	Τ	T
Lower than Grade 12	0	0%
Grade 12 completed	73	28%
University completed	95	37%
Profes not to con	90	35%
Prefer not to say Geographic location	1	0%
Western Cape	51	20%
Northern Cape	0	0%
Eastern Cape	4	2%
North West	2	1%
Free State	1	0%
Mpumalanga	5	2%
Limpopo	2	1
Kwa-Zulu Natal	52	20%
Gauteng	142	55%
Home language		
English	172	66%
Afrikaans	72	28%
Ethnic South African Languages	15	6%
Average monthly household income		
Lowest (R0- R1 708)	6	2%
Second lowest (R1 708 - R7 417)	20	8%
Low emerging middle (R7 417 - R16 87)	40	15%
Emerging middle (R16 875 - R34 333)	65	25%
Realised middle (R34 333 - 58 917)	58	22%
Emerging affluent (R58 917 - R126 000)	64	25%
Prefer not to answer Marital status	6	2%
Single/ unmarried	137	53%
Married/ living with a partner	115	44%
Divorced/ widowed	7	3%
Household size	'	370
1 person	51	20%
2 people	92	36%
3 - 4 people	83	32%
5 + people	33	13%
Number of dependent children per household		
0 children	195	75%
1 child	21	8%
2 children	21	8%
3 + children	10	4%
Missing	12	5%



4.1.1. Gender

Gender was included in this study as differences exist among gender groups relating to food product selection and consumption (Chambers *et al.*, 2008). Respondents were asked to indicate their gender in a drop-down, multiple-choice question. The demographic distribution of the sample was 61% female (N =158) and 39%, male (N =101) as seen in Table 4.1. Although this split is not favourable in terms of representativeness, this is a positive outcome since females in South Africa are typically the primary food managers of the household. This means that they are responsible for food selection, purchasing, and preparation within the household as well as caring for and feeding children (Reddy & Moletsane, 2009). Therefore, they are likely to be more knowledgeable about their family's breakfast cereal purchasing and consumption behaviour and willing to share this information. Similarly, Ferreira (2015) also mentioned that when investigating consumer behaviour in South Africa, a larger ratio of females participating in said research should be viewed as advantageous due to the prominent role that females play in food-related decision-making for their families.

4.1.2. Age

Age influences consumer's breakfast cereal product selection and consumption (Kautra *et al.*, 2015) as food preferences change with age (Simon, 2018). Respondents were asked to indicate their current age on a sliding scale question with a minimum of 21 and a maximum of 65 according to the sampling criteria of the study. This criterion was included because these consumers were of an age where they were likely to be purchasing breakfast cereal for themselves or households and are likely to be making regular food purchase and consumption decisions as noted by Thiruvenkadam and Panchanatham (2016).

The age distribution of the sample was divided into brackets of nine years with generational cohorts in mind as seen in Table 4.1 because industry role-players use this information to target consumer segments with a personalised marketing mix (Chaney *et al.*, 2017). The majority (63%, N =164) of the sample was young consumers between the ages of 21 and 30, indicating a relatively young group of respondents within the millennial generational cohort. The remaining groups of respondents included 13% (N =34) between the ages of 31 and 40, 8% (N =20) between the ages of 41 and 50, 11% (N =29) between the ages of 51 and 60 and 5% (N =12) above the age of 61. Although the age distribution of the sample is not representative of the South African population (Statista, 2020b), data was gathered from all age groups within the unit of analysis to confirm differing food preferences across age groups.



4.1.3. Ethnicity

Cullen *et al.* (2007) noted that ethnicity influences food product selection and consumption decisions. Respondents were asked to indicate the population group they belonged to according to the Employment Equity Act No.55 of 1998 in a drop-down multiple choice question. They were also given the option not to specify their ethnicity due to the sensitive nature of the question. The population group of the study was predominantly White (85%, N =220). Black African (N =19) and Indian/ Asian (N =19) consumers comprised 7% of the respondents each. Although this split is not representative of the South African population (StatsSa, 2016), Johnson and Lee (2015) note that participation in online research by ethnic group is in line with the sample collected for this study.

4.1.4. Level of education

A consumer's level of education acts as an influencing factor in breakfast cereal product purchase and consumption decisions (Simon, 2018; Golub & Binkley, 2005; Hallström *et al.*, 2011; Bogue & Yu, 2009). Respondents in this study were asked to provide their highest level of education in a drop-down multiple choice question. As seen in Table 4.1, most of the sample was educated with 28% (N =73) of the respondents having completed Grade 12. 37% (N =95) had completed a university degree and 35% (N =90) had completed a postgraduate degree. Compared to the general South African population, this sample presented a more formal education (Statista, 2020c).

4.1.5. Geographic location

Although the respondent's geographic location was included in the questionnaire for sampling purposes rather than detailed analysis, a respondent's area of residence plays an important role in access to infrastructure and therefore, purchase and consumption decisions. Respondents were asked to specify their city of residence during the questionnaire in an open-ended question. Respondents from all provinces in South Africa were included in the sample due to the electronic nature of the measurement instrument and the significance of the study as it applies to all South African industry role-players, in particular retailers with multiple store branches. As seen in Table 4.1, 20% of respondents resided in the Western Cape (N =51) and Kwa-Zulu Natal (N =52) each and 55% of the respondents resided in Gauteng (N =142). The remaining respondents living in other provinces comprised 6% of the sample. Although the entire sample did not represent the South African population distribution, the majority of respondents were located in the Western Cape, Kwa-Zulu Natal and Gauteng which falls in line with the provincial population distribution of South Africa (Statista, 2020d).



4.1.6. Home language

Ferreira (2015) notes that home language influences a consumer's ability to understand societal and marketing messages and, therefore, their food product choices. Respondents were asked to specify their home language during the questionnaire from a drop-down, multiple-choice question. As seen in Table 4.1, most of the respondents (66%) spoke English (N = 172) at home, indicating their ability to understand the questionnaire in full. 28% of the respondents spoke Afrikaans (N = 72) at home with only 6% of the sample speaking the other South African national languages (N = 15).

4.1.7. Average monthly household income

Simon (2018) notes the influence of household income on consumer breakfast cereal decision-making specifically with regards to cereal prices, purchase frequency, evaluation of substitutes and discount behaviour. Respondents were asked to specify their average monthly household income on a sliding scale question rounded up to the nearest R1000. This question did not have a forced response due to the sensitive nature of disclosing income. As seen in Table 4.1. Only 2% (N =6) of the sample fell within the lowest income group in South Africa with 8% (N =20) falling within the second lowest group. 15% (N =40) of the sample were classified into the low emerging middle group and 25% (N =65) fell within the emerging middle classification. 22% and 25% of respondents monthly household income fell within the realised middle and emerging affluent income groups respectively. The average monthly household income of the sample was R40 990 which is higher than the national average for 2020 at R 22 387 (Trading Economics, 2020).

4.1.8. Marital status

Marital status and family structure influence consumer's breakfast cereal consumption practices (Hallström *et al.*, 2011). Respondents were asked to specify their marital status using a drop-down multiple choice question. As seen in Table 4.1, more than half (53%, N =137) of the respondents were single and unmarried, possibly due to the young age composition of the sample. 44% (N =115) of respondents were married or living with a partner while 3% (N =7) were divorced or widowed. This split is very similar to the marital status distribution for the country, which indicates that 49% of the South African population is single, 43% are married or living with a partner, 9% are divorced, separated or widowed (Statista, 2020f).

4.1.9. Household size

Household size is a significant contributor to food consumption behaviour in South Africa, particularly in terms of food expenditure where the larger the household, the more is spent on



food products (Sekhampu, 2012). Respondents were asked to specify the number of people living in their household on a sliding scale question. As seen in Table 4.1, 20% (N =51) of the sample live alone in single-person households and 36% (N =92) live in a double-person household. 32% (N =83) live in a household of three to four people and only 13% (N =33) live in a household of more than five people. The average household size of the sample was 2.75 which shows that respondents of the study had smaller household sizes than the national average which is at 3.3 members as of 2019 (StatsSA, 2016).

4.1.10. Household composition

Blissett and Fogel (2013) note that specific product attributes influence child acceptance of food products. Therefore, respondents were asked to specify the number of dependent children under the age of 18 in their household on a sliding scale question. As seen in Table 4.1, most (75%, N =195) of the respondents did not have children. This may be associated with the predominant young age and single/ unmarried status of the sample. 8% (N =21) of the sample had one child and another 8% (N = 21) had two children. 4% (N =10) of respondents had three or more children.

4.2. Purchasing and consumption behaviour of the sample

In South Africa, a rise in the sale of RTE breakfast cereals is evident (Mordor Intelligence, 2019; Trader's Friend, 2019). This is attributed to the convenience, availability and suitability for all family members as well as the global pandemic and lockdown (Kaur & Singh, 2014; Deloitte & Brands Eye 2020). Consumers' needs for products with longer shelf lives such as RTE breakfast cereals coupled with the industry growth have created a highly competitive environment for industry role players who need to understand how their target market purchases and consumes their products (Ratneshwar *et al.*, 1999). Therefore, it is highly important to explore and describe consumers' purchasing patterns within this product category. This section presents and discusses consumer purchase and consumption attributes in terms of the household shopper, purchase frequency, purchase occasion and the consumption occasion.

It should also be noted that the data for this study were collected between July and September of 2020, which fell within the South African COVID-19 nationwide lock-down. Under Level 4 and 5, consumer movement and ultimately spending was restricted.



TABLE 4.2. PURCHASE AND CONSUMPTION BEHAVIOUR OF THE SAMPLE (N = 259)

Dimension	N	Frequency
Individual responsible for the grocery shop	ping in the household	
Myself	116	45%
Spouse/ partner	12	5%
Sibling/ roommate	1	0%
Parent	50	19%
Other	6	2%
Myself and my spouse/ partner	70	27%
Missing	4	2%
Breakfast cereal monthly purchase frequer	псу	
0 times	18	7%
1 - 2 times	186	72%
3 - 4 times	47	18%
5 + times	8	3%
Breakfast cereal weekly consumption frequency	iency	
0 times	2	1%
1- 2 times	5	2%
3 - 4 times	10	4%
5 + times	19	7%
Missing	223	86%
Breakfast cereal consumption occasion		
Breakfast	220	85%
Lunch	3	1%
Dinner	1	0%
Snack	35	14%

• The household shopper

Global figures indicate that during 2019, consumers from developed countries such as the United States of America and the United Kingdom shared the responsibility of grocery shopping between adults in the household (Statista, 2021). To investigate the primary target market of manufacturers, suppliers and retailers in South Africa, respondents were asked to select the household member responsible for grocery shopping on a drop-down multiple-choice question.

As seen in Table 4.2, 45% (N =116) of respondents indicated that they were primarily responsible for their household grocery shopping, whereas a combined total of 26% (N =69) had either a spouse, partner, parent, sibling or roommate complete the shopping. Interestingly, only 27% (N =70) of respondents indicated that they share the responsibility of grocery shopping with their spouse or partner. This could indicate that compared to global standards, South African consumers still conform to traditional values where grocery shopping is commonly done by one person who is likely to be female (Ferreira, 2015).

It should be considered that the current COVID-19 pandemic and the nationwide lockdown during the time of data collection, might also have had some impact on respondents shopping behaviour (Deloitte & Brands Eye, 2020).



• Purchase frequency

Recent figures presented by Kellogg's (2015) indicated that the purchase frequency of RTE breakfast cereals may fluctuate due to factors such as household size, portion size and consumption frequency. Overall, due to the habitual nature of breakfast cereal purchases characterised by the low involvement, risk and cost nature of the products, purchase frequency in this product category is relatively high (Solomon, 2015:32; Tanner & Raymond, 2018:92). To investigate the sample's purchase frequency, respondents were asked to specify the number of times per week that they purchased breakfast cereals on a sliding scale question.

Results revealed that 21% (N=55) of respondents purchased breakfast cereal more than four times per month (weekly) compared to 7% (N =18) who did not purchase breakfast cereal at all. The majority of the sample (72%, N=186) indicated that they purchase breakfast cereal once or twice per month, which could be due to their preferred monthly shopping trips/patronage or due to lower volumes consumed per household.

Consumption frequency

Simon (2018) notes that breakfast cereals have achieved more than 90% household penetration globally. This may be attributed to the fact that consumption of RTE breakfast cereals contribute to a healthy lifestyle as well as the nutritional education and marketing message that breakfast is the most important meal of the day (Hallstrom *et al.*, 2011; Wiles, 2017; Goglia *et al.*, 2010; Seema & Aparna, 2017). Therefore, to investigate the respondent's consumption frequency, they were asked to specify the number of times per week that they ate breakfast cereals on a sliding scale question.

As seen in Table 4.2 7% of respondents (N = 19) ate cereal more than five times per week. 4% (N = 10) ate cereal three to four times per week whereas 2% (N = 5) ate cereal once or twice per week. Only 1% of respondents (N = 2) indicated that they do not consume cereal at all. However, it should be noted that 86% of respondents (N = 223) did not answer this question, invalidating the results of this purchase and consumption factor.

Consumption occasion

Since breakfast cereals are no longer only consumed in the morning, industry role players are becoming more interested in understanding how these products are consumed across the day for different reasons for both marketing and new food product development (Spence, 2017). Therefore, to investigate the different consumption occasions for breakfast cereals, respondents were asked to specify the meal type in which they were most likely to eat cereal on a drop-down multiple-choice question.



As seen in Table 4.2 the majority (85%, N =220) ate cereal at breakfast time, with only 1% (N =3) of respondents indicated that they ate cereal for either lunch or dinner. 14% (N =35) of respondents ate cereal as a snack. This aligns with the growth in demand for breakfast cereal-based snack products that suit the need for convenience (Euromonitor International, 2019; Lee et al., 2007).

4.3. Results

The results are discussed and presented following the objectives laid out for the study. Section 4.3.1. highlights the consumers' prioritisation of product attributes (intrinsic and extrinsic attributes) when purchasing and consuming RTE breakfast cereals. This is followed by Section 4.3.2. which discusses the results of the consumers' prioritisation of retailer attributes (marketing mix attributes). The results section concludes by presenting findings regarding possible underlying relationships between industry-relevant consumer-related attributes and important product-related attributes and how this might impact consumers RTE breakfast cereal purchase and consumption decisions (Section 4.3.3).

4.3.1. The importance of product attributes in breakfast cereal purchase and consumption decisions (Objective 1)

To investigate consumer prioritisation of product attributes in terms of intrinsic and extrinsic attributes, respondents were presented with a matrix of 44 statements in Section B of the questionnaire. Respondents were asked to rate each statement on a Likert-type scale based on importance where 1 = not important at all and 5 = extremely important. Included scale items represented ten prominent food product attributes (as identified from literature) of which three were intrinsic and seven extrinsic.

Data analysis included the calculation of means, standard deviation and variance explained for the combined group of respective product attributes (i.e. intrinsic and extrinsic) but also per specific attribute dimensions (i.e. intrinsic dimensions = taste, texture, and nutritional value and extrinsic dimensions = country of origin, pack size, brand, packaging, brand image, labelling and price). The means were interpreted as follows: $M \ge 5$: extremely important, M4<5: very important, M3<4: moderately important, M2<3: slightly important, M<2 = not important at all. The highest means for each product attribute are highlighted in red in Table 4.3-4.9.

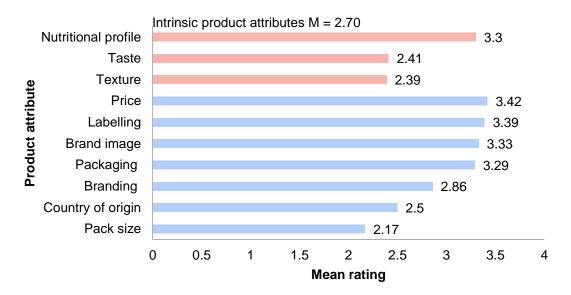


FIGURE 4.1 THE IMPORTANCE PLACED ON INTRINSIC VERSUS EXTRINSIC PRODUCT ATTRIBUTES IN BREAKFAST CEREAL PURCHASE AND CONSUMPTION DECISIONS.

The results in Figure 4.1. presents that overall respondents prioritised extrinsic product attributes (M=2.92) over intrinsic product attributes (M=2.70) when making a breakfast cereal purchase and consumption decision. These findings were noteworthy as Swanepoel (2015) found that when consumers selected niche food products, they were more likely to prioritise intrinsic product attributes. It can, therefore, be assumed that due to the habitual nature of RTE breakfast cereal purchases, consumers tend to focus more on extrinsic product attributes.

4.3.1.1. The importance of intrinsic product attributes in breakfast cereal purchase and consumption decisions (Objective 1.1)

When shopping for food products, consumers tend to rely on previous experiences in terms of intrinsic product attributes such as taste, texture and nutritional profile to facilitate their decision-making process (Samsudin *et al.*, 2017; Grunert, 2002; Symmank, 2018).

In terms of specific intrinsic food product attributes, results, as presented in table 4.3, indicated that respondents rated the nutritional profile (M = 3.30) as more important compared to other attributes such as taste (M = 2.41) and then texture (M = 2.39) that was respectively rated as only slightly important. This is interesting to note as Gracia and Barreiro-Hurlé (2019) have highlighted the fact that modern consumers are becoming more health-conscious and are, therefore, starting to demand healthier food options. Wiles (2017) also highlighted that consumers benefit nutritionally by consuming breakfast cereals as these products can be positively associated with high micronutrient content and overall nutritional benefits.



TABLE 4.3. DESCRIPTIVE ANALYSIS OF INTRINSIC PRODUCT ATTRIBUTES

Attribute	Dimension	N	Mean	Standard Deviation	Standard Error	Variance
Nutritional profile (M	Fibre content	259	3.60	1.15	0.07	1.33
= 3.30)	Sugar content	259	3.37	1.35	0.08	1.83
	Vitamin and mineral content	259	3.32	1.35	0.08	1.81
	Protein content	259	3.17	1.32	0.08	1.74
	Energy value	259	3.02	1.33	0.08	1.77
Taste (M = 2.41)	Natural taste	259	3.07	1.19	0.07	1.42
	Sweet taste	259	2.57	1.18	0.07	1.39
	Fruity taste	259	2.20	1.24	0.08	1.53
	Savoury taste	259	1.79	1.01	0.06	1.01
Texture (M = 2.39)	Crunchy texture	259	3.37	1.14	0.07	1.30
	Creamy texture	259	2.24	1.24	0.08	1.55
	Chewy texture	259	2.03	1.11	0.07	1.24
	Smooth texture	259	1.92	1.12	0.07	1.26

Findings relating to the individual scale items (see table 4.3) revealed that in terms of **nutritional profile**, respondents rated all of the indicators as moderately important i.e., fibre content (M = 3.60), sugar content (M = 3.37), vitamin and mineral content (M = 3.32), protein content (M = 3.17), and lastly energy (KJ) content (M = 3.02). In light of the reported health benefits of cereals, nutritional profiles of RTE breakfast cereals are often used by marketers to connect with their target markets (Schwartz, 2008).

In terms of **taste**, which is considered to have a major influence on consumer acceptance of food products (Klopčič *et al.*, 2020), and affect how breakfast cereals perform in the market (Heiniö *et al.*, 2016), respondents seem to prioritise a natural taste by rating it as moderately important (M = 3.07) compared to the other indicators which were all rated as slightly important i.e., sweet taste (M = 2.57) and fruity (M = 2.20). A savoury taste (M = 1.79) was rated as not important at all.

Findings pertaining to **texture** presented that respondents prioritise crunchy textures by rating them as moderately important (M = 3.37). Other indicators of texture such as a creamy texture (M = 2.24) and chewy texture (M = 2.03) were rated as slightly important with a smooth texture rated as not important at all (M = 1.92). The product texture is important to consumers when selecting a breakfast cereal as this attribute is associated with the product quality and freshness (Heiniö *et al.*, 2016). Breakfast cereal texture is a significant determinant of acceptance by different age groups due to changes in oral physiology (Song *et al.*, 2016).



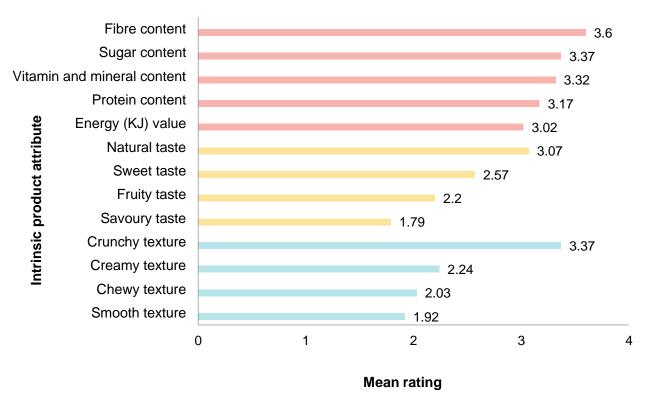


FIGURE 4.2. THE IMPORTANCE OF INTRINSIC PRODUCT ATTRIBUTES IN BREAKFAST CEREAL PURCHASE AND CONSUMPTION DECISIONS (N = 259)



4.3.1.2. The importance of extrinsic product attributes in breakfast cereal purchase and consumption decisions (Objective 1.2)

Extrinsic product attributes often influence consumers' food selection as these are often viewed as indicators of quality and value (Teas & Agarwal, 2000; Grunert, 2002).

TABLE 4.4. DESCRIPTIVE ANALYSIS OF EXTRINSIC PRODUCT ATTRIBUTES

Attribute	Dimension	N	Mean	Standard Deviation	Standard Error	Variance
Price	Good value for money	259	4.01	1.00	0.06	1.00
(M = 3.42)	Affordable price	259	3.88	1.03	0.06	1.06
,	Cheap price	259	3.05	1.21	0.07	1.46
	Expensive price	259	2.74	1.18	0.07	1.39
Labelling	Best-before, use-by, sell-by date (date coding)	259	3.76	1.32	0.08	1.73
(M = 3.39)	Ingredients list	259	3.65	1.23	0.08	1.51
,	Nutritional table	259	3.51	1.29	0.08	1.65
	Statements and claims	259	3.07	1.24	0.08	1.53
	Allergens	259	2.94	1.56	0.10	2.45
Brand	A brand that makes good quality products	259	3.93	0.95	0.06	0.89
image	A brand that makes a good impression	259	3.38	1.12	0.07	1.25
(M = 3.33)	A brand I am highly aware of	259	3.10	1.06	0.07	1.13
	A brand that stands out	259	2.90	1.14	0.07	1.29
Packaging	Hygienic packaging	259	3.98	1.14	0.07	1.30
(M = 3.29)	Informative packaging	259	3.59	1.22	0.08	1.48
	Environmentally friendly packaging	259	3.54	1.25	0.08	1.57
	Convenient packaging	259	3.48	1.08	0.07	1.16
	Attractively designed packaging	259	2.93	1.15	0.07	1.33
	Colourful packaging	259	2.24	1.14	0.07	1.31
Branding	A brand I am familiar with	259	3.48	1.11	0.07	1.24
(M = 2.86)	A brand I frequently purchase	259	3.33	1.17	0.07	1.36
	A national brand	259	2.65	1.22	0.08	1.49
	A house brand	259	1.97	1.02	0.06	1.04
Country of	Locally produced	259	2.85	1.23	0.08	1.50
origin	A clearly marked country of origin	259	2.70	1.34	0.08	1.78
(M = 2.50)	A country of origin associated with good quality	259	2.51	1.26	0.08	1.58
	products	0.50	4.00	4.0=	0.07	
L	A prestigious country of origin	259	1.93	1.07	0.07	1.15
Pack size	Standard box pack size	259	3.00	1.22	0.08	1.50
(M = 2.42)	Case pack size	259	2.78	1.14	0.07	1.30
	Refill bag pack size	259	2.18	1.26	0.08	1.60
	Single-serving pack size	259	1.73	1.07	0.07	1.14

In terms of specific extrinsic food product dimensions, Table 4.4, presents that in order of importance, respondents prioritised price (M = 3.42), labeling (M = 3.39), brand Image (M = 3.33) and packaging (M = 3.29) as moderately important over branding (M = 2.85), country of origin (M = 2.50) and pack size (M = 2.17) which were rated as slightly important when making a breakfast cereal purchase and consumption decision.

Findings relating to the individual scale items (Figure 4.3) revealed that, in terms of **price**, respondents prioritise products that are good value for money, as this indicator was rated as very important (M = 4.00). Similarly, respondents found an affordably (M = 3.88) or cheap (M = 3.05) priced cereal to be moderately important. On the other hand, a dimension that was not rated



favourably was expensive pricing (M =2.74) which was rated by respondents to be slightly important. These findings are in line with Chaudhury (2010) who states that the price of breakfast cereal significantly impacts the consumer's intention to purchase. This is often because, within the breakfast cereal category, consumers are particularly price-sensitive (Golub & Binkley, 2005; Dhar *et al.*, 2001; Li *et al.*, 2018).

In terms of **labelling**, respondents rated almost all of the indicators as moderately important (i.e., date coding (M = 3.78), ingredients list (M = 3.65), nutritional table (M = 3.51), statements and claims (M = 3.07)). The only indicator that was rated as slightly important was allergens (M = 2.94). This could be attributed to a low percentage of consumers being allergic to wheat, barley, rye, maize, rice and oats that are commonly found in breakfast cereals (Gilissen, Van der Meera & Smulders, 2014). These findings confirmed the notion that consumers are becoming more interested in food labels and utilise the labels when making a food purchase or consumption decision (Silayoi & Speece, 2005; Mutsikiwa *et al.*, 2013).

When considering **brand image** findings presented that respondents prioritised a brand that makes good quality products (M =3.93), makes a good impression (M =3.38) and a brand they were highly aware of (M =3.10). All of these indicators were rated as moderately important when making a breakfast cereal purchase and consumption decision. On the other hand, respondents rated a brand that stands out as slightly important (M = 2.90). Because the brand image is highly regarded by consumers when considering to trial and commit to a product, it is important for retailers to ensure they are associated with a reputable and credible image (Wijaya, 2013).

Product **packaging** creates expectations in the consumer's mind of the product and significantly influences product selection (Silayoi & Speece, 2005; Ampuero & Vila, 2006). Findings indicated that respondents placed a moderate level of importance on hygienic (M =3.98), informative (M =3.59), environmentally friendly (M = 3.54) and convenient (M =3.48) packaging. Packaging that is attractively designed (M =2.93) and colourful (M =2.24) seemed to be only slightly important as these indicators were rated as only slightly important when making a breakfast cereal purchase and consumption decision.

Acknowledging the importance of **branding** in terms of its ability to elicit an emotional consumer response and decrease decision-making time and effort is important (Mazibuko, 2010) and findings can be summarized as follows. Respondents indicated that they prioritise not only familiar brands (M = 3.48) but also brands recently frequented (M = 3.33). Results pertaining to generic brands were rated as less important as national brands (M = 2.65) was rated as only slightly important and a house brand (M = 1.97) as not important at all. These results fall in line with the findings of Mazibuko (2010) who noted that South African consumers are often not willing



to switch brands of breakfast cereals due to the high-cost implications. These consumers trust frequently purchased, familiar brands due to consistent high quality and a long-term relationship established with the brand.

Results pertaining to respondents' prioritisation of **country of origin** showed that the respondents viewed breakfast cereals that were locally produced (M = 2.85) with a clearly marked country of origin (M = 2.70) or a country of origin that is associated with good quality products (M = 2.51) as slightly important. On the other hand, they rated a prestigious country of origin (M = 1.93) as not important at all when making a breakfast cereal purchase and consumption decision. These findings were interesting to note as many studies present that consumers often view country of origin as an indicator of quality (Balabanis & Diamantopoulos, 2004; Kalicharan, 2014; Maheswaren, 2004; Baker & Ballington, 2002).

The findings presented in terms of **pack size** which, is a visual factor that aids consumers in selecting breakfast cereal products (Castro *et al.*, 2018; Hassan *et al.*, 2012; Dominick *et al.*, 2018), showed that respondents prioritise standard box pack sizes (M = 3.00) over refill bags (M = 2.18). Interestingly, indicators pertaining to bulk i.e., case packs (M = 1.78) and single-serving pack sizes (M = 1.73) was rated as not important at all.



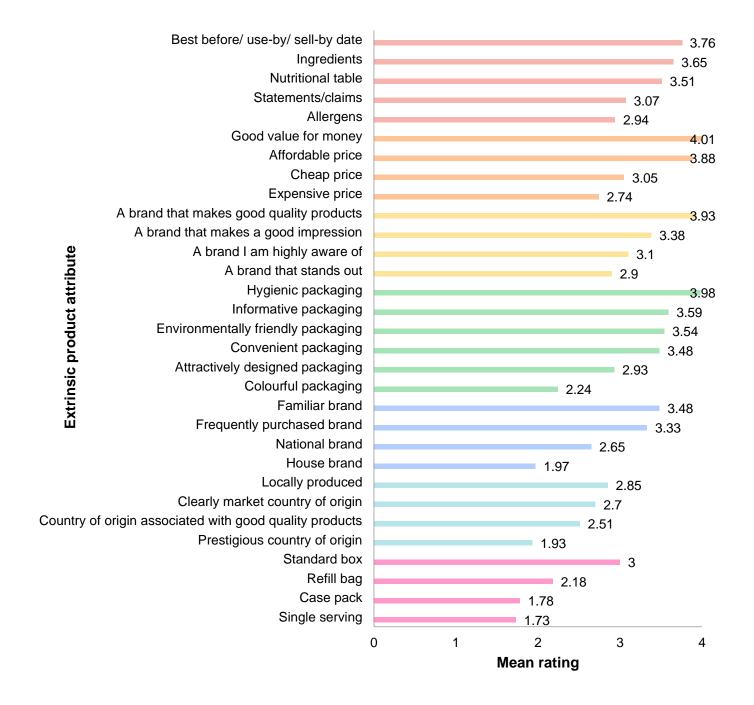


FIGURE 4.3. THE IMPORTANCE OF EXTRINSIC PRODUCT ATTRIBUTES IN BREAKFAST CEREAL PURCHASE AND CONSUMPTION DECISIONS (N = 259).

To support and triangulate the findings presented above, respondents were also prompted (at the end of Section B of the questionnaire), to rank the previously assessed intrinsic and extrinsic product attributes in order of importance. A ranking of one was viewed as most important and a ranking of ten was least important. Table 4.5 presents the results. Contradictory to the previous results in section 4.3.1, this time around consumers seemed to prioritised intrinsic attributes over extrinsic, as taste, texture and nutritional profile were ranked amongst the top four. Price was



once again highlighted as the most important extrinsic attribute, with the rest of the extrinsic attributes being ranked as less important. It should be noted that these rankings are not in line with the ratings assigned to the product attributes when respondents were asked to rate each individually (i.e. section 4.3.1) and suggest that when consumers are confronted with attributes simultaneously their decision making and ultimate prioritisation is different.

TABLE 4.5. RANKING OF PRODUCT ATTRIBUTES BREAKFAST CEREAL PURCHASE AND CONSUMPTION DECISIONS (N = 259)

Product Attribute	Mean Ranking	Standard Deviation	Variance
Taste	2.17	1.52	2.32
Price	3.89	2.45	6.02
Texture	3.95	1.94	3.77
Nutritional profile	4.57	3.04	9.26
Pack size	4.82	2.24	5.01
Brand	5.56	2.23	4.96
Packaging	6.46	1.65	2.74
Labelling	7.27	2.03	4.13
Brand image	7.43	1.99	3.97
Country of origin	8.88	1.91	3.65

In Section C of the questionnaire, respondents were provided with a planogram (Figure 4.4) showing some of the most commonly sold breakfast cereals in South Africa. They were asked to select the product they were most likely to purchase and provide a reason for their selection in an open-ended question.



FIGURE 4.4. PLANOGRAM OF SOUTH AFRICAN BREAKFAST CEREALS

The following presents a summary of the main themes derived from the contextual analysis that was performed on the answers provided in the open-ended question. Results confirmed once again that respondents place a great emphasis on the nutritional profile as this attribute was mentioned most frequently when citing reasons for their product selection. Those that specified nutritional aspects also detailed that they often look for, healthier, high fibre, high protein and low sugar cereal options. Branding was the second most important attribute mentioned and it seemed



that consumers prioritise brands that are familiar and are frequently purchased as these were also highlighted in their selections on the planogram image, i.e. respondents prioritised options in the planogram that resembled popular brands.

Other themes or attributes that emanated from the analysis included:

- Taste, in particularly amongst those consumers who preferred the chocolate flavoured products in the planogram;
- The nostalgia that could be related to brand image and;
- Convenience.

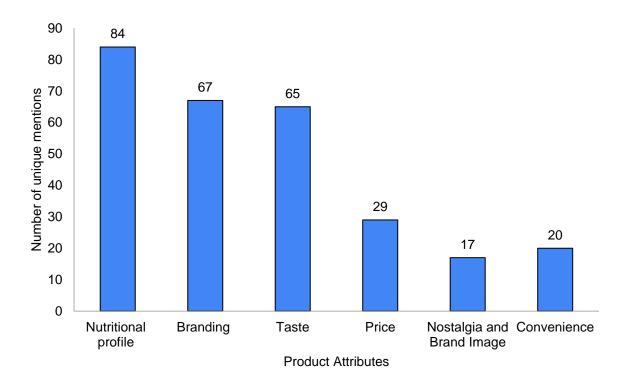


FIGURE 4.5 THE NUMBER OF UNIQUE RESPONSE MENTIONS PER PRODUCT ATTRIBUTE (N = 259)



4.3.2. Importance of retailer attributes in breakfast cereal purchase and consumption decisions (Objective 2)

Recent research highlighted that retailer attributes such as those found in the marketing mix plays a fundamental role in consumer decision-making and ultimately product selection (Makhitha & Khumalo, 2018; Skippari *et al.*, 2017; Beneke *et al.*, 2012). Objective 2 aimed at attaining insight into the role of these attributes during consumers' selection and ultimate purchase of RTE breakfast cereals. Section B of the questionnaire presented a list of twelve scale items that represented four selected retailer attributes, as identified from literature (i.e. promotional activity, product assortment and retailer format). A five-point Likert-type level of importance scale with 1 being not important and 5 being very important was used to capture the data. The data analysis of retailer attributes and their dimensions involved the calculation of means, standard deviation, standard error of the mean and variance. To standardise the findings, the means were interpreted as follows. $M \ge 5$: extremely important, M4<5: very important, M3<4: moderately important, M2<3: slightly important, M<2 = not important at all.

TABLE 4.6. DESCRIPTIVE ANALYSIS OF RETAILER ATTRIBUTES

Attribute	Dimension	N	Mean	Standard Deviation	Standard Error	Variance
Promotional	A store with a loyalty program	259	3.35	1.24	0.08	1.44
activity	A store with frequent promotions	259	3.29	1.21	0.08	1.48
(M = 3.16)	A store with informative advertisements	259	2.84	1.20	0.07	1.44
Product assortment	A store with a wide variety of breakfast cereal types to choose from	259	3.17	1.25	0.08	1.55
(M = 3.00)	A store with a wide variety of breakfast cereal flavours to choose from	259	2.94	1.25	0.08	1.57
	A store with a deep assortment of breakfast cereal variants to choose from	259	2.89	1.24	0.08	1.53
Retailer	A grocery store	259	3.64	0.98	0.06	0.96
format	A hypermarket	259	2.69	1.17	0.07	1.36
(M = 2.21)	A specialty store	259	2.31	1.12	0.07	1.25
	A discount retailer	259	1.92	0.98	0.06	0.96
	A convenience store	259	1.59	0.78	0.05	0.61
	A spaza shop/street vendor	259	1.10	0.41	0.03	0.17

Findings as presented in Table 4.6, indicate that respondents rated promotional activity (M =3.16) and a wide product assortment (M =3.00) as moderately important when selecting RTE breakfast cereals. Hence, it could be interpreted that consumers prefer to shop at a retailer with some kind of promotional activity and wide product assortments. Results pertaining to retailer format (M =2.21) showed that respondents place less importance on this attribute.

Findings relating to the individual scale items revealed that in terms of **promotional activity**, a store with a loyalty program (M =3.35) and frequent promotions (M =3.29) is considered moderately important when making a breakfast cereal purchase and consumption decision. Whereas, a store with informative advertisements (M =2.84) are only slightly important to



respondents. These results could be attributed to the notion that promotional activity significantly influences retailer patronage and purchase intention, especially if the consumers purchase regularly from the product category (Blut *et al.*, 2018; Dhar *et al.*, 2001).

In terms of the **product assortment**, respondents rated, a store with a wide variety of breakfast cereals (M =3.17) as moderately important, whereas a store with a wide variety of breakfast cereal flavours (M =2.94) or a store with a deep assortment of breakfast cereal variants (M =2.89) was considered to be only slightly important when selecting RTE breakfast cereals. These findings are supported by findings in Blut *et al.* (2018), who noted that the size of the assortment carried by a store significantly affects retailer patronage and intention to purchase.

Results pertaining to **retailer format** indicated that respondents were more likely to shop for RTE breakfast cereals in grocery stores as they rated this format as important and most preferred (M = 3.64). Hypermarkets and specialty stores were deemed as less preferred as they were rated as only slightly important. Discount, convenience and street vendors were viewed as least preferred due to them being rated as not important at all (M = <2) possibly due to the high-income distribution of the study population. Dawson, (2013) confirmed that store format affects a consumer's in-store product selection. It was also noted that consumers select a retailer while considering format in a dynamic process that involves information processing to make a selection (Sinha & Banerjee, 2004; Leszczyz, *et al.*, 2000; Sinha *et al.*, 2005).



FIGURE 4.6. THE IMPORTANCE OF RETAILER ATTRIBUTES IN BREAKFAST CEREAL PURCHASE AND CONSUMPTION DECISIONS (N = 259).



4.3.3. The importance of consumer attributes in breakfast cereal purchase and consumption decisions (Objective 3)

As noted by Simon (2018) sociodemographic attributes are known to influence food product selection and consumption. These attributes are also predictors of consumer spending (Vilčeková & Sabo, 2013) as they influence the evaluation of important product attributes, resulting in a final product selection and purchase (Li *et al.*, 2015). Industry-relevant sociodemographic attributes are utilised by manufacturers, suppliers and retailers to segment the target market (Trinh *et al.*, 2009). These role-players utilise loyalty schemes to access information about their consumers specifically some of their sociodemographic criteria as well as their prioritisation of particular product attributes as they make purchases which are analysed in the form of basket data (Trinh *et al.*, 2009; Brijs *et al.*, 2004). However, consumers are more likely to specify information such as gender, age and household size than detail their status of sensitive attributes like household income and ethnicity according to Graeff and Harmon (2002).

When investigating consumer decision making of breakfast cereals, the influence of consumer attributes (i.e., sociodemographic characteristics) cannot be ignored (Simon, 2018). Steptoe *et al.* (1995) noted that besides food availability and access, consumers' sociodemographic characteristics, as well as purchasing behaviours, should be viewed as dominant precursors to food product selection. A more recent study highlighted the significant change in grocery shopping amongst consumers in emerging economies due to an increase in the per capita disposable income (Mittal *et al.*, 2011). Therefore, it is undeniable that consumer profiles today, differ significantly from those of years gone by (Ferreira, 2015).

Overall consumers are more educated and empowered, resulting in dynamic market behaviour that needs to be understood and proactively managed. This understanding leads to emerging pockets of opportunity that could be the reason for a retailer's competitive advantage according to Lobaugh *et al.* (2019), Hollander *et al.* (2018) Koutra *et al.* (2015) and Beek *et al.* (2008). Within the breakfast cereal category, consumers are more demanding than ever with increased expectations regarding specific product attributes as well as the personalisation of the marketing mix. This requires industry role-players to adapt previous marketing strategies to a more focused and customer-centric approach in terms of category management which involves consumer segmentation.

Objective 3, therefore, aimed at revealing possible underlying relationships between industry-relevant sociodemographic characteristics and important product attributes as identified in Section 4.3.1 (i.e. nutritional profile, labelling, brand image and packaging) that could be considered as possible precursors for RTE breakfast cereal selection. For the purpose of this



study industry-related attributes included gender, age, household income and household size as these attributes are deemed relevant by current retailers in SA. Data analysis involved performing t-tests and Anova's. Where significant relationships were identified (p≤0.05), a post hoc LSD test was conducted to further investigate these relationships.

4.3.3.1. Significant relationships between industry-relevant sociodemographic factors and important product attributes as a possible precursor for breakfast cereal purchase and consumption decisions (Objective 3.1.).

Table 4.7. presents the results pertaining to underlying relationships between the selected sociodemographics and important product attributes as identified in section 4.3.1. Significant relationships are highlighted in blue and the highest mean per sociodemographic group is highlighted in red. Findings are discussed in terms of the industry-relevant sociodemographic attributes.



TABLE 4.7. T-TEST AND ANOVA TABULATION BETWEEN INDUSTRY-RELEVANT SOCIODEMOGRAPHIC ATTRIBUTES AND IMPORTANT PRODUCT ATTRIBUTES

produ (M > 3	ict atti 3)	ributes	,		rinsic p	roduct	attribute	es (M > 3	3)					
	-	ofile		_		Price	40			_			-	
		CEM		-	CEM	_		CEM	_		CEM	_	-	SEM
					_			-			-			0.06
														0.08
														0.05
	3.30	0.06		3.39	0.06		3.42	0.05		3.33	0.05		3.29	0.05
0.00			0.00			0.25			0.04			0.00		
N	М	SEM	N	М	SEM	N	М	SEM	N	М	SEM	N	М	SEM
164	3.22	0.08	164	3.26	0.08	164	3.46	0.06	164	3.39	0.07	164	3.35	0.06
34	3.69	0.17	34	3.63	0.19	34	3.44	0.15	34	3.27	0.15	34	3.46	0.12
20	3.55	0.20	20	3.66	0.22	20	3.40	0.25	20	3.50	0.19	20	3.21	0.16
29	3.12	0.15	29	3.43	0.16	29	3.10	0.16	29	3.10	0.17	29	2.95	0.15
12	3.25	0.16	12	3.80	0.21	12	3.54	0.20	12	2.90	0.21	12	3.11	0.19
259	3.30	0.06	259	3.39	0.06	259	3.42	0.05	259	3.33	0.05	259	3.29	0.05
		0.08			0.10			0.32			0.16			0.06
N	М	SEM	N	М	SEM	N	М	SEM	N	М	SEM	N	М	SEM
6	3.23	0.38	6	3.47	0.31	6	3.67	0.37	6	3.33	0.25	6	3.42	0.36
20	3.44	0.23	20	3.35	0.23	20	3.59	0.17	20	3.45	0.17	20	3.45	0.17
40	3.31	0.18	40	3.42	0.18	40	3.72	0.12	40	3.32	0.14	40	3.32	0.13
65	3.27	0.14	65	3.31	0.12	65	3.51	0.10	65	3.23	0.12	65	3.18	0.09
58	3.26	0.13	58	3.28	0.15	58	3.31	0.12	58	3.29	0.11	58	3.32	0.11
64	3.36	0.11	64	3.59	0.12	64	3.14	0.11	64	3.38	0.11	64	3.32	0.09
6	2.73	0.45	6	2.90	0.61	6	3.54	0.47	6	3.92	0.29	6	3.14	0.31
259	3.30	0.06	259	3.39	0.06	259	3.42	0.05	259	3.33	0.05	259	3.29	0.05
0.86		•	0.53	•		0.02			0.64		•	0.85	•	
T NI	L N 4	LCEM	NI.	I N 4	CEM	l NI	L N 4	CEM	l NI	N 4	LCEM	l NI	T N4	SEM
		_			_			_			_			
														0.08
			_											0.09
														0.08
259	3.30	0.13	259	3.39	0.17	259		0.14	259	3.33	0.14	259	3.29	0.13
							3 47							
	Produ (M > 3 Nutrit M = 3. N 158 101 259 0.00 N 164 34 20 29 12 259 N 6 20 40 65 58 64 6 259 0.86 N	N	Nutritional profile M = 3.30 M SEM 158 3.44 0.08 101 3.07 0.09 259 3.30 0.06 0.00 0.00 N M SEM 164 3.22 0.08 34 3.69 0.17 20 3.55 0.20 29 3.12 0.15 12 3.25 0.16 259 3.30 0.06 0.08 N M SEM 6 3.23 0.38 20 3.44 0.23 40 3.31 0.18 65 3.27 0.14 58 3.26 0.13 64 3.36 0.11 6 2.73 0.45 259 3.30 0.06 0.86 N M SEM 51 3.38 0.16	product attributes (M > 3) Nutritional profile M = 3.30 M = 3. N M SEM N 158 3.44 0.08 158 101 3.07 0.09 101 259 3.30 0.06 259 0.00 0.00 N M SEM N 164 3.22 0.08 164 34 3.69 0.17 34 20 3.55 0.20 20 29 3.12 0.15 29 12 3.25 0.16 12 259 3.30 0.06 259 0.08 0.08 N 6 3.23 0.38 6 20 3.44 0.23 20 40 3.31 0.18 40 65 3.27 0.14 65 58 3.26 0.13 58 64 3.36 0.1	Nutritional profile Labelling M = 3.30 M = 3.87 N	Nutritional profile	Nutritional profile M = 3.30	Nutritional profile M = 3.30	Nutritional profile M = 3.30	Nutritional profile M = 3.87	Number N	Nutritional profile Habelling Habell	N	N

M* = Mean maximum of 5; SEM = Standard error of the mean; p − values indicate significant relationships, (p≤0.05)

Gender

Results derived from the t-test conducted (Table 4.7) revealed significant relationships between gender and the following product attributes, nutritional profile (p = 0.00), labelling (p = 0.00), brand image (p = 0.04) and packaging (p = 0.00). It could therefore be assumed that gender can be considered as a possible precursor for consumers' prioritisation of these intrinsic and extrinsic attributes when selecting RTE breakfast cereals. No significant relationships could be found between the sociodemographic attribute of gender and the product attribute of price (p = 0.25). It can, therefore, be concluded that gender cannot be considered as a possible precursor for consumers' prioritisation of price when selecting RTE breakfast cereals.



Results from the post hoc LSD test (Table 4.8) that was conducted based on the significant relationships identified, revealed that females were more likely to prioritise the nutritional profile (particularly the vitamin and sugar content) when selecting RTE breakfast cereals compared to Males). Females were also more likely to prioritise product labelling (in particularly date coding) compared to men. These relationships may be because females are more likely to read food labels than males (Koen et al., 2016; Campos et al., 2011). Specifically, females are more interested in labelling information because they are more health-conscious than males (Silayoi & Speece, 2005; Satia et al., 2005; Koen et al., 2016). Females tend to focus on labelling information of RTE breakfast cereals to identify unnatural ingredients (Simon, 2018). Concerning brand image, females were also more likely to prioritise this attribute (in particularly a brand they were highly aware of and a brand that makes good quality products) compared to males. This may be because females are more likely to consider the quality of a breakfast cereal product before purchasing (Simon, 2018). In terms of product packaging, females placed significantly more importance on this attribute (in particularly hygienic and informative packaging) compared to males. These results are in line with the study conducted by Simon (2018) who found that females were more likely to check packaging dimensions than males before purchasing.

TABLE 4.8. THE INFLUENCE OF GENDER IN CONSUMER PRIORITISATION OF SIGNIFICANT PRODUCT ATTRIBUTES

			M	Mean difference	SEM	p-value
Product attribute	e: Nutritional profile					
Female $M = 3.20$	Energy (KJ) content	Male	2.75	0.44	0.17	0.09
Female M = 3.47	Vitamin and mineral content	Male	3.07	0.41	0.17	0.02
Female M = 3.63	Sugar content	Male	2.96	0.67	0.17	0.00
Female M = 3.19	Protein content	Male	3.14	0.05	0.17	0.76
Female M = 3.71	Fibre content	Male	3.44	0.27	0.15	0.06
Product attribute	e: Labelling					
Female M = 3.91	Best-before, use-by, sell-by date (date coding)	Male	3.53	0.38	0.17	0.02
Female M = 3.18	Statements/ claims	Male	2.90	0.28	0.16	0.08
Female M = 3.07	Allergens	Male	2.73	0.34	0.20	0.09
Female M = 3.72	Nutritional table	Male	3.18	0.54	0.16	0.00
Female M = 3.89	Ingredients	Male	3.28	0.61	0.15	0.00
Product attribute	e: Brand image		,		•	•
Female M = 3.22	A brand I am highly aware of	Male	2.92	0.30	0.13	0.03
Female M = 4.04	A brand that makes good quality products	Male	3.75	0.29	0.12	0.02
Female M = 3.43	A brand that makes a good impression	Male	3.30	0.13	0.14	0.35
Female M = 2.97	A brand that stands out	Male	2.78	0.19	0.14	0.18
Product attribute	e: Packaging					
Female M = 4.15	Hygienic packaging	Male	3.71	0.44	0.14	0.00
Female M = 3.03	Attractively designed packaging	Male	2.78	0.25	0.15	0.09
Female M = 3.51	Convenient packaging	Male	3.44	0.08	0.14	0.58
Female M = 2.34	Colourful packaging	Male	2.08	0.26	0.14	0.07
Female M = 3.86	Informative packaging	Male	3.16	0.70	0.15	0.00
Female M = 3.63	Environmentally-friendly packaging	Male	3.40	0.24	0.16	0.14



• Age

Findings derived from the one-way ANOVA conducted (Table 4.7) indicate that no significant relationships exist amongst age groups and their prioritisation of the product attributes: nutritional profile (p = 0.08), labelling (p = 0.10), price (p = 0.32), brand image (p = 0.16) and packaging (p = 0.06). This means that age can not be considered as a significant precursor for consumer's prioritisation of product attributes such as nutritional profile, labelling, price, brand image or packaging when making breakfast cereal purchase and consumption decisions.

Household income

Although the findings derived from the one-way ANOVA conducted (Table 4.7) revealed no significant relationships between household income and important product attributes (e.g. nutritional profile, labelling, brand image and packaging) results did indicate a significant relationship amongst household income groups and their prioritisation of the product attribute, price (p = 0.02).

Results from the post hoc LSD test (Table 4.9) that was conducted based on the significant relationships identified, revealed that consumers in the emerging affluent income group placed significantly less importance on cheap pricing than all other specified income groups. Similarly, consumers in the highest income groups (realised middle and emerging affluent) prioritised good value for money significantly less than consumers in lower-income groups (second-lowest, low emerging middle and emerging middle). The same pattern was evident as consumers in the emerging affluent income group placed significantly less importance on an affordable price than consumers in the low emerging middle and emerging-middle income groups. These findings fall in line with the study conducted by Simon (2018) who noted differences in consumption patterns of breakfast cereals across household income groups. The results are also substantiated by Jones *et al.* (1996) who noted that lower-income consumers' purchase decisions were highly influenced by product prices and were, therefore, more likely to purchase lower-priced breakfast cereals.



TABLE 4.9. THE INFLUENCE OF HOUSEHOLD INCOME IN CONSUMER PRIORITISATION OF SIGNIFICANT PRODUCT ATTRIBUTES

Product attribute: Price	e		Mean	Mean difference	SEM	p-value
Lowest	Expensive price	Second lowest	2.60	-0.10	0.55	0.86
M = 2.50		Low emerging middle	3.05	-0.55	0.52	0.29
IVI = 2.50		Emerging middle	2.71	-0.21	0.51	0.68
		Realised middle	2.76	-0.26	0.51	0.61
		Emerging affluent	2.61	-0.11	0.51	0.83
		Prefer not to say	3.00	-0.50	0.68	0.47
Second lowest		Lowest	2.50	0.10		
M = 2.60		Low emerging middle	3.05	-0.45	0.32	0.17
IVI = 2.00		Emerging middle	2.71	-0.11	0.30	0.72
		Realised middle	2.76	-0.16	0.31	0.61
		Emerging affluent	2.61	-0.01	0.30	0.98
		Prefer not to say	3.00	-0.40	0.55	0.47
Low emerging middle		Lowest	2.50	0.55	0.52	0.29
M 2.05		Second lowest	2.60	0.45	0.32	0.17
M = 3.05		Emerging middle	2.71	0.34	0.24	0.15
		Realised middle	2.76	0.29	0.24	0.23
		Emerging affluent	2.61	0.44	0.24	0.07
		Prefer not to say	3.00	0.05	0.52	0.92
Emerging middle		Lowest	2.50	0.21	0.51	0.68
N4 0.74		Second lowest	2.60	0.11	0.30	0.72
M = 2.71		Low emerging middle	3.05	-0.34	0.24	0.15
		Realised middle	2.76	-0.05	0.21	0.81
		Emerging affluent	2.61	0.10	0.21	0.64
		Prefer not to say	3.00	-0.29	0.51	0.56
Realised middle		Lowest	2.50	0.26	0.51	0.61
M 2.76		Second lowest	2.60	0.16	0.31	0.61
M = 2.76		Low emerging middle	3.05	-0.29	0.24	0.23
		Emerging middle	2.71	0.05	0.21	0.81
		Emerging affluent	2.61	0.15	0.21	0.49
		Prefer not to say	3.00	-0.24	0.51	0.64
Emerging affluent		Lowest	2.50	0.11	0.51	0.83
M 0.04		Second lowest	2.60	0.01	0.30	
M = 2.61		Low emerging middle	3.05	-0.44	0.24	0.07
		Emerging middle	2.71	-0.10	0.21	0.64
		Realised middle	2.76	-0.15	0.21	0.49
		Prefer not to say	3.00	-0.39	0.51	0.44
Prefer not to say		Lowest	2.50	0.50	0.68	0.47
M 2.00		Second lowest	2.60	0.40	0.55	0.47
M = 3.00		Low emerging middle	3.05	-0.05	0.52	0.92
		Emerging middle	2.71	0.29	0.51	0.56
		Realised middle	2.76	0.24	0.51	0.64
		Emerging affluent	2.61	0.39	0.51	0.44
Lowest	Cheap price	Second lowest	3.40	0.10	0.54	0.85
M 0.50		Low emerging middle	3.52	-0.02	0.51	0.96
M = 3.50		Emerging middle	3.15	0.35	0.50	0.49
		Realised middle	2.97	0.53	0.50	0.29
		Emerging affluent	2.53	0.97		
		Prefer not to say	3.33	0.17		

Second lowest		Lowest	3.50	-0.10	0.54	0.85
NA 0.40		Low emerging middle	3.52	-0.13	0.32	0.70
M = 3.40		Emerging middle	3.15	0.25	0.30	0.41
		Realised middle	2.97	0.43	0.30	0.15
		Emerging affluent	2.53	0.87	0.30	0.00
		Prefer not to say	3.33	0.07	0.54	0.90
Low emerging middle		Lowest	3.50	0.02	0.51	0.96
		Second lowest	3.40	0.13	0.32	0.70
M = 3.52		Emerging middle	3.15	0.37	0.23	0.12
		Realised middle	2.97	0.56	0.24	0.02
		Emerging affluent	2.53	0.99	0.24	0.00
		Prefer not to say	3.33	0.19	0.51	0.71
Emerging middle	1	Lowest	3.50	-0.35	0.50	0.49
		Second lowest	3.40	-0.25	0.30	0.41
M = 3.15		Low emerging middle	3.52	-0.37	0.23	0.12
		Realised middle	2.97	0.19	0.21	0.37
		Emerging affluent	2.53	0.62	0.21	0.00
		Prefer not to say	3.33	-0.18	0.50	0.72
Realised middle		Lowest	3.50	-0.53	0.50	0.29
		Second lowest	3.40	-0.43	0.30	0.15
M = 2.97		Low emerging middle	3.52	-0.56	0.24	0.02
		Emerging middle	3.15	-0.19	0.21	0.37
		Emerging affluent	2.53	0.43	0.21	0.04
		Prefer not to say	3.33	-0.37	0.50	0.46
Emerging affluent	1	Lowest	3.50	-0.97	0.50	0.05
		Second lowest	3.40	-0.87	0.30	0.00
M = 2.53		Low emerging middle	3.52	-0.99	0.24	0.00
		Emerging middle	3.15	-0.62	0.21	0.00
		Realised middle	2.97	-0.43	0.21	0.04
		Prefer not to say	3.33	-0.80	0.50	0.11
Prefer not to say	1	Lowest	3.50	-0.17	0.67	0.81
		Second lowest	3.40	-0.07	0.54	0.90
M = 3.33		Low emerging middle	3.52	-0.19	0.51	0.71
		Emerging middle	3.15	0.18	0.50	0.72
		Realised middle	2.97	0.37	0.50	0.46
		Emerging affluent	2.53	0.80	0.50	0.11
Lowest	Good value for money	Second lowest	4.35	-0.02	0.46	0.97
		Low emerging middle	4.20	0.13	0.43	0.76
M = 4.33		Emerging middle	4.15	0.18	0.42	0.67
		Realised middle	3.79	0.54	0.42	0.20
		Emerging affluent	3.81	0.52	0.42	0.22
		Prefer not to say	3.83	0.50	0.57	0.38
Second lowest	1	Lowest	4.33	0.02	0.46	0.97
		Low emerging middle	4.20	0.15	0.27	0.58
M = 4.35		Emerging middle	4.15	0.20	0.25	0.44
		Realised middle	3.79	0.56	0.26	0.03
		Emerging affluent	3.81	0.54	0.25	0.04
		Prefer not to say	3.83	0.52	0.46	0.26
Low emerging middle	1	Lowest	4.33	-0.13	0.43	0.76
		Second lowest	4.35	-0.15	0.27	0.58
M = 4.20		Emerging middle	4.15	0.05	0.20	0.82
		Realised middle	3.79	0.41	0.20	0.05
		Emerging affluent	3.81	0.39	0.20	0.05
		Prefer not to say	3.83	0.37	0.43	0.40

Emerging middle		Lowest	4.33	-0.18	0.42	0.67
		Second lowest	4.35	-0.20	0.25	0.44
M = 4.15		Low emerging middle	4.20	-0.05	0.20	0.82
		Realised middle	3.79	0.36	0.18	0.05
		Emerging affluent	3.81	0.34	0.17	0.05
		Prefer not to say	3.83	0.32	0.42	0.45
Realised middle		Lowest	4.33	-0.54	0.42	0.20
		Second lowest	4.35	-0.56	0.26	0.03
M = 3.79		Low emerging middle	4.20	-0.41	0.20	0.05
		Emerging middle	4.15	-0.36	0.18	0.05
		Emerging affluent	3.81	-0.02	0.18	0.91
		Prefer not to say	3.83	-0.04	0.42	0.93
Emerging affluent		Lowest	4.33	-0.52	0.42	0.22
		Second lowest	4.35	-0.54	0.25	0.04
M = 3.81		Low emerging middle	4.20	-0.39	0.20	0.05
		Emerging middle	4.15	-0.34	0.17	0.05
		Realised middle	3.79	0.02	0.18	0.91
		Prefer not to say	3.83	-0.02	0.42	0.96
Prefer not to say	†	Lowest	4.33	-0.50	0.57	0.38
,		Second lowest	4.35	-0.52	0.46	0.26
M = 3.83		Low emerging middle	4.20	-0.37	0.43	0.40
		Emerging middle	4.15	-0.32	0.42	0.45
		Realised middle	3.79	0.04	0.42	0.93
		Emerging affluent	3.81	0.02	0.42	0.96
Lowest	Affordable price	Second lowest	4.00	0.33	0.48	0.48
		Low emerging middle	4.10	0.23	0.45	0.60
M = 4.33		Emerging middle	4.03	0.30	0.44	0.49
		Realised middle	3.72	0.61	0.44	0.17
		Emerging affluent	3.62	0.71	0.44	0.11
		Prefer not to say	4.00	0.33	0.59	0.57
Second lowest	7	Lowest	4.33	-0.33	0.48	0.48
		Low emerging middle	4.10	-0.10	0.28	0.72
M = 4.00		Emerging middle	4.03	-0.03	0.26	0.91
		Realised middle	3.72	0.28	0.27	0.30
		Emerging affluent	3.62	0.38	0.26	0.15
		Prefer not to say	4.00	0.00	0.48	1.00
Low emerging middle		Lowest	4.33	-0.23	0.45	0.60
		Second lowest	4.00	0.10	0.28	0.72
M = 4.10		Emerging middle	4.03	0.07	0.21	0.74
		Realised middle	3.72	0.38	0.21	0.08
		Emerging affluent	3.62	0.47	0.21	0.02
		Prefer not to say	4.00	0.10	0.45	0.82
Emerging middle	3	Lowest	4.33	-0.30	0.44	0.49
		Second lowest	4.00	0.03	0.26	0.91
M = 4.03		Low emerging middle	4.10	-0.07	0.21	0.74
		Realised middle	3.72	0.31	0.18	0.10
		Emerging affluent	3.62	0.41	0.18	0.03
		Prefer not to say	4.00	0.03	0.44	0.94
Realised middle	7	Lowest	4.33	-0.61	0.44	0.17
		Second lowest	4.00	-0.28	0.27	0.30
M = 3.72		Low emerging middle	4.10	-0.38	0.21	0.08
		Emerging middle	4.03	-0.31	0.18	0.10
		Emerging affluent	3.62	0.10	0.19	0.59
		Prefer not to say	4.00	-0.28	0.44	0.53

Emerging affluent	Lowest	4.33	-0.71	0.44	0.11
NA 0.00	Second lowest	4.00	-0.38	0.26	0.15
M = 3.62	Low emerging middle	4.10	-0.47	0.21	0.02
	Emerging middle	4.03	-0.41	0.18	0.03
	Realised middle	3.72	-0.10	0.19	0.59
	Prefer not to say	4.00	-0.38	0.44	0.39
Prefer not to say	Lowest	4.33	-0.33	0.59	0.57
M = 4.00	Second lowest	4.00	0.00	0.48	1.00
IVI = 4.00	Low emerging middle	4.10	-0.10	0.45	0.82
	Emerging middle	4.03	-0.03	0.44	0.94
	Realised middle	3.72	0.28	0.44	0.53
	Emerging affluent	3.62	0.38	0.44	0.39

Household size

Findings derived from the one-way ANOVA conducted (Table 4.7) indicate that no significant relationships exist amongst household size categories and important product attributes such as nutritional profile (p = 0.85), labelling (p = 0.86), price (p = 0.15), brand image (p = 0.39) and packaging (p = 1.00). Therefore, household size cannot be considered as a significant precursor for consumer's prioritisation of product attributes such as nutritional profile, labelling, price, brand image or packaging when selecting RTE breakfast cereals.

4.4 Conclusion

The findings of the study were confirmed in line with each specified objective for the research. In terms of product attributes, consumers placed more importance on extrinsic product attributes than intrinsic product attributes. In order of importance, they prioritised price (M=3.42), labelling (M=3.39), brand image (M=3.33), nutritional profile (M=3.30), packaging (M=3.29), branding (M=2.86), country of origin (M=2.50), taste (M=2.41), texture (M=2.39) and lastly, pack size (M=2.17) when making a breakfast cereal purchase and consumption decision. Consumers are also influenced by retailer attributes, specifically the marketing mix when selecting breakfast cereals. In order of importance, they prioritised a grocery store format (M=3.64), loyalty programs (M=3.35), frequent promotions (M=3.29), a wide variety of cereal types to choose from (M=3.17), a wide range of flavours (M=2.94), a deep assortment of variants (M=2.89), informative advertisements (m=2.89), hypermarket format (M=2.69), specialty store format (M=2.31), discount retailer format (M=1.92), convenience store format (M=1.59) and lastly, a spaza shop or street vendor format (M=1.10). Finally, the consumer's sociodemographic attributes influence their decision-making within the breakfast cereal category. Industry-relevant attributes were analysed against important product attributes to identify significant relationships to enhance industry role-player understanding of the target market and assist with the future investigation of consumer segmentation through clustering.



CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

This chapter presents the conclusions to each objective stipulated for the study. First, a summary of key findings is discussed concerning the research aim, which was to explore and describe consumer prioritisation of product-related attributes within the breakfast cereal category. The conclusions presented in this chapter are utilised to set an evidence-based scene for the use of this information to improve category management practices by industry role-players in South Africa within the breakfast cereal product category. The study's limitations are also specified, along with the significance of the research and recommendations for further investigation.

5.1. Introduction

Due to the historical and predicted expansion of the RTE breakfast cereal market on a global and national scale, consumers are growing more educated and demanding in terms of personalisation and satisfaction of their needs (Hollander *et al.*, 2018; Varley, 2011:256; Koutra *et al.*, 2015; Beek *et al.*, 2008).

This dynamic market behaviour has created an intensely competitive market for industry role-players such as manufacturers, suppliers and retailers. These businesses are required to understand who their target market is as well as monitor their buying behaviour to retain their loyalty (Lucas, 2018; Kaur & Singh, 2014). This challenge means that an enhanced understanding is needed of how South African consumers prioritise product-related attributes when making a breakfast cereal purchase and consumption decision. Each of these attributes has individual dimensions that contribute to a breakfast cereal purchase and consumption decision (Simon, 2018; Prasad & Reddy, 2007; Golub & Binkley, 2005; Ares & Gambaro, 2007). With this knowledge, stakeholders will be able to leverage strategic opportunities and increase their ROI (Lobaugh *et al.*, 2019; Hollander *et al.*, 2018; Varley, 2011:59; Koutra *et al.*, 2015; Beek *et al.*, 2008).

Therefore, this study aimed to investigate the importance of product, consumer and retailer attributes within the context of breakfast cereal decision making because this information is limited within a South African context (Hallström *et al.*, 2011; Seema & Aparna, 2017; Nelson *et al.*, 2016; Tripathi *et al.*, 2018).



5.2. Conclusion of results

The results of this study are discussed with relation to Objective 1-3 which detail the consumer's prioritisation of product, retailer and consumer attributes respectively within the context of breakfast cereal decision-making.

5.2.1. The importance of product attributes in breakfast cereal purchase and consumption decisions (Objective 1)

Intrinsic and extrinsic product cues are the key product attributes evaluated during the consumer decision-making process and heavily impact the consumption experience (Samsudin *et al.*, 2018; Grunert, 2002; Symmank, 2018). Different consumer segments have distinct preferences with relation to product attributes as well as different levels of prioritisation of these attributes when making an RTE breakfast cereal purchase and consumption decision (Dominick *et al.*, 2018). Product preferences are driven by extrinsic and intrinsic product attributes that affect the final product selection (Teas & Agarwal, 2000; Seema & Aparna, 2017).

This dynamic market behaviour combined with the rapid growth in the market has highlighted the opportunity for new food product development according to Bogue and Yu (2015) and Nevo (2001). However, this product category has a high market failure rate due to a lack of customer knowledge and, therefore, satisfaction. This has brought to light the need for stakeholders to understand how consumers make decisions within this product category and what product attributes are most important to them (Swanepoel, 2015; Enneking *et al.*, 2007).

When making a purchase and consumption decision, consumers who are familiar with the breakfast cereal category are easily able to distinguish between product attributes that are critical to the purchase decision and those that are not (Veale *et al.*, 2006; Wirtz & Mattila, 2003). Consumers in this study found extrinsic product attributes to impact their purchase and consumption decisions more than intrinsic product attributes. Overall, in order of importance consumers prioritised price, labelling, brand image, nutritional profile, packaging, branding, country of origin, taste, texture and lastly, pack size when making a breakfast cereal purchase and consumption decision.

Now that industry role-players can understand which product attributes are important to consumers during the breakfast cereal decision-making process, they can be used as grouping criteria for category-based clustering to segment customers based on similar buying behaviour (Hossain, 2017; Herbert, 2008; Trinh *et al.*, 2009; Cooil *et al*, 2008; Brijs *et al.*, 2004). Once the clusters are generated, stakeholders will be able to analyse and profile each cluster to have an enhanced understanding of their market and how to target them effectively. This will allow for an



ultimate understanding of consumer behaviour and the utilisation of this information to create a customer-centric approach to the retail experience through a personalised marketing mix (Varley, 2011:252; Beek *et al.*, 2008).

5.2.1.1. The importance of intrinsic product attributes in breakfast cereal purchase and consumption decisions (Objective 1.1)

Intrinsic product attributes are the key aspects of the product that cannot be changed without altering the product itself (Swanepoel, 2015; Piqueras-Fiszman & Spence, 2015; Li *et al.*, 2015; Veale *et al.*, 2006). These attributes affect the consumer's sensory evaluation of breakfast cereals and, therefore, contribute significantly to the consumption experience (Samsudin *et al.*, 2017). According to Objective, 1.1 respondents evaluated the importance of nutritional profile, taste and texture as intrinsic product attributes with regards to breakfast cereal decision-making. Results indicated that respondents were more likely to prioritise nutritional profile over taste and texture when making a breakfast cereal purchase and consumption decision.

Consumers rated all dimensions of nutritional profile as moderately important when purchasing and consuming breakfast cereal. They placed the most importance on fibre content, followed by sugar content, vitamin and mineral content, protein content and lastly, energy content. The prioritisation of nutritional profile by consumers is also noted by Gracia and Barreiro-Hurlé (2019) who specify that breakfast cereal consumers are becoming more knowledgeable about the nutritional profile of the foods they consume and, therefore, are more likely to demand healthier products when making a purchase. The importance placed on fibre content was also highlighted by Dominick *et al.* (2018) who noted this finding.

In terms of product taste, consumers rated a natural taste as moderately important and a sweet and fruity taste as slightly important with savoury taste as not important at all when purchasing and consuming a breakfast cereal. Interestingly, consumer's prioritisation of breakfast cereal taste was not in line with Brown (2008:2) who noted that this attribute is often the most influential product attribute influencing food choice. This finding in the study may be due to the habitual nature of RTE breakfast cereal purchases that tend to place more importance on extrinsic product attributes such as branding and brand image as well as purchase and consumption attributes like purchase frequency (Solomon, 2015:30; Tanner & Raymond, 2018:92). This is substantiated by Lamb *et al.* (2018:92) who states that as consumers become more familiar with a regular purchase decision, they become less involved in the decision-making process. The importance placed on this attribute may also align with the fact that taste is a significant determinant of child acceptance of food products (Blissett & Fogel, 2013), whereas the sample was comprised of adult consumers.



In terms of texture, consumers rated a crunchy texture as moderately important, a creamy and chewy texture as slightly important with a smooth texture as not important at all when purchasing and consuming a breakfast cereal. The consumer prioritisation of a crunchy texture aligns with the fact that this attribute is highly associated with freshness and good quality (Heiniö *et al.*, 2016). Since changes in oral physiology caused by aging are associated with changes in texture preferences, the predominantly young (Millennial) composition of the sample may be the reason for the importance placed on a crunchy texture (Song *et al.*, 2016). This may also be because Millenial consumers are driven by heightened eating experiences with more pronounced flavours and textures (Williams, 2017).

Overall, in terms of new food product development and the retailer's decisions surrounding the marketing mix, importance should be placed on breakfast cereals with high fibre content, a natural taste and a crunchy texture. The amalgamation of important and favoured sensory characteristics are a requirement for breakfast cereal products to excel in competitive markets according to Heiniö *et al.* (2016). Emphasis should be placed on adding healthy breakfast cereals to the product assortment due to the rise in demand for on-the-go, healthy and organic breakfast cereal products (Grand View Research, 2018; Simon, 2018).

5.2.1.2. The importance of extrinsic product attributes in breakfast cereal purchase and consumption decisions (Objective 1.2)

Extrinsic product attributes are particularly important to consumers as they are used as indicators of quality and value (Teas & Agarwal, 2000; Grunert, 2002). In cases where consumers are not able to judge a cereal product without sensory inputs, importance is placed on extrinsic cues (Piqueras-Fiszman & Spence, 2015).

According to Objective 1.2 respondents evaluated the importance of labelling, price, brand image, packaging, branding, country of origin and pack size with regards to breakfast cereal decision-making. In order of importance, consumers prioritised price, labelling, brand image, packaging, branding, country of origin and pack size when making a breakfast cereal purchase and consumption decision.

With regard to price, consumers rated breakfast cereals that are good value for money as very important. They rated an affordable and cheap price as moderately important and an expensive price as slightly important when purchasing and consuming a breakfast cereal. They placed the most importance on products that were good value for money, followed by an affordable price, a cheap price and lastly, an expensive price. The importance placed on cereals that are good value for money reiterates the findings of Golub and Binkley (2005), Dhar *et al.*, (2001) and Li *et al.*, (2018) who state that breakfast cereal consumers are price-sensitive.

In terms of product labelling, consumers rated the date coding, ingredients, nutritional table and statements/ claims as moderately important. Consumers rated allergens as slightly important when purchasing and consuming breakfast cereal. They placed the most importance on the date coding, followed by the ingredients list, nutritional table, statements and claims and lastly, allergens. The product labelling attribute was likely to be important due to the prevalence of use of food labels by consumers (Mutsikiwa *et al.*, 2013) as well as their growing interest in reading labels as they place more importance on nutrition and health (Silayoi & Speece, 2005). The lack of importance placed on allergens is likely due to the low number of consumers who are allergic or intolerant to common allergens found in cereals according to Gilissen *et al.* (2014).

With regard to brand image, consumers rated a brand that makes good quality products, a brand that makes a good impression and a brand they were highly aware of as moderately important. They rated a brand that stands out as slightly important when purchasing and consuming breakfast cereal. They placed the most importance on a brand that makes good quality products, followed by a brand that makes a good impression, a brand they were highly aware of and lastly, a brand that stands out. Mazibuko (2010) also highlights the importance placed on good quality breakfast cereals by consumers who regularly purchase from this product category.

When considering product packaging, consumers rated hygienic, informative, environmentally friendly and convenient packaging as moderately important and attractively designed and colourful packaging as slightly important when purchasing and consuming a breakfast cereal. They placed the most importance on hygienic packaging, followed by informative packaging, environmentally-friendly packaging, convenient packaging, attractively designed packaging and lastly, colourful packaging. The importance placed on hygienic packaging highlights the consumer prioritisation of the logistical and functional roles of packaging in protecting the product and extending its shelf life (Macedo *et al.*, 2013; Hawkes, 2013; Mutsikiwa *et al.*, 2013). Similarly, the importance placed on informative packaging highlights the fact that consumers also benefit from the communication role of packaging by communicating information about the product at the point of sale (Silayoi & Speece, 2005; Hawkes, 2013).

With regards to branding, consumers rated a familiar brand and a brand they frequently purchased as moderately important, a national brand as slightly important and a house brand as not important at all when purchasing and consuming a breakfast cereal. They placed the most importance on a familiar brand, followed by a frequently purchased brand, a national brand and lastly a house brand. The consumer prioritisation of branding attributes may be attributed to the fact that consumers are more likely to trust brands that they purchase frequently and are familiar with due to long-standing brand loyalty (Mazibuko, 2010).



With regards to the country of origin, consumers rated breakfast cereals that were locally produced, a clearly marked country of origin and a country of origin associated with good quality products as slightly important. They rated a prestigious country of origin as not important at all when purchasing and consuming a breakfast cereal. They placed the most importance on products that were locally produced, followed by a clearly marked country of origin, a country of origin associated with good quality products and lastly, a prestigious country of origin. The importance placed on breakfast cereals that are locally produced falls in line with the findings of Verbeke and Roosen (2009) and Swanepoel (2015) who note that consumers often prioritise products that are produced and consumed in the same country.

In terms of pack size, consumers rated a standard box pack size as moderately important, refill bag pack size as slightly important and a case pack and single-serving pack size as not important at all when purchasing and consuming a breakfast cereal. They placed the most importance on the standard box size, followed by a refill bag size, a case-pack size and lastly, a single-serving pack size. The consumer prioritisation of larger pack sizes over a single-serving pack size may be because consumers use pack size to assess value for money by comparing price with product volume (Silayoi & Speece, 2007; Hendrickson, 2016). Larger pack sizes are, therefore, often better value for money and may be more easily noticed on shelves. These findings may also be due to the low prevalence of single-person households in the study (Hassan *et al.*, 2012; Silayoi & Speece, 2007).

Overall, when considering new food product development and the retailer's decisions surrounding the marketing mix, importance should be placed on ensuring that the date coding is clearly visible on the packaging. They should provide breakfast cereals that are good value for money from brands associated with good quality products, sold in hygienic packaging. Retailers should focus on brands that are familiar to their target market and are locally produced while also ensuring that their product offering has at least a standard box pack size per product variant.

5.2.1.3. The interaction of both intrinsic and extrinsic product attributes in breakfast cereal purchase and consumption decisions

When consumers were asked to rank the product attributes against one another based on the importance they provided different answers to when they were asked to rate the product attributes in isolation. When ranking the attributes in order of importance, consumers prioritised taste, price, texture, nutritional profile, pack size, branding, packaging, labelling, brand image and lastly, country of origin. When mentioning distinct reasons for product selection, respondents provided more insight into their purchasing behaviours. Contextual analysis revealed the following themes:



The consumers primarily mentioned nutritional profile as their reason for a particular product selection with a focus placed on high fibre, high protein and low sugar content. Branding was also important to consumers who placed importance on a familiar brand that they frequently purchased. The taste was also a deciding factor where respondents cited the cereal's level of sweetness as a reason for product selection. A well-known trusted brand image was important to consumers who also prioritised a crunchy or smooth texture. The respondents mentioned product packaging regarding a design that stands out, is colourful or portrays the image that the product is natural. They also detailed information about labelling where they needed to know the product's ingredients or allergens (specifically gluten). Respondents prioritised either smaller or larger pack sizes as well as a cereal that is locally produced. The convenience of preparation, the ability to consume a cereal on the go and versatility also proved to be important when making a breakfast cereal purchase and consumption decision.

Overall, the distinction between respondents answers when they rate product attributes in isolation versus together versus in a shopping environment differ. This highlights the notion that consumers may not make conscious purchase decisions as their choices may reflect the influence of the retailers marketing mix and shopping environment (Grunert, 2002).

5.2.2. The importance of retailer attributes in breakfast cereal purchase and consumption decisions (Objective 2)

Retailers influence the consumer decision-making process by acting as the middleman between the supplier and the consumer. They influence the marketing mix intending to encourage consumers to make a purchase (Hameli, 2018). Larger retailers have various store formats and are expanding into new markets such as rural sectors thereby intensifying the competition between retailers to differentiate themselves and gain consumer loyalty (Makhitha & Khumalo, 2018).

During breakfast cereal decision-making, consumers evaluate retailer attributes through their instore experience (Skippari *et al.*, 2017). It is, therefore, imperative for retailers to learn how these attributes affect the consumer's purchase decision within the RTE breakfast cereal category (Makhitha & Khumalo, 2018; Beneke *et al.*, 2012). These attributes also influence the store image, which is evaluated when consumers choose to patronise a store (Ness *et al.*, 2002; Mafini & Dhurup, 2015).

According to Objective, 2.1 respondents evaluated the importance of retailer format, the product assortment and promotional activity in regards to breakfast cereal decision-making. Overall, respondents rated retailer attributes as less important than extrinsic product attributes but equally as important as intrinsic product attributes. In order of importance, consumers prioritised



promotional activity, the product assortment and lastly, the retailer format when making a breakfast cereal purchase and consumption decision.

In terms of promotional activity, consumers rated a store with a loyalty program and frequent promotions as moderately important and a store with informative advertisements as slightly important when purchasing and consuming a breakfast cereal. They placed the most importance on a store with a loyalty program followed by a store with frequent promotions and lastly, a store with informative advertisements. These findings are relevant because consumers are more likely to be regular purchasers of a product category if a retailer implements regular promotions (Blut *et al.*, 2018; Dhar *et al.*, 2001).

With regards to the product assortment, consumers rated a store with a wide variety of breakfast cereal types as moderately important and a store with a wide range of breakfast cereal flavours and a deep assortment of breakfast cereal variants as slightly important when purchasing and consuming a breakfast cereal. They placed the most importance on a store with a wide variety of breakfast cereal types to choose from followed by a store with a wide range of breakfast cereal flavours and lastly, a store with a deep assortment of breakfast cereal variants to choose from. These findings fall in line with Blut *et al.* (2018) who noted that the size of the assortment carried by a store significantly affects retailer patronage and intention to purchase.

In terms of retailer format, consumers rated a grocery store as moderately important, a hypermarket and speciality store as slightly important and a discount retailer, convenience store and spaza shop or street vendor as not important at all when purchasing and consuming a breakfast cereal. They placed the most importance on shopping at a grocery store followed by shopping at a hypermarket, speciality store, discount retailer, convenience store and lastly a street vendor or spaza shop. The preference in retailer format can be explained by the fact that retailers adopt specific formats to ensure the success of their business by appealing to particular market segments (Huddleston *et al.*, 2008).

Overall, retailers should focus on the following elements of the marketing mix. They should ensure that they have a loyalty program as well as a wide variety of product types within the breakfast cereal category. A traditional grocery store format has also proved to be most successful within the context of this study.

5.2.3. The importance of consumer attributes in breakfast cereal purchase and consumption decisions (Objective 3)

Consumer attributes include sociodemographic attributes that play a significant role in the consumer decision-making process (Simon, 2018). Stakeholders collect information about



consumer's sociodemographic attributes through the use of loyalty data where some information is provided by the customer and other information is collected by analysing their purchasing behaviour (Larsen, 2010; Trinh *et al.*, 2009; Brijs *et al.*, 2004). Specifically, consumers are more likely to provide information on attributes like their gender, age and household size and are less likely to provide information on sensitive attributes like their ethnicity and household income (Graeff & Harmon, 2002).

Retailers, suppliers and manufacturers can utilise consumer attributes to segment their target market (Trinh, Dawes & Lockshin, 2009). Each segment can be analysed, profiled and later used to predict future purchase behaviour (Brijs *et al.*, 2004). Therefore, significant relationships between industry-relevant sociodemographic attributes and important product attributes were investigated and supplemented with a discussion of consumer prioritisation of purchase and consumption attributes.

5.2.3.1. Significant relationships between industry-relevant sociodemographic factors and important product attributes as a possible precursor for breakfast cereal purchase and consumption decisions (Objective 3.1.)

Sociodemographics were investigated in this study because these attributes can influence purchasing patterns and consumption choices (Simon, 2018) as well as predict consumer spending (Vilčeková & Sabo, 2013). These attributes influence the consumer's evaluation of intrinsic and extrinsic product attributes resulting in a product purchase (Li *et al.*, 2015).

Based on the findings of the study, the sociodemographic attribute of gender can be considered as a significant precursor for consumer prioritisation of nutritional profile, labelling, brand image and packaging. No significant underlying relationship was however identified between gender and consumers' prioritisation of price when selecting RTE breakfast cereals.

The results furthermore revealed that females exhibited more health-conscious behaviour than males. This is because they placed significantly more importance on vitamin and mineral content, sugar content, date coding, the nutritional table, ingredients list as well as hygienic and informative packaging. These findings were substantiated by studies conducted by Koen *et al.* (2016), Campos *et al.* (2011), Silayoi and Speece (2005), Satia *et al.* (2005) and Simon (2018). Females also exhibited a possible higher risk awareness in terms of the brand image due to the preference for brands they were highly aware of as well as their prioritisation of quality when making a breakfast cereal purchase and consumption decision. This behaviour was also noted by Simon (2018).



On the other hand, the findings did not deliver any significant relationships between the sociodemographic attributes of age, household size and respondents' prioritisation of nutritional profile, labelling, price, brand image or packaging when making a breakfast cereal purchase and consumption decision.

Based on the findings pertaining to the sociodemographic attribute of household income analysis did however reveal a significant relationship with consumer prioritisation of price. Post-hoc tests confirmed that wealthier consumers were less likely to place importance on attributes like an affordable price, good value for money and a cheap price. These findings are in line with the studies conducted by Simon (2018) and Jones *et al.* (1996) who cited similar differences in purchase and consumption patterns of breakfast cereals across different household income groups.

5.3. The study in retrospect

Once a research study has been concluded, it is important for the researcher to evaluate the objectivity of the study to ensure all of the objectives laid out for the research have been met. Objectives 1-3 are tackled in Section 5.1.

Consumers today are more educated and empowered than ever before, producing dynamic market behaviour that businesses need to understand and anticipate (Hollander *et al.*, 2018; Koutra *et al.*, 2015; Beek *et al.*, 2008). Within the breakfast cereal category, consumers are more demanding than ever with increased expectations regarding convenience, quality and personalisation, highlighting the need for retailers to transition from traditional methods of category management to a more modern approach (Hollander *et al.*, 2018; Beek *et al.*, 2008).

With this research problem highlighted, the relevant objectives, conceptual framework and operationalisation for the investigation were developed. In terms of the research design and methodology, steps were taken to ensure the production of reliable and valid results. The study followed a quantitative, empirical research design in which primary data was collected using a structured, electronic, self-administered questionnaire that was distributed using an anonymous link via social media websites. The questionnaire included a cover letter that followed the requirements for ethical research conducted on human participants, therefore, increasing the reliability of the study. Convenience, non-probability sampling was utilised due to the time and monetary constraints of the study.



5.3.1 Achievement of the objectives set out for this research

The objectives for this study were attended to and addressed satisfactorily. The conclusions that were drawn were relevant and reflected well in terms of the main objectives laid out for the study. There were no unexpected issues identified regarding the composition of the questionnaire, data collection or the study in general. Therefore, it is believed that the results presented in this investigation add to the relevant literature about consumer purchasing and consumption behaviour within the RTE breakfast cereal category.

5.3.2. Significance of the research findings

This study seeks to aid businesses such as retailers, manufacturers and suppliers in improving their category management practices based on an improved understanding of consumer prioritisation of product-related attributes within the breakfast cereal category. This will result in benefits for industry role-players and consumers (Tripathi *et al.*, 2018; Hossain, 2017).

Significance for industry role-players

This study highlights the need for industry role-players to understand their target market's shopping behaviour as well as the need for category management and clustering (consumer segmentation) in the industry today. The conclusions obtained from this study have provided indepth information regarding how the South African consumer shops within the breakfast cereal category. Therefore, this knowledge could aid in developing category-based customer solutions that could result in a sustainable competitive advantage (Dewsnap & Hart, 2004). By implementing category management within the business, industry role-players will see results such as increased turnover, profitability, stock movement and market share (Dominick *et al.*, 2018). This means that a measured improvement in category performance will be observed.

Significance for consumers

Based on the findings of this study, it has become obvious that consumers have different priorities when making a breakfast cereal purchase and consumption decision based on their demographic, household and purchase/consumption attributes. Therefore, manufacturers, suppliers and retailers should not target them using a mass-market approach to satisfying their needs. The findings of this study will assist retailers with first understanding their target market and the methods to identify the consumer segments that comprise it. They will be able to utilise the information regarding attributes that are most important to each consumer group and ensure that these are reflected using a personalised marketing mix that is delivered at the right price, place and time using the right promotional tactics (Abril & Sanchez, 2015). This results in an



enhanced customer shopping experience, customer satisfaction and loyalty (Jiang & Tuzhilin, 2009; Tripathi *et al.*, 2018).

Significance in terms of scarce skills

The wide adoption of category management across South African retailers bridges the gap for scarce skills and job creation. The use of category management on a national scale is still fairly new, especially for third-party category management providers. Therefore, this study providing insights into the fact that distinct consumer preferences exist within product categories as well as the fact that similar consumers can be grouped, analysed and understood opens up the door to further research and investigation within the industry. This will provide new training and job creation where manufacturers, suppliers and retailers begin to adopt these practices on a wider scale.

5.3.3 Limitations of the study

Care and careful attention were paid to ensure that the data collection and processing was completed in a valid, reliable and ethical manner. It was, therefore, important for the researcher to follow sound research methods to ensure the study was conducted ethically to obtain accurate, reliable data. However, the study was still restricted by some inevitable limitations. The following limitations specified could serve as guidance for future research investigations:

- Due to time restrictions, the resultant sample was smaller than was ideal. This was acceptable and allowed for useful conclusions to be drawn but a larger sample would have been more representative of the South African population.
- The sampling method used was non-purposive convenience sampling. This meant that
 conclusions of the larger South African population could not be drawn. Larger groups of
 individuals from different provinces, ethnic groups, income groups etc. could have been
 collected to ensure that the sample was representative of the South African population.
- The pre-requisites for the sample limited respondents between the ages of 21 and 65. In retrospect, the study could have increased the age limit to at least 80 as, although the retirement age in South Africa, consumers older than 65 still purchase food for themselves and their families.
- Qualtrics provides an IQ score that flags areas for improvement on the survey. According to this information, the following areas could have been improved:
 - Include screening questions before respondents could start the survey. Add in screening questions to exclude respondents who did not fit the unit of analysis.
 - Decrease the number of matrix questions, as Qualtrics noted that respondents do not enjoy completing this type of survey resulting in decreased response quality



- and completion rate. This could be improved by changing the 5-point Likert scales to 3-point Likert scales which Qualtrics notes will mitigate this challenge.
- Optimise the questions for mobile phone use and preview the survey on a mobile phone. Qualtrics notes that making the questions mobile-friendly such as choosing simple scales and drop-down menus rather than complex sliding scales and 5-point matrixes will increase the completion rates and representativeness of the data.
- Ensure that all questions are WCAG AA/508 accessible². Qualtrics noted that two questions were not accessible to people with disabilities. These standards aim to make electronic and information technology accessible to people with colourblindness, vision disabilities or hearing disabilities.

5.4. Recommendations for future investigation

Understanding consumers' prioritisation of product-related attributes is an essential element in successful category management. Category management is beneficial to industry role players like manufacturers, suppliers and retailers because this practice assists them in understanding how consumers shop for products within a specific category (Dewsnap & Hart, 2004; Varley, 2011). Category management encompasses the strategies and tactics employed to improve category performance by leveraging this knowledge. Category management has various functions that are utilised to improve the role player's ROI (Return on investment) as well as the customer experience. Some of these functions include floor planning, clustering, assortment planning and space planning. Therefore, further investigation into the utilisation of consumer purchasing and consumption behaviour would be beneficial within the field of category management. Based on the results of this investigation, the following recommendations for future investigation have been made.

5.4.1 Utilisation of store-level, POS and loyalty data to gather information on consumer behaviour

Due to the finding that consumers prioritise different attributes in different environments (i.e. evaluating product attributes individually, against one another and in a shopping environment), it is recommended to substantiate these findings with store-level, POS and loyalty data to triangulate the findings of the study. This information should ideally be collected from many South African retailers of each format type across a wide range of consumers to achieve an accurate

² The goal of WCAG AA/508 is to ensure that electronic and information technology is available to people with disabilities such as colour blindness, vision and hearing disabilities so that their experience is comparable to others (Pan, 2017).



result. Once the results of this investigation can be compared with concrete consumer basket data, an overall prioritisation of product-related attributes can be determined. These attributes should, therefore, be considered and utilised as a part of clustering and assortment planning within an optimised category management strategy.

5.4.2. Development of an improved cluster analysis methodology and automated solution for consumer segmentation

Currently, cluster analysis within the retail industry is not widely used. In cases where this practice is implemented, retailers utilise subjective store-based clustering rather than data-driven category-based clustering. This practice is also time, knowledge and labour intensive as it requires the manual identification of patterns within a large data set. Therefore, not implementing clustering and not automating this process is preventing retailers from capitalising on the full benefits of category management as noted by Ngai et al. (2009). Industry stakeholders should prioritise the product attributes of nutritional profile, labelling, price, brand image and packaging as grouping criteria when completing a cluster analysis of the breakfast cereal category to achieve the most effective customer segmentation. Further investigation is also required into an automated solution for clustering that is built into a retailer's ERP system (e.g., SAP) that is fed with a variety of data. An example of the data required would be consumer data generated from loyalty cards and consumer basket analysis. Next, there would be a need for performance data (sales, units, profit etc.) and product data which includes information about the products such as brand and a description of the product attributes which are studied in this research. Finally, market or store-level data would also be needed in this regard to understand the store format, the product assortment as well as other factors such as store size and geographic location. This automated solution, combined with a tested methodology for implementation, would prove highly valuable to both national and international retailers in South Africa as well as third-party category management specialists.

5.4.2. Development of an improved assortment planning methodology and automated solution

Assortment planning goes hand-in-hand with clustering in the retail industry because each cluster receives a customer-centric assortment plan or product range that is personalised for the consumers within that cluster or segment. Therefore, after each cluster is analysed and profiled, the learnings from this process can be utilised to develop a targeted assortment plan that focuses on the product and retailer attributes prioritised by the cluster. Development of an automated assortment planning model that takes into account the existing clusters or consumer segments within the category would be highly beneficial for industry role players to ensure that the right



products are delivered to the consumers at the right time, place and using the proper promotional techniques.

5.5. Conclusion

Each of the objectives laid out for the study is investigated and detailed based on the findings of the research. It is evident that different types of consumers prioritise certain product-related attributes more than others when making a breakfast cereal purchase and consumption decision. In particular, consumers place more importance on extrinsic than intrinsic product attributes and consider the attributes of nutritional profile, labelling, price, brand image and packaging to be of significant importance for this product category. Therefore, this knowledge will enable industry role-players to focus on these attributes when delivering a customer-centric marketing mix and use these factors when implementing category-based clustering and assortment optimisation as part of a strategic category management plan.



LIST OF REFERENCES

Abril, C. and Sanchez, J. 2016. Will they return? Getting private label consumers to come back: Price, promotion, and new product effects. *Journal of Retailing and Consumer Services*, 3(11), pp.109–116.

Akhtar, I. 2016. Research Design. In: *Research in Social Science: Interdisciplinary Perspectives*. Cambridge: Cambridge Scholars Publishing, pp.68–84.

Akpinar, M.G., Aykin, S.M., Sayin, C. and Ozkan, B. 2009. The role of demographic variables in purchasing decisions on fresh fruit and vegetables. *Journal of Food, Agriculture & Environment*, 73 & 4, pp.106–110.

Ampuero, O. and Vila, N. 2006. Consumer perceptions of product packaging. *Journal of Consumer Marketing*, 2(32), pp.100–112.

Anselmsson, J., Vestman Bondesson, N. and Johansson, U. 2014. Brand image and customers' willingness to pay a price premium for food brands. *Journal of Product & Brand Management*, 2(32), pp.90–102.

Anthony, M. 2017. Shoppers Vs Consumers: Once More With Feeling. [online] Mike Anthony - Consumer, Shopper, Retail Expert. Available at: http://www.mikeanthony.me/shopper-marketing/shoppers-vs-consumers/#:~:text=The%20consumer%20is%20the%20person [Accessed 21 Feb. 2021].

Ares, G. and Gámbaro, A. 2007. Influence of gender, age and motives underlying food choice on perceived healthiness and willingness to try functional foods. *Appetite*, 491, pp.148–158.

Arkader, R. and Ferreira, C.F. 2004. Category Management Initiatives from the Retailer Perspective: a Study in the Brazilian Grocery Retail Industry. *Journal of Purchasing and Supply Management*, 10(1), pp.41–51.

Babbie, E.R. 2010. *The practice of social research*. 12th ed. Belmont, Ca: Wadsworth Cengage.

Baker, M.J. and Ballington, L. 2002. Country of origin as a source of competitive advantage. *Journal of Strategic Marketing*, 10(2), pp.157–168.



Barreiro-Hurlé, J. and Gracia, A. 2010. Does nutrition information on food products lead to healthier food choices? *Food Policy*, 35(3), pp.221–229.

Beek, A., Kazen, J., Meijer, M. and Kohn, R. 2008. *Customer-Centric Assortment Planning*. Capgemini, pp.1–4.

Bearden, W.O., Ingram, T.N. and Laforge, R.W. 2007. *Marketing: Principles and Perspectives*. 5th ed. New York: McGraw-Hill Irwin.

Belch, G.E. and Belch, M.A. 2018. Advertising and promotion: an integrated marketing communications perspective. New York, NY: Mcgraw-Hill Education.

Belch, M.A. and Willis, L.A. 2002. Family decision at the turn of the century: has the changing structure of households impacted the family decision-making process? *Journal of Consumer Behaviour*, 2(2), pp.111–124.

Beneke, J., Hayworth, C., Hobson, R. and Mia, Z. 2012. Examining the effect of retail service quality dimensions on customer satisfaction and loyalty: The case of the supermarket shopper. *Acta Commercial*, 121.

Beneke, J. and Carter, S. 2014. A demographic analysis of brand perceptions: The case of a private label breakfast cereal in South Africa. *Journal of Business and Retail Management Research JBRMR*, 9(1), pp.1–12.

Berning, J. and Rabinowitz, A.N. 2017. Targeted Advertising in the Breakfast Cereal Industry. *Journal of Agricultural and Applied Economics*, 49(3), pp.382–399.

Bernstein, F., Modaresi, S. and Sauré, D. 2018. A Dynamic Clustering Approach to Data-Driven Assortment Personalization. *Management Science*.

Bhat, A. 2019. Snowball Sampling: Definition, Methods, Advantages and Disadvantages. [online] QuestionPro. Available at: https://www.questionpro.com/blog/snowball-sampling/.

Blake, C.E., Wethington, E., Farrell, T.J., Bisogni, C.A. and Devine, C.M. 2011. Behavioral Contexts, Food-Choice Coping Strategies, and Dietary Quality of a Multiethnic Sample of Employed Parents. *Journal of the American Dietetic Association*, 11(13), pp.401–407.

Blissett, J. and Fogel, A. 2013. Intrinsic and extrinsic influences on children's acceptance of new foods. *Physiology & Behavior*, 12(1), pp.89–95.



Blut, M., Teller, C. and Floh, A. 2018. Testing Retail Marketing-Mix Effects on Patronage: A Meta-Analysis. *Journal of Retailing*, 94(2), pp.113–135.

Bogue, J. and Yu, H. 2015. The Influence of Sociodemographic and Lifestyle Factors on Consumers' Healthy Cereal Food Choices. *Journal of Food Products Marketing*, 22(3), pp.398–419.

Boivin, C., Parissier, C., Alle, A., Asselin Forcier, P. and Langlois, S. 2014. Healthy Breakfast Cereals: What Do Consumers Want? *Journal of Foodservice Business Research*, 17(1), pp.48–55.

Bosman, M.J., Van der Merwe, D., Ellis, S.M., Jerling, J.C. and Badham, J. 2014. South African adult metropolitan consumers' opinions and use of health information on food labels. *British Food Journal*, 11(61), pp.30–43.

Bouchachia, A. 2012. Dynamic Clustering. Evolving Systems, 3(3), pp.133–134.

Boyd, D.E. and Bahn, K.D. 2009. When Do Large Product Assortments Benefit Consumers? An Information-Processing Perspective. *Journal of Retailing*, 85(3), pp.288–297.

Brečić, R., Mesić, Ž. and Cerjak, M. 2017. Importance of intrinsic and extrinsic quality food characteristics by different consumer segments. *British Food Journal*, 11(9)4, pp.845–862.

Bradbury, J. 2004. Taste Perception: Cracking the Code. PLoS Biology, 2(3), p.64.

Briand, L. and Salles, C. 2016. Taste Perception and Integration. *From Food to Behaviors, Wellbeing and Health*, pp.101–119.

Briesch, R.A., Dillon, W.R. and Fox, E.J. 2013. Category Positioning and Store Choice: The Role of Destination Categories. *Marketing Science*, 32(3), pp.488–509.

Brijs, T., Swinnen, G. and Vanhoof, K. 2004. *Using Shopping Baskets to Cluster Supermarket Shoppers*. [online] Research Gate. Available at: https://uhasselt.be/tom.brijs/pubs/artforum.pdf.

Brown, A.C. 2008. *Understanding food: principles and preparation*. 3rd ed. Belmont, Calif.: Wadsworth Cengage Learning.

Broyles, S.A., Schumann, D.W. and Leingpibul, T. 2009. Examining Brand Equity Antecedent/Consequence Relationships. *Journal of Marketing Theory and Practice*, 17(2), pp.145–162.



Cachon, G.P. and Kök, A.G. 2007. Category Management and Coordination in Retail Assortment Planning in the Presence of Basket Shopping Consumers. *Management Science*, 53(6), pp.934–951.

Caldwell, E.F. and Kadan, R.S. 2004. Cereals Breakfast Cereals. *Encyclopedia of Grain Science*, pp.201–206.

Campos, S., Doxey, J. and Hammond, D. 2011. Nutrition labels on pre-packaged foods: a systematic review. *Public Health Nutrition*, [online] 148, pp.1496–1506. Available at: https://www.cambridge.org/core/journals/public-health-nutrition/article/nutrition-labels-on-prepackaged-foods-a-systematic-review/F28676122435F2FC22D404AA268C2DB0 [Accessed 3 May 2019].

Carillo, E., Varela, P., Salvador, A. and Fiszman, S. 2011. Main Factors Underlying Consumers' Food Choice: A First Step for Understanding the Attitudes towards "Healthy Eating".. *Journal of Sensory Studies*, 26(2), pp.85–95.

Carr, C. and Coy, S. 2011. *Effective day-to-day category management*. Bearing point, pp.1–14.

Carr, J. 2013. *A Simple Approach to Retail Clustering*. Wilson Perumal and Company's Vantage Point, pp.1–8.

Charman, A., Bacq, S. and Brown, K. 2019. *Supermarkets, Street Traders and Spaza Shops: Spatial Determinants of Formal Retailers' Impact on Informal Micro-Enterprises in Phillippi, Cape Town.* [online] Cape Town: DST-NRF Centre of Excellence in Food Security Research, pp.1–59. Available at: https://foodsecurity.ac.za/wp-content/uploads/2019/02/FINAL_CoE-RR-002_SLF-Feb-2019.pdf.

Castetbon, K., Harris, J.L. and Schwartz, M.B. 2011. Purchases of ready-to-eat cereals vary across US household sociodemographic categories according to nutritional value and advertising targets. *Public Health Nutrition*, 15(8), pp.1456–1465.

Castro, I., Majmundar, A., Williams, C. and Baquero, B. 2018. Customer Purchase Intentions and Choice in Food Retail Environments: A Scoping Review. *International Journal of Environmental Research and Public Health*, [online] 15(11), p.2493. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6266052/ [Accessed 15 Sep. 2019].

Chambers, S., Lobb, A., Butler, L.T. and Traill, W.B. 2008. The influence of age and gender on food choice: a focus group exploration. *International Journal of Consumer Studies*, [online]



32(4), pp.356–365. Available at: https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1470-6431.2007.00642.x [Accessed 11 Nov. 2019].

Chaudhury, R. 2010. Determinants of Consumer Behavior in Buying RTE Foods. *Journal of Business and Retail Management Research*, 5(1), pp.76–86.

Claudimar, P. da V., Cassia, R.P. da V., Anderson, C., Ubirata, T., Edilson, A.C. and Eduardo, V. da C.J. 2014. Assortment Planning: Strategic Perception of Retail Owners and Managers in Brazil. *African Journal of Business Management*, 81(9), pp.903–912.

Che Wel, C., Hussin, S., Omar, N. and Nor, S. 2012. Important Determinant of Consumers' Retail Selection Decision in Malaysia. *World Review of Business Research*, 2(2), pp.164–175.

Clark, J.E. 1998. Taste and flavour: their importance in food choice and acceptance. *Proceedings of the Nutrition Society*, 57(4), pp.639–643.

Cognos Analytics 2016. *Retail Strategic Merchandise Planning Implementation Guide*. South Africa: IBM Cognos Analytics, pp.1–8.

Cohen, L., Manion, L. and Morrison, K. 2018. *Research methods in education*. New York Routledge.

Cooil, B., Aksoy, L. and Keiningham, T.L. 2008. Approaches to Customer Segmentation. *Journal of Relationship Marketing*, 63(4), pp.9–39.

Cooper, D.R. and Schindler, P.S. 2014. *Business research methods*. New York, Ny: Mcgraw-Hill/Irwin.

Corsten, H., Hopf, M., Kasper, B. and Thielen, C. 2017. Assortment planning for multiple chain stores. *OR Spectrum*, 40(4), pp.875–912.

Davison, P. 2018. Why Category Management Should Start with Behavioral Clustering | RELEX. [online] RELEX Solutions. Available at: https://www.relexsolutions.com/whycategory-management-should-always-start-with-behavioral-clustering/ [Accessed 18 Feb. 2019].

Dawes, J. 2006. Interpretation of brand penetration figures that are reported by sub-groups. *Journal of Targeting, Measurement and Analysis for Marketing*, 14(2), pp.173–183.



Dawson, J. 2013. Retailer activity in shaping food choice. *Food Quality and Preference*, 28(1), pp.339–347.

Deloitte and Brands Eye 2020. How COVID-19 Has Affected South African Grocery Retail Consumer Sentiment: Consumer Insights Pre- and during Lockdown. [online] Deloitte, South Africa: Deloitte, pp.1–26. Available at: https://www2.deloitte.com/content/dam/Deloitte/za/Documents/za_Deloitte_BrandsEye_Con sumer-Sentiment-report_May%202020.pdf [Accessed 26 Oct. 2020].

De Vos, A.D., Strydom, H., Fouche, C.B. and Delport, C.S.L. 2011. *Research at grass roots:* for the social sciences and human service professionals. 4th ed. Pretoria: Van Schaik.

DeFoor, B., Yates, M. and Billings, A. 2016. *Customer-Centric Assortment Clustering*. [online] *Northhighland*, pp.1–4. Available at: http://www.northhighland.com//media/Files/NH/Perspectives/PS_Customer%20Centric%20Clustering2.pdf.

Devlin, A.S. 2017. Chapter 5: Measures and Survey Research Tools. In: *The Research Experience*. Connecticut College, USA: Sage Publications, pp.137–183.

Dewsnap, B. and Hart, C. 2004. Category management: a new approach for fashion marketing? *European Journal of Marketing*, 38(7), pp.809–834.

Dhar, S.K., Hoch, S.J. and Kumar, N. 2001. Effective category management depends on the role of the category ★. *Journal of Retailing*, 77(2), pp.165–184.

Dominick, S.R., Bir, C., Widmar, N.O., Acharya, L., Wang, H.H. and Wilcox, M. 2018. Exploring preferences beyond the cereal box: ready-to-eat breakfast cereal buying behaviors. *International Food and Agribusiness Management Review*, 21(8), pp.1185–1201.

Duchessi, P., Schaninger, C.M. and Nowak, T. 2004. Creating cluster-specific purchase profiles from point-of-sale scanner data and geodemographic clusters: improving category management at a major US grocery chain. *Journal of Consumer Behaviour*, 4(2), pp.97–117.

Du Plessis, P.J., Rosseau, G.G., Boshoff, C., Ehlers, L., Engelbrecht, M., Joubert, R. and Sanders, S. 2007. *Buyer behaviour : understanding consumer psychology and marketing.* 4th ed. Cape Town: Oxford Univ. Press.

Dupre, K. and Gruen, T.W. 2004. The use of category management practices to obtain a sustainable competitive advantage in the fast-moving-consumer-goods industry. *Journal of Business & Industrial Marketing*, 19(7), pp.444–459.



Dussart, C. 1998. Category Management: Strengths, Limits and Developments. *European Management Journal*, 16(1), pp.50–62.

Enneking, U., Neumann, C. and Henneberg, S. 2007. How important intrinsic and extrinsic product attributes affect purchase decision. *Food Quality and Preference*, 18(1), pp.133–138.

Euromonitor International 2018. *Breakfast Cereals in South Africa | Market Research Report | Euromonitor.* [online] Euromonitor.com. Available at: https://www.euromonitor.com/breakfast-cereals-in-south-africa/report [Accessed 2 Oct. 2019].

Falck, M. 2018. *Five Pitfalls to Avoid When Creating Store Clusters | RELEX Solutions*. [online] RELEX Solutions. Available at: https://www.relexsolutions.com/five-pitfalls-to-avoid-when-creating-store-clusters/ [Accessed 18 Feb. 2019].

Fast, R.B. and Caldwell, E.F. 2000. *Breakfast cereals and how they are made*. St. Paul: American Association Of Cereal Chemists.

Ferreira, D. 2014. An Exploratory Investigation into Tshwane Postmodern Consumers' Consciousness and Practices that Relate to Sustainable Food Procurement. Thesis. pp.1–122.

Finnie, S. and Atwell, W.A. 2016. Pasta, Noodle, and Breakfast Cereal Products. *Wheat Flour*, pp.131–143.

Flanigan, E. and Maimone, M. 2016. *Uncommon Sense: The Global State of Breakfast? What the Consumer Wants, and How You Can Provide It.* [online] Nielsen.com. Available at: https://www.nielsen.com/us/en/insights/article/2016/uncommon-sense-the-state-of-breakfast-what-the-consumer-wants-and-how-to-provide-it/ [Accessed 23 Sep. 2019].

Fotopoulos, C., Krystallis, A., Vassallo, M. and Pagiaslis, A. 2009. Food Choice Questionnaire FCQ revisited. Suggestions for the development of an enhanced general food motivation model. *Appetite*, 52(1), pp.199–208.

Foxman, E.R., Tansuhaj, P.S. and Ekstrom, K.M. 1989. Family Members' Perceptions of Adolescents' Influence in Family Decision Making. *Journal of Consumer Research*, 15(4), p.482.



Furst, T., Connors, M., Bisogni, C. A., Sobal, J., Falk. L W. 1996. Food Choice: A Conceptual Model of the Process. *Appetite*, [online] 26(3), pp.247–266. Available at: http://baileynorwood.com/rcfp/files/GoodSource3.pdf [Accessed 27 May 2019].

Ghosh, P., Tripathi, V. and Kumar, A. 2010. Customer expectations of store attributes: A study of organized retail outlets in India. *Journal of Retail & Leisure Property*, 9(1), pp.75–87.

Gilbert, D. 2018. *How Efficient Store Clustering Can Drive Retail Sales*. [online] Dotactiv.com. Available at: https://www.dotactiv.com/blog/store-clustering-drives-retail-sales [Accessed 23 May 2019].

Gilbert, D. 2019. *Critical Interdependencies to Consider for Your Cluster Management*. [online] Dotactiv.com. Available at: https://www.dotactiv.com/blog/cluster-management?utm_source=hs_email&utm_medium=email&utm_content=72934831&_hsenc =p2ANqtz-

__esWEix51NNCLsTMqBZ8GzlZoBGfQMNvDCiVHa9P2KDScSW3hVsnOE7hbPLmXaVTa HdRgrZT25RcqEpJ7ZT4qYGXP2w&_hsmi=72934831 [Accessed 23 May 2019].

Gilissen, L.J.W.J., van der Meer, I.M. and Smulders, M.J.M. 2014. Reducing the incidence of allergy and intolerance to cereals. *Journal of Cereal Science*, 59(3), pp.337–353.

Glanz, K., Basil, M., Maibach, E., Goldberg, J., and Snyder, D. 1998. Why Americans Eat What They Do. *Journal of the American Dietetic Association*, 98(10), pp.1118–1126.

Golub, A. and Binkley, J. 2005. Determinants of Household Choice of Breakfast Cereals: Healthy or Unhealthy? In: The American Agricultural Economics Association Annual Meeting.

Graeff, T.R. and Harmon, S. 2002. Collecting and using personal data: consumers' awareness and concerns. *Journal of Consumer Marketing*, 19(4), pp.302–318.

Grand View Research 2018. Breakfast Cereal Market Size, Share & Trends Analysis Report By Product RTE, Hot Cereal, By Distribution Channel Supermarket, E-Commerce, Convenience Store, By Region, Vendor Landscape, And Segment Forecasts, 2018 - 2025. San Francisco, United States: Grand View Research, pp.1–122.

Grunert, K.G. 2002. Current issues in the understanding of consumer food choice. *Trends in Food Science & Technology*, 13(8), pp.275–285.

Halkidi, M. and Domeniconi, C. 2008. A Clustering Framework Based on Subjective and Objective Validity Criteria. *ACM Transactions on Knowledge Discovery from Data ACM Trans.*



Knowl. Discov. Data, [online] 118. Available at: https://cs.gmu.edu/~carlotta/publications/a18-halkidi.pdf [Accessed 19 Jul. 2019].

Hall, K. and Mokomane, Z. 2018. The shape of children's families and households: A demographic overview. In: *Children, Families and the State*. Cape Town: Children's Institute, University of Cape Town, pp.32–45.

Hallström, L., Vereecken, C.A., Ruiz, J.R., Patterson, E., Gilbert, C.C., Catasta, G., Díaz, L.-E., Gómez-Martínez, S., González Gross, M., Gottrand, F., Hegyi, A., Lehoux, C., Mouratidou, T., Widham, K., Åström, A., Moreno, L.A. and Sjöström, M. 2011. Breakfast habits and factors influencing food choices at breakfast in relation to socio-demographic and family factors among European adolescents. The HELENA Study. *Appetite*, 56(3), pp.649–657.

Hameli, MSc.K. 2018. A Literature Review of Retailing Sector and Business Retailing Types. *ILIRIA International Review*, 8(1).

Hamister, J.W. and Fortsch, S.M. 2016. Cumulative impact of category management on small retailers. *International Journal of Retail & Distribution Management*, 44(7), pp.680–693.

Hammersley, M. 1991. A note on campbell's distinction between internal and external validity. *Quality & Quantity*, 25(4), pp.381–387.

Hanna, N. and Wozniak, R. 2001. *Consumer Behavior An Applied Approach.* New Jersey: Consumer behavior: An applied approach.

Hanumanth Sastry, S. and Prasada Babu, M.S. 2013. Analysis and Prediction of Sales Data in SAP-ERP System Using Clustering Algorithms. *International Journal of Computational Science and Information Technology*, 1(4), pp.95–109.

Harding, W. 2013. *The future of category management*. [online] Bizcommunity.com. Available at: https://www.bizcommunity.com/Article/196/179/97942.html [Accessed 18 Feb. 2019].

Harris, M. 1997. The Impact of Food Product Characteristics on Consumer Purchasing Behavior: The Case of Frankfurters. *Journal of Food Distribution Research*, pp.92–97.

Hassan, S.H., Leng, L.W. and Peng, W.W. 2012. The Influence of Food Product Packaging Attributes in Purchase Decisions: A Study among Consumers in Penang, Malaysia. *Journal of Agribusiness Marketing*, 5(1), pp.14–28.

Hawkes, C. 2010. Food packaging: the medium is the message. *Public Health Nutrition*, 13(2), pp.297–299.



Heiniö, R.L., Noort, M.W.J., Katina, K., Alam, S.A., Sozer, N., de Kock, H.L., Hersleth, M. and Poutanen, K. 2016. Sensory characteristics of wholegrain and bran-rich cereal foods – A review. *Trends in Food Science & Technology*, 4(7), pp.25–38.

Hecht, A.A., Perez, C.L., Polascek, M., Thorndike, A.N., Franckle, R.L. and Moran, A.J. 2020. Influence of Food and Beverage Companies on Retailer Marketing Strategies and Consumer Behavior. *International Journal of Environmental Research and Public Health*, [online] 17(20), p.7381. Available at: https://www.mdpi.com/1660-4601/17/20/7381 [Accessed 28 Dec. 2020].

Hendrickson, K. 2016. *Understanding Price Sensitivity in the Grocery Aisle*. [online] GreenBook. Available at: https://greenbookblog.org/2016/08/30/understanding-price-sensitivity-in-the-grocery-aisle/ [Accessed 5 May 2019].

Hibić, S. and Poturak, M. 2016. Impact of a Brand on Consumer Decision-making Process. *Russian Federation European Journal of Economic Studies*, 17(3), pp.405–414.

Hingley, M.K. 2018. Crisis of Food Brands: sustaining safe, innovative and competitive food. S.L.: Routledge.

Hodgson, E. 2020. What Is Product Attribute Clustering and Is It Really Worth It? [online] www.dotactiv.com. Available at: https://www.dotactiv.com/blog/what-is-product-attribute-clustering [Accessed 20 Sep. 2020].

Hollander, D., Hertz, K. and Klein Wassink, B. 2013. *The Journey toward greater Customer-Centricity*. London, United Kingdom: Ernst & Young, pp.1–24.

Hossain, A. 2019. Customer Segmentation using Centroid Based and Density Based Clustering Algorithms. In: *International Conference on Electrical Information and Communication Technology EICT*.

Hoyer, W.D., Macinnis, D.J. and Pieters, R. 2013. *Consumer behavior*. 6th ed. Australia; Mason, Oh: South Western Cengage Learning.

https://www.facebook.com/InsightSurvey 2018. *Is SA's Breakfast Cereals Industry catering to the growing Millennial segment? - Insight Survey.* [online] Insight Survey. Available at: https://www.insightsurvey.co.za/blog/sas-breakfast-cereals-catering-growing-millennial-segment [Accessed 13 Aug. 2019].



Huddleston, P., Whipple, J., Nye Mattick, R. and Jung Lee, S. 2009. Customer satisfaction in food retailing: comparing specialty and conventional grocery stores. *International Journal of Retail & Distribution Management*, 37(1), pp.63–80.

Hussey, M. and Duncombe, N. 1999. Projecting the right image: using projective techniques to measure brand image. *Qualitative Market Research: An International Journal*, 2(1), pp.22–30.

Informatica 2011. *Product Centric to Customer Centric Focus*. Tata Consultancy services, pp.1–4.

Intelligence, M. 2019. *Mordor intelligence*. [online] Mordorintelligence.com. Available at: https://www.mordorintelligence.com/industry-reports/breakfast-cereals-market?gclid=Cj0KCQjwv8nqBRDGARIsAHfR9wAVX1RAhB33dU7uvrbmSLxnvsImcGJ0UC EleWrvEe1Ite-dfNGt1WkaAr21EALw_wcB [Accessed 21 Aug. 2019].

Išoraitė, M. 2018. Brand Image Theoretical Aspects. *Integrated Journal of Business and Economics*, 2(1), p.116.

Janakiraman, S. and Umamaheswari, K. 2014. A Survey on Data Mining Techniques for Customer Relationship Management. *International Journal of Engineering, Business and Enterprise Applications*.

Jarvis, W. and Goodman, S. 2005. Effective marketing of small brands: niche positions, attribute loyalty and direct marketing. *Journal of Product & Brand Management*, 14(5), pp.292–299.

Jayasankara Prasad, C. and Ramachandra Aryasri, A. 2011. Effect of shopper attributes on retail format choice behaviour for food and grocery retailing in India. *International Journal of Retail & Distribution Management*, 39(1), pp.68–86.

Jerome Paul Peter and Donnelly, J.H. 2013. *Marketing management : knowledge and skills*. New York, Ny: Mcgraw-Hill Irwin.

Jiang, T. and Tuzhilin, A. 2009. Improving Personalization Solutions through Optimal Segmentation of Customer Bases. *IEEE Transactions on Knowledge and Data Engineering*, 21(3), pp.305–320.

Johnson, K.J. and Lee, S.H. 2015. Factors Associated with Volunteering Among Racial/Ethnic Groups: Findings from the California Health Interview Survey. *Research on Aging*, 39(5),



pp.575-596.

Jones, E., Chern, W.S. and Mustiful, B. 1996. Purchasing behaviour of higher-and lower-income shoppers: a look at breakfast cereals. *Applied Economics*, 28(1), pp.131–137.

Jones. 2014. *Understanding the Types of Consumer Buying Behavior*. [online] Business 2 Community. Available at: https://www.business2community.com/consumer-marketing/understanding-types-consumer-buying-behavior-0822037.

Kagan, J. 2019. *Price Sensitivity*. [online] Investopedia. Available at: https://www.investopedia.com/terms/p/price-sensitivity.asp [Accessed 5 May 2019].

Kalicharan, H.D. 2014. The Effect And Influence Of Country-Of-Origin On Consumers Perception Of Product Quality And Purchasing Intentions. *International Business & Economics Research Journal IBER*, 13(5), pp.897–902.

Karrkkainen, M. 2018. *Balancing Sales and Costs with Optimal Assortment Differentiation*. [online] RELEX Solutions. Available at: https://www.relexsolutions.com/balancing-sales-costs-with-optimum-level-of-assortment-differentiation/ [Accessed 18 Feb. 2019].

Kaur, I. and Singh, S. 2014. Consumer Behavior of Purchase of Processed Cereal Food Products in Punjab. *IOSR Journal of Business and Management*, 16(2), pp.47–57.

Kelley, K. 2003. Good practice in the conduct and reporting of survey research. *International Journal for Quality in Health Care*, [online] 15(3), pp.261–266. Available at: https://academic.oup.com/intqhc/article/15/3/261/1856193.

Kelloggs 2015. Leveraging Ready-to-Eat Cereal for Higher Center Store Sales. [online] Progressive Grocer. Available at: https://progressivegrocer.com/leveraging-ready-eat-cereal-higher-center-store-sales [Accessed 28 Apr. 2019].

Khetan, N. 2020. Impact of Family Life Cycles on Consumer Buying Behavior in Indian Context. *International Journal of Science and Research*, 9(2), pp.1296–1303.

Klopčič, M., Slokan, P. and Erjavec, K. 2020. Consumer preference for nutrition and health claims: A multi-methodological approach. *Food Quality and Preference*, 8(2).

Koen, N., Blaauw, R. and Wentzel-Viljoen, E. 2016. Food and nutrition labelling: the past, present and the way forward. *South African Journal of Clinical Nutrition*, 29(1), pp.13–21.



Kök, A.G., Fisher, M.L. and Vaidyanathan, R. 2008. Assortment Planning: Review of Literature and Industry Practice. *Retail Supply Chain Management*, pp.99–153.

Köpke, U. 2005. Organic foods: do they have a role? Forum of Nutrition, 57(1), pp.62–72.

Kothari, C.R. and Garg, G. 2019. Research methodology: methods and techniques. New Delhi: New Age International P Limited, Publishers.

Kotzé, T. 2007. *Guidelines on writing a first quantitative academic article*. [online] . Available at:

https://btsau.edu.ua/sites/default/files/scopus/%d0%a1%d1%83%d0%bf%d0%b5%d1%80% 20-%20writing_an_academic_journal_article.pdf [Accessed 30 Jun. 2019].

Koutra, C., Thespol, M. and Ngugi, I.K. 2015. The Role of Branding, Promotion and Subculture in the Consumption of Breakfast Cereals in Thailand. *Journal of Hotel & Business Management*, 0401.

Krider, R.E. and Putler, D.S. 2013. Customer and Business Analytics: Applied Data Mining for Business Decision Making Using R. *International Statistical Review*, 81(2), pp.328–328.

Kumar, M. and Patel, N.R. 2008. Using clustering to improve sales forecasts in retail merchandising. *Journal of Operations Research*, 17(41), pp.33–46.

Kumar, R. 2014. Research Methodology. London: Sage Publications.

Kümpel Nørgaard, M., Bruns, K., Haudrup Christensen, P. and Romero Mikkelsen, M. 2007. Children's influence on and participation in the family decision process during food buying. *Young Consumers*, 8(3), pp.197–216.

Label Insight, Inc 2018. *Category Management Plan Example: Category Role*. [online] Labelinsight.com. Available at: https://blog.labelinsight.com/category-management-planexample-category-role [Accessed 8 Feb. 2020].

Laine, J. 2011. *Effective day-to-day category management by BearingPoint*. [online] Slideshare.net. Available at: https://www.slideshare.net/lainejj/effective-daytoday-category-management-by-bearingpoint [Accessed 18 Feb. 2019].

Lal Dar, Y. and Light, J.M. eds., 2014. Food texture design and optimization. Chichester: Wiley-Blackwell.



Lee, C.K.C. and Beatty, S.E. 2002. Family structure and influence in family decision making. *Journal of Consumer Marketing*, 19(1), pp.24–41.

Lee, C.M., Moskowitz, H.R. and Lee, S.Y. 2007. Expectations, Needs and Segmentation of Healthy Breakfast Cereal Consumers. *Journal of Sensory Studies*, 22(5), pp.587–607.

Lee, S. and Kunz, G.I. 2001. Assortment diversity in relation to financial productivity: contributions towards merchandising theory. *Journal of Fashion Marketing and Management: An International Journal*, 5(4), pp.303–312.

Leech, R.M., Worsley, A., Timperio, A. and McNaughton, S.A. 2015. Understanding meal patterns: definitions, methodology and impact on nutrient intake and diet quality. *Nutrition Research Reviews*, [online] 281, pp.1–21. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4501369/ [Accessed 26 Nov. 2019].

Leedy, P.D., Ormrod, J.E. and Johnson, L.R. 2019. *Practical research : planning and design.*New York: Pearson Education, Inc.

Leszczyc, P.T.L.Popkowski., Sinha, A. and Timmermans, H.J.P. 2000. Consumer store choice dynamics: an analysis of the competitive market structure for grocery stores. *Journal of Retailing*, 76(3), pp.323–345.

Li, J., Jaenicke, E.C., Anekwe, T.D. and Bonanno, A. 2018. Demand for ready-to-eat cereals with household-level censored purchase data and nutrition label information: A distance metric approach. *Agribusiness*, 34(4), pp.687–713.

Li, X.E., Jervis, S.M. and Drake, M.A. 2015. Examining Extrinsic Factors that Influence Product Acceptance: A Review. *Journal of Food Science*, 80(5), pp.R901–R909.

Lim, J.-S. ., Darley, W.K. and Summers, J.O. 1994. An Assessment of Country of Origin Effects Under Alternative Presentation Formats. *Journal of the Academy of Marketing Science*, 22(3), pp.274–282.

Lindskog, H. and Brege, S. 2002. *Time-Rich and Time-Poor Consumer Behavior: The Importance of Time in Market Segmentation*. Linköping, Sweden: Department of Management and Economics Institute of Technology, University of Linköping, pp.9–18.

Lucas, J. 2018. Cereal Category Insight Report. FONA International, pp.1–8.

Lusk, J.L. and McCluskey, J. 2018. Understanding the Impacts of Food Consumer Choice and Food Policy Outcomes. *Applied Economic Perspectives and Policy*, 40(1), pp.5–21.



Macedo, I.S.M., Sousa-Gallagher, M.J., Oliveira, J.C. and Byrne, E.P. 2013. Quality by design for packaging of granola breakfast product. *Food Control*, 29(2), pp.438–443.

Madhumitha, G. and Kathiresan, K. 2018. A Survey on Clustering Techniques in Data Mining. *International Journal of Computer Science and Mobile Computing A Monthly*, 7(8), pp.192–195.

Mafini, C. and Dhurup, M. 2015. Drivers Of Customer Loyalty In South African Retail Stores. *Journal of Applied Business Research JABR*, 31(4), p.1295.

Magier-Łakomy, E. and Boguszewicz-Kreft, M. 2015. Dimensions of the Country of Origin Effect and their Measurement. *Annales Universitatis Mariae Curie-Skłodowska, sectio H, Oeconomia*, 49(3), p.125.

Maheswaren, D. 2004. Country of Origin as a Stereotype:Effects of Consumer Expertise and Attribute Strength on Product Evaluations. *The Journal of Consumer Research*, 21(2), pp.354–365.

Mahomedy, Y. 2016. *Manufacture of Breakfast Cereals :: South Africa*. [online] Whoownswhom.co.za. Available at: https://www.whoownswhom.co.za/store/info/4426 [Accessed 2 Oct. 2019].

Makhitha, K.M. and Khumalo, N.M. 2019. The influence of supermarket attributes on consumer selection of a supermarket: a South African perspective. *Journal of Consumer Sciences*, 47(1), pp.14–27.

Mantrala, M. and Kamran-Disfani, O. 2017. Category Management and Captains. In: *Handbook of Research on Retailing*. Edward Elgar Publishing.

Martins, J. 2007. The South African Consumer Market. *Global Journal of Business Research*, 1(1), pp.168–183.

Mazibuko, A.L. 2010. *Brand loyalty of cereal products*. [Dissertation] pp.1–60. Available at: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.904.1438&rep=rep1&type=pdf.

Mcdaniel, C., Hair, J. and Lamb, C. 2018. Mktg. Australia: South-Western.

Mcdonald, M.H.B. and Wilson, H. 2011. *Marketing plans: how to prepare them, how to use them.* 7th ed. Chichester, West Sussex: Wiley.



Mcwilliams, M. 2008. *Foods : experimental perspectives*. 6th ed. Upper Saddle River, N.J.: Pearson Prentice Hall.

Mishra, Dr.S.B. and Alok, Dr.S. 2017. *Handbook of Research Methodology: A Compendium for Scholars & Researchers*. India: Educreation Publishing.

Mitchell, V.W. and Boustani, P. 1992. Consumer Risk Perceptions in the Breakfast Cereal Market. *British Food Journal*, 94(4), pp.17–26.

Monlapak Thespol, C.K. and Ngugi, I.K. 2015. The Role of Branding, Promotion and Subculture in the Consumption of Breakfast Cereals in Thailand. *Journal of Hotel & Business Management*, 4(1).

Monneuse, M., Bellisle, F. and Koppert, G. 1997. Eating habits, food and health related attitudes and beliefs reported by French students. *European Journal of Clinical Nutrition*, 51(1), pp.46–53.

Morgan, K.J., Metzen, E.J. and Johnson, S.R. 1979. An Hedonic Index for Breakfast Cereals. *Journal of Consumer Research*, 6(1), p.67.

Morgan, N.A., Kaleka, A. and Gooner, R.A. 2006. Focal supplier opportunism in supermarket retailer category management. *Journal of Operations Management*, 25(2), pp.512–527.

Mueller, S. and Szolnoki, G. 2010. The relative influence of packaging, labelling, branding and sensory attributes on liking and purchase intent: Consumers differ in their responsiveness. *Food Quality and Preference*, 21(7), pp.774–783.

Munthiu, M.-C. 2009. The Buying Decision Process and Types of Buying Decision Behaviour. Sibiu Alma Mater University Journals. Series A. Economic Sciences, 2(4), pp.27–33.

Murray, C.C., Talukdar, D. and Gosavi, A. 2010. Joint Optimization of Product Price, Display Orientation and Shelf-Space Allocation in Retail Category Management. *Journal of Retailing*, 86(2), pp.125–136.

Mutsikiwa, M., Marumbwa, J. and Mudondo, D.C. 2013. The Impact of Informational Package Elements on Consumer Purchase Behaviour of Breakfast Cereal Products: The Case of University Students in Masvingo, Zimbabwe. *European Journal of Business and Management*, 5(6), pp.55–63.

Nelson, J.C., Ranganathan, R., Sharma, A. and Sands, Z.G. 2016. *Analysis of Clustering Solutions*.



Ness, M., Gorton, M. and Kuznesof, S. 2002. The student food shopper: Segmentation on the Basis of Attitudes to Store Features and Shopper Behavior. *British Food Journal*, 10(47), pp.506–525.

Nevo, A. 2001. Measuring Market Power in the ReadytoEat Cereal Industry. *Econometrica*, [online] 69(2), pp.307–342. Available at: https://www.jstor.org/stable/2692234 [Accessed 19 Jul. 2019].

Ngai, E.W.T., Xiu, L. and Chau, D.C.K. 2009. Application of data mining techniques in customer relationship management: A literature review and classification. *Expert Systems with Applications*, [online] 36(2), pp.2592–2602. Available at: https://ac.els-cdn.com/S0957417408001243/1-s2.0-S0957417408001243-main.pdf?_tid=4a817eac-d1d7-46f7-96be-bd1d14393d4c&acdnat=1549037276_753a473f3706f299e1b2538334251903 [Accessed 1 Feb. 2019].

Nguyen, T.N., Phan, T.T.H. and Vu, P.A. 2015. The Impact of Marketing Mix Elements on Food Buying Behavior: A Study of Supermarket Consumers in Vietnam. *International Journal of Business and Management*, 10(10).

Niehof, A. 2011. Conceptualizing the household as an object of study. *International Journal of Consumer Studies*, 35(5), pp.488–497.

Nielsen 2018a. *South African Shoppers "Drop" The Basket*. [online] Nielsen.com. Available at: https://www.nielsen.com/za/en/press-releases/2018/south-african-shoppers-drop-the-basket/ [Accessed 2 Oct. 2019].

Nielsen 2018b. *The Hidden Opportunity In South Africa's Growing Appetite For Convenience*. [online] Nielsen.com. Available at: https://www.nielsen.com/za/en/insights/article/2018/the-hidden-opportunity-in-south-africans-growing-appetite-for-convenience/ [Accessed 2 Oct. 2019].

O'Regan, R. 2009. *Through a shopper's eyes Adopting a customer-centric approach to category management*. London: Economist Intelligence Unit Limited, pp.1–7.

Odunitan-Wayas, F., Okop, K., Dover, R., Alaba, O., Micklesfield, L., Puoane, T., Uys, M., Tsolekile, L., Levitt, N., Battersby, J., Victor, H., Meltzer, S. and Lambert, E. 2018. Food Purchasing Characteristics and Perceptions of Neighborhood Food Environment of South Africans Living in Low-, Middle- and High-Socioeconomic Neighborhoods. *Sustainability*, 10(12), p.4801.



Oliveira, V. 2012. Analytical Customer Relationship Management in Retailing Supported by Data Mining Techniques. Doctoral Thesis.

Pallant, J. 2013. SPSS survival manual: a step by step guide to data analysis using SPSS for windows. London, Uk: Mcgraw-Hill.

Pan, J. 2017. 508, ADA, WCAG: What's the difference? [online] Logic Solutions. Available at: https://www.logicsolutions.com/508-ada-wcag-accessibility-difference/#:~:text=WCAG%20is%20simply%20a%20set [Accessed 13 May 2021].

Paul Russell Smith and Taylor, J. 2010. *Marketing communications : an integrated approach*. London; Philadelphia: Kogan Page, Cop.

Peter, J.P. and Olson, J.C. 1999. *Consumer behavior and marketing strategy*. 5th ed. Singapore: McGraw Hill.

Piqueras-Fiszman, B. and Spence, C. 2015. Sensory expectations based on product-extrinsic food cues: An interdisciplinary review of the empirical evidence and theoretical accounts. *Food Quality and Preference*, 40(1), pp.165–179.

Pollack, J. 2018. Retail Clustering Methods | Retail Consultants, Retail Strategy, Retail Thought Leadership. [online] Parkeravery.com. Available at: http://www.parkeravery.com/pov Retail Clustering Methods.html [Accessed 19 Feb. 2019].

Popping, R. 2015. Analyzing Open-ended Questions by Means of Text Analysis Procedures. *Bulletin of Sociological Methodology/Bulletin de Méthodologie Sociologique*, 128(1), pp.23–39.

Prasad, Ch.J.S. and Reddy, D.R. 2007. A Study on the Role of Demographic and Psychographic Dynamics in Food and Grocery Retailing. *Vision: The Journal of Business Perspective*, 11(4), pp.21–30.

Prasad, P. and Malik, L. 2011. Generating Customer Profiles for Retail Stores Using Clustering Techniques. *International Journal on Computer Science and Engineering IJCSE*, 3(6), pp.2506–2510.

Promozione, V. 2013. *Overview of the South African Retail Market*. [online] Available at: https://www.tb.camcom.gov.it/uploads/CCIAA/Corsi/Atti/2013_11_07/OverviewOFTHESOUT HAfrica.pdf.



Purohit, H.C. and Wagh, A. 2009. Research methodology: tools & techniques. New Delhi: Shree Publishers & Distributors.

Qazzafi, S. 2019. Consumer Buying Decision Process Towards Products. *International Journal of Scientific Research and Engineering Development*, 2(5), pp.130–134.

Qualtrics 2020. *Sample Size Calculator*. [online] Qualtrics. Available at: https://www.qualtrics.com/blog/calculating-sample-size/ [Accessed 28 Sep. 2020].

Raghubir, P. and Krishna, A. 1999. Vital Dimensions in Volume Perception: Can the Eye Fool the Stomach? *Journal of Marketing Research*, 36(3), p.313.

Rajaram, K. 2001. Assortment planning in fashion retailing: methodology, application and analysis. *European Journal of Operational Research*, 129(1), pp.186–208.

Ramanlal Ambaram, M. 2013. The factors that enable customer centricity and the changes in the organisation design when moving from a product to a customer centric strategy. Thesis.

Rappoport, L., Peters, G.R., Downey, R., McCann, T. and Huff-Corzine, L. 1993. Gender and Age Differences in Food Cognition. *Appetite*, 20(1), pp.33–52.

Ratneshwar, S., Shocker, A.D., Cotte, J. and Srivastava, R.K. 1999. Product, person, and purpose: putting the consumer back into theories of dynamic market behaviour. *Journal of Strategic Marketing*, 7(3), pp.191–208.

Rees, A.M. 1992. Factors influencing consumer choice. *International Journal of Dairy Technology*, 45(4), pp.112–116.

Reutterer, T. and Teller, C. 2009. Store format choice and shopping trip types. *International Journal of Retail & Distribution Management*, 37(8), pp.695–710.

Ricciuto, L., Tarasuk, V. and Yatchew, A. 2006. Socio-demographic influences on food purchasing among Canadian households. *European Journal of Clinical Nutrition*, 60(6), pp.778–790.

Riley, M.D., Bowen, J., Krause, D., Jones, D. and Stonehouse, W. 2016. A survey of consumer attitude towards nutrition and health statements on food labels in South Australia. *Functional Foods in Health and Disease*, 61(2), pp.809–821.



Rocco, T.S. and Plakhotnik, M.S. 2009. Literature Reviews, Conceptual Frameworks, and Theoretical Frameworks: Terms, Functions, and Distinctions. *Human Resource Development Review*, 8(1), pp.120–130.

Roman, V. 2019. *Unsupervised Machine Learning: Clustering Analysis*. [online] Medium. Available at: https://towardsdatascience.com/unsupervised-machine-learning-clustering-analysis-d40f2b34ae7e [Accessed 26 Sep. 2019].

Roth, Y. 2016. Do Brands Serve as Reliable Signals of Nutritional Quality? The Case of Breakfast Cereals. *Journal of Food Products Marketing*, 23(1), pp.1–23.

Rundh, B. 2005. The multi-faceted dimension of packaging. *British Food Journal*, [online] 1079, pp.670–684. Available at: https://www.deepdyve.com/lp/emerald-publishing/the-multi-faceted-dimension-of-packaging-marketing-logistic-or-r0JKjkzCLh [Accessed 10 Dec. 2019].

Rygielski, C., Wang, J.-C. and Yen, D. 2002. Data mining techniques for customer relationship management. *Technology in Society*, 2(4).

Salkind, N.J. 2018. Exploring research. Boston, Mass: Pearson Education Limited.

Sammut-Bonnici, T. 2015. Brand and Branding. Wiley Encyclopedia of Management, pp.1-3.

Samsudin, N., Chik, C.T., Azman, N.F. and Bachok, S. 2017. The extrinsic factors affecting food preferences among Generation Y. *Journal of Tourism, Hospitality & Culinary Arts*, 9(1), pp.41–49.

Sano, N., Tsutsui, R., Yada, K. and Suzuki, T. 2016. Clustering of Customer Shopping Paths in Japanese Grocery Stores. *Procedia Computer Science*, 96(1), pp.1314–1322.

Sarli, A. and Hon Tat, H. 2011. Attracting Consumers by Finding out Their Psychographic Traits. *International Journal of Fundamental Psychology & Social Sciences*, 1(1), pp.6–10.

Satia, J.A., Galanko, J.A. and Neuhouser, M.L. 2005. Food nutrition label use is associated with demographic, behavioral, and psychosocial factors and dietary intake among African Americans in North Carolina. *Journal of the American Dietetic Association*, 105(3), pp.392–402.

Scarpi, D. 2005. Hedonic and Utilitarian Behaviour in Specialty Shops. *The Marketing Review*, 5(1), pp.31–44.



Schiffman, L.G. and Kanuk, L.L. 2000. *Consumer Behaviour*. 7th ed. New Jersey: Prentice Hall.

Schlesinger, L. 2008. Customer-Centric Assortment Planning. CapGemini. CapGemini.

Schmitt, B. 2012. The consumer psychology of brands. *Journal of Consumer Psychology*, 22(1), pp.7–17.

Sckokai, P. and Varacca, A. 2012. Product Differentiation and Brand Competition in the Italian Breakfast Cereal Market: a Distance Metric Approach. *Bio-based and Applied Economics*, 1(3), pp.297–312.

Seema, G. and Aparna, K. 2017a. Consumer Purchase Behaviour and Brand Preferences of Various Ready to Eat Breakfast Cereals - A Case of Hyderabad Metro. Thesis. pp.64–68.

Seema, G.A. and Aparna, K. 2017b. Consumer Purchase Behaviour and Brand Preferences of Various Ready-to-Eat Breakfast Cereals - A Case of the Hyderabad Metro. *The Journal of Research PJTSAU*, 453(4), pp.66–68.

Sheth, J.N. and Mittal, B. 2004. *Customer Behavior: A Managerial Perspective*. 2nd ed. Ohio: South Western.

Shi, H. and Price, D.W. 1998. Impacts of Sociodemographic Variables on the Implicit Values of Breakfast Cereal Characteristics. *Journal of Agricultural and Resource Economics*, 23(1), pp.126–139.

Shopability 2011. *Does One Purchase Decision Hierarchy Fit All?* | Shopability. [online] Shopability.com.au. Available at: http://shop-ability.com.au/2011/does-one-purchase-decision-hierarchy-fit-all/ [Accessed 18 Feb. 2019].

Shrivastava, V. and Arya, P. narayan 2012. A Study of Various Clustering Algorithms on Retail Sales Data. *International Journal of Computing, Communications and Networking*, 1(2), pp.68–74.

Silayoi, P. and Speece, M. 2007. The importance of packaging attributes: a conjoint analysis approach. *European Journal of Marketing*, 4111(12), pp.1495–1517.

Simon, S. 2018. A Study On The Determinants Of Consumer Buying Behavior Towards Ready To Eat Breakfast Cereals. Doctoral Thesis.



Sinha, P.K. and Banerjee, A. 2004. Store choice behaviour in an evolving market. *International Journal of Retail & Distribution Management*, 32(10), pp.482–494.

Sinha, P.K., Mathew, E. and Kansal, A. 2005. Format Choice of Food and Grocery Retailer. *Indian Institute of Management*.

Sisodiya, P. and Sharma, G. 2018. The Impact of Marketing Mix Model/Elements on Consumer Buying Behaviour: A Study of FMCG Products in Jaipur City. *International Journal of Technical Research & Science*, 3(1).

Skippari, M., Nyrhinen, J. and Karjaluoto, H. 2017. The impact of consumer local engagement on local store patronage and customer satisfaction. *The International Review of Retail, Distribution and Consumer Research*, 27(5), pp.485–501.

Smewing, J. 2015. *Texture Analysis Professionals Blog: Cereal Product Texture Measurement and Analysis*. [online] Texture Analysis Professionals Blog. Available at: https://textureanalysisprofessionals.blogspot.com/2015/06/cereal-product-texture-measurement-and.html [Accessed 31 Aug. 2020].

Sobhani, S.R. and Babashahi, M. 2020. Determinants of Household Food Basket Composition: A Systematic Review. *Iran Journal of Public Health*, 9(10), pp.1827–1838.

Solomon, M.R. 2015. *Consumer behaviour: buying, having, being.* 11th ed. Melbourne Pearson Australia.

Song, H., Halvorsen, B. and Harley, A. 2014. Marketing cereal to children: content analysis of messages on children's and adults' cereal packages. *International Journal of Consumer Studies*, 38(6), pp.571–577.

Song, X., Giacalone, D., Bølling Johansen, S.M., Frøst, M.B. and Bredie, W.L.P. 2016. Changes in orosensory perception related to aging and strategies for counteracting its influence on food preferences among older adults. *Trends in Food Science & Technology*, 5(3), pp.49–59.

Spence, C. 2017. Breakfast: The most important meal of the day? *International Journal of Gastronomy and Food Science*, [online] 8(1), pp.1–6. Available at: https://www.sciencedirect.com/science/article/pii/S1878450X17300045.

Srindhar, G. 2007. Consumer Involvement in Product Choice - A Demographic Analysis. *XIMB Journal of Management*, pp.131–142.



Standard Bank 2016. The SA Consumer in Brief. South Africa: Standard Bank, pp.1–18.

Stats SA 2018. *General Household Survey*. [online] *Statistics South Africa*, pp.1–9. Available at: http://www.statssa.gov.za/publications/P0318/P03182018.pdf.

Stankevich, A. 2017. Explaining the Consumer Decision-Making Process: Critical Literature Review. *Journal of International Business Research and Marketing*, [online] 2(6), pp.7–14. Available

https://www.researchgate.net/profile/Bojan_Obrenovic/publication/335491132_Explaining_the Consumer Decision-

Making_Process_Critical_Literature_Review/links/5d68f0df92851c154cc5c252/Explaining-the-Consumer-Decision-Making-Process-Critical-Literature-Review.pdf.

Statista 2021. *Breakfast Cereals - Worldwide | Statista Market Forecast*. [online] Statista. Available at: https://www.statista.com/outlook/cmo/food/bread-cereal-products/breakfast-cereals/worldwide#volume [Accessed 11 May 2021].

Statista 2020a. *South Africa - total population by gender 2018*. [online] Statista. Available at: https://www.statista.com/statistics/967928/total-population-of-south-africa-by-gender/.

Statista 2020b. *South Africa: age distribution of population, by gender 2019.* [online] Statista. Available at: https://www.statista.com/statistics/1127528/age-distribution-of-population-in-south-africa-by-gender/.

Statista 2020c. *South Africa: distribution of educational attainment.* [online] Statista. Available at: https://www.statista.com/statistics/1115589/distribution-of-educational-attainment-in-south-africa/.

Statista 2020d. *South Africa: households, by household size*. [online] Statista. Available at: https://www.statista.com/statistics/1114299/distribution-of-households-in-south-africa-by-household-size/.

Statista 2020e. South Africa: languages spoken within households. [online] Statista. Available at: https://www.statista.com/statistics/1114302/distribution-of-languages-spoken-inside-and-outside-of-households-in-south-africa/ [Accessed 30 Jan. 2021].

Statista 2020f. *South Africa: population by province*. [online] Statista. Available at: https://www.statista.com/statistics/1112169/total-population-of-south-africa-by-province/ [Accessed 30 Jan. 2021].



Statista 2020g. *South Africa: population, by marital status*. [online] Statista. Available at: https://www.statista.com/statistics/1114298/distribution-of-population-in-south-africa-by-marital-status/ [Accessed 30 Jan. 2021].

Stats SA 2016. *Community Survey 2016*. Pretoria, South Africa: Statistics South Africa, pp.1–185.

Stats SA 2018. *Quarterly Labour Force Survey*. [online] South Africa: Statistics South Africa, pp.1–130. Available at: http://www.statssa.gov.za/publications/P0211/P02111stQuarter2018.pdf [Accessed 8 Apr. 2019].

Stats SA 2020. *Protecting South Africa's elderly* | *Statistics South Africa*. [online] Statistics South Africa. Available at: http://www.statssa.gov.za/?p=13445 [Accessed 28 Sep. 2020].

Swanepoel, L.F. 2015. *Consumers' Perception of Artisan Bottled Preserved Food Products*. Dissertation. pp.1–151.

Symmank, C. 2018. Extrinsic and intrinsic food product attributes in consumer and sensory research: literature review and quantification of the findings. *Management Review Quarterly*, 69(1), pp.39–74.

Tanner, J.F. and Raymond, M.A. 2018. *Principles of Marketing*. University Of Minnesota Libraries Publishing.

Teas, R.K. and Agarwal, S. 2000. The Effects of Extrinsic Product Cues on Consumers' Perceptions of Quality, Sacrifice, and Value. *Journal of the Academy of Marketing Science*, 28(2), pp.278–290.

Tee, L.M. 2014. The Intake and Quality of Breakfast Consumption among Adolescents Attending Public Secondary Schools in Potchefstroom. Mini-Dissertation. pp.1–156.

Thakor, M.V. and Katsanis, L.P. 1997. A Model of Brand and Country Effects on Quality Dimensions. *Journal of International Consumer Marketing*, 9(3), pp.79–100.

The Economic Times 2020. What is Marketing Mix? Definition of Marketing Mix, Marketing Mix Meaning - The Economic Times. [online] The Economic Times. Available at: https://economictimes.indiatimes.com/definition/marketing-

mix#:~:text=Price%3A%20refers%20to%20the%20value [Accessed 14 Sep. 2020].



Thunström, L. 2010. Preference Heterogeneity and Habit Persistence: The Case of Breakfast Cereal Consumption. *Journal of Agricultural Economics*, 61(1), pp.76–96.

Thiruvenkadam, T. and Panchanatham, N. 2016. Influence of Demographic Factors on Grocery Buying Behaviour. *Asian Journal of Research in Social Sciences and Humanities*, 6(4), p.544.

Thiyagaraj, A. 2015. A Study of Consumer Preference Towards Branded Tea in Tiruppur City. *Global Journal for Research Analysis*, 4(5), pp.207–208.

Trading Economics 2020. South Africa Average Monthly Gross Wage | 2004-2020 Data | 2021-2022 Forecast. [online] tradingeconomics.com. Available at: https://tradingeconomics.com/south-africa/wages.

Traders Friend 2019. *The South African Breakfast Cereal Landscape - Traders*. [online] Traders. Available at: https://red.tradersfriend.co.za/the-south-african-breakfast-cereal-landscape/ [Accessed 2 Oct. 2019].

Trans, H.-C.C. and Green, R. 2009. Marketing Mix and Branding: Competitive Hypermarket Strategies. *International Journal of Management and Marketing Research*, 2(1), pp.17–34.

Treuhaft, S. and Karpyn, A. 2010. *The Grocery Gap: Who Has Access to Food and Why It Matters*. California: United States of America: Policy Link and The Food Trust, pp.1–44.

Trinh, G., Dawes, J. and Lockshin, L. 2009. Do product variants appeal to different segments of buyers within a category? *Journal of Product & Brand Management*, 18(2), pp.95–105.

Tripathi, S., Bhardwaj, A. and Poovammal, E. 2018. Approaches to Clustering in Customer Segmentation. *International Journal of Engineering & Technology*, 73(12), p.802.

TROC Global 2020. Shoppers vs. Consumers: What Different Insights do they Give? [online] T-ROC. Available at: https://trocglobal.com/blog/shopper-insights-vs-consumer-insights/ [Accessed 21 Feb. 2021].

Vaismoradi, M., Turunen, H. and Bondas, T. 2013. Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing & Health Sciences*, [online] 15(3), pp.398–405. Available at: https://onlinelibrary.wiley.com/doi/full/10.1111/nhs.12048.

Van der Colff, N., van der Merwe, D., Bosman, M., Erasmus, A. and Ellis, S. 2015. Consumers' prepurchase satisfaction with the attributes and information of food labels. *International Journal of Consumer Studies*, 40(2), pp.220–228.



Van Der Vyver, J. 2008. The Importance of Store Image Dimensions in Apparel Retail: Customer and Management Perceptions. Unpublished Masters Thesis.

Varley, R. 2011. *Retail product management : buying and merchandising.* Abingdon, Oxon: Routledge, Taylor & Francis Group.

Veale, R., Quester, P. and Karunaratna, A. 2006. The role of intrinsic (sensory) cues and the extrinsic cues of country of origin and price on food product evaluation. In: *3rd International Wine Business & Marketing Research Conference*. Adelaide, South Australia: School of Commerce: The University of Adelaide.

Verbeke, W. and Roosen, J. 2009. Market Differentiation Potential of Country-of-origin, Quality and Traceability Labeling. *Estey Centre Journal of International Law and Trade Policy*, 10(1), pp.20–35.

Vilčeková, L. and Sabo, M. 2013. The influence of demographic factors on attitudes toward brands and brand buying behavior of Slovak consumers. *International Journal of Education and Research*, 11(1), pp.1–10.

Visser, E.M., Du Preez, R. and Janse Van Noordwyk, H.S. 2006. Importance of apparel store image attributes: Perceptions of female consumers. *SA Journal of Industrial Psychology*, 323.

Vraneševic', T. and Stančec, R. 2003. The effect of the brand on perceived quality of food products. *British Food Journal*, 105(11), pp.811–825.

Volpe, R., Kuhns, A. and Jaenicke, T. 2017. *Store Formats and Patterns in Household Grocery Purchases*. [online] United States: U.S. Department of Agriculture, Economic Research Service, pp.1–34. Available at: https://www.ers.usda.gov/webdocs/publications/82929/eib-167.pdf?v=0.

Wahyudi, A., Kuwornu, J.K.M., Gunawan, E., Datta, A. and Nguyen, L.T. 2019. Factors Influencing the Frequency of Consumers' Purchases of Locally-Produced Rice in Indonesia: A Poisson Regression Analysis. *Agriculture*, 9(6), p.117.

Walliman, N. 2018. Research methods the basics. Abingdon, Oxon New York, Ny Routledge.

Who Owns Whom 2020. *Manufacture of Breakfast Cereals in South Africa 2020*. South Africa: Who Owns Whom, pp.1–79.

Wiid, J. and Diggines, C. 2015. Marketing research. 3rd ed. Lansdowne, Cape Town: Juta.



Wijaya, B.S. 2013. Dimensions of Brand Image: A Conceptual Review from the Perspective of Brand Communication. *European Journal of Business and Management*, 53(1), pp.55–65.

Wiles, N.L. 2017. The nutritional quality of South African ready-to-eat breakfast cereals. *South African Journal of Clinical Nutrition*, 30(4), pp.93–100.

Williams, L.A. 2017. *Targeting Millennial Food & Beverage Consumers*. [online] www.preparedfoods.com. Available at: https://www.preparedfoods.com/articles/119925-targeting-millennial-food-beverage-consumers [Accessed 13 May 2021].

Williams, P.G. 2014. The Benefits of Breakfast Cereal Consumption: A Systematic Review of the Evidence Base. *Advances in Nutrition*, 55, pp.636S673S.

Wilson, G. and Wood, K. 2004. The influence of children on parental purchases during supermarket shopping. *International Journal of Consumer Studies*, 28(4), pp.329–336.

Wirtz, J. and Mattila, A.S. 2003. The effects of consumer expertise on evoked set size and service loyalty. *Journal of Services Marketing*, 17(7), pp.649–665.

Wood, L. 2004. Dimensions of brand purchasing behaviour: consumers in the 18–24 age group. *Journal of Consumer Behaviour*, 4(1), pp.9–24.

Wyatt, J.C. 2000. When to Use Web-based Surveys. *Journal of the American Medical Informatics Association*, 7(4), pp.426–430.

Yong, A.G. and Pearce, S. 2013. A Beginner's Guide to Factor Analysis: Focusing on Exploratory Factor Analysis. *Tutorials in Quantitative Methods for Psychology*, 9(2), pp.79–94.

Zikmund, W.G. and Babin, B.J. 2007. *Essentials of marketing research*. 3rd ed. Boston, Ma: Cengage.

Zikmund, W.G. and D'amico, M. 2002. *Effective marketing : creating and keeping customers in an e-commerce world.* Mason Ohio: South-Western, Cop.



ADDENDUM A: ETHICS APPROVAL



Faculty of Natural and Agricultural Sciences Ethics Committee

E-mail: ethics.nas@up.ac.za

14 May 2020

ETHICS SUBMISSION: LETTER OF APPROVAL

Miss EA Hodgson Department of Consumer and Food Sciences Faculty of Natural and Agricultural Science University of Pretoria

Reference number: NAS074/2020

Project title: Consumer Prioritisation of Product-Related Attributes within the Breakfast Cereals

Category

Dear Miss EA Hodgson,

We are pleased to inform you that your submission conforms to the requirements of the Faculty of Natural and Agricultural Sciences Research Ethics committee.

Please note the following about your ethics approval:

- Please use your reference number (NAS074/2020) on any documents or correspondence with the Research Ethics Committee regarding your research.
- Please note that the Research Ethics Committee may ask further questions, seek additional information, require further modification, monitor the conduct of your research, or suspend or withdraw ethics approval.
- Please note that ethical approval is granted for the duration of the research (e.g. Honours studies: 1 year, Masters studies: two years, and PhD studies: three years) and should be extended when the approval period lapses.
- The digital archiving of data is a requirement of the University of Pretoria. The data should be accessible in the event of an enquiry or further analysis of the data.

Ethics approval is subject to the following:

- The ethics approval is conditional on the research being conducted as stipulated by the details of all documents submitted to the Committee. In the event that a further need arises to change who the investigators are, the methods or any other aspect, such changes must be submitted as an Amendment for approval by the Committee.
- Applications using Animals: NAS ethics recommendation does not imply that AEC approval
 is granted. The application has been pre-screened and recommended for review by the AEC.
 Research may not proceed until AEC approval is granted.

Post approval submissions including application for ethics extension and amendments to the approved application should be submitted online via the Ethics work centre.

We wish you the best with your research.

Yours sincerely,

المامل الم

Chairperson: NAS Ethics Committee



ADDENDUM B: PLAGARISM DECLARATION

Full names	Erin Hodgson
Student number	15037755
Topic of work	Masters in Consumer Science: Food Management

Declaration

- 1. I understand what plagiarism is and am aware of the University's policy in this regard.
- 2. I declare that this dissertation (e.g. essay, report, project, assignment, dissertation, thesis, etc.) is my own original work. Where other people's work has been used (either from a printed source, internet or any other source), this has been properly acknowledged and referenced in accordance with the requirements as stated in the University's plagiarism prevention policy.
- 3. I have not used another student's past written work to hand in as my own.
- 4. I have not allowed, and will not allow, anyone to copy my work with the intention of passing it off as his or her own work.

Signature	- FOR	
•		



ADDENDUM C: QUESTIONNAIRE



CONSUMER PRIORITISATION OF PRODUCT-RELATED ATTRIBUTES WITHIN THE BREAKFAST CEREALS CATEGORY

Informed consent form

Dear respondent

The purpose of this study is to gain insight into the consumer's prioritisation of product-related attributes in the breakfast cereals category. This study is interested in your prioritisation of product-related attributes when retailer, category and consumer-related attributes are considered. We would like to use the information gained to provide information to South African retailers who will use the insights as part of the category management function to provide a tailored shopping experience to consumers. Thank you for taking the time to share your perspectives in this regard.

As a participant in this study, you will be asked to complete a series of questions about yourself and the way in which you shop for breakfast cereals. Your identity and answers will be kept confidential at all times and will be used for the purpose of the research only. The survey will take approximately 10 minutes to complete and you are welcome to refrain from answering any questions that pose any discomfort or infringement on your privacy and may decide to stop the survey at any time without penalty. Please note that your participation is voluntary and does in no way release the researchers or involved institution from their legal and professional responsibilities. You may withdraw from the questionnaire at any time without providing an explanation. You also have the right to ask for access to your data and can contact any of the researchers to ask questions before beginning the questionnaire.

Your decision to respond to the questions will be interpreted as confirmation that you have agreed to participate in the study.

Kind regards

Postgraduate student: Erin Hodgson (Erin.hodgson06@gmail.com)

Principal Investigator and supervisor: Nadene Marx-Pienaar (Nadene.marxp@up.ac.za)

Co-supervisor: Bertha Jacobs (Bertha.jacobs@up.ac.za)

Please read the consent form and tick the applicable statement.

O I agree to the terms and conditions and would like to participate in the study

 I do not agree with the terms and conditions and would not like to participate in the study



What is your gend	der'	?										
~												
How old are you?												
Age	21	25	30	34	39	43	47	52	56	61	65	
In terms of the Enbelong to?	nplo	oyme	nt Ec	uity /	Act, v	vhich	рори	ılatior	n gro	up do	you	
What is your high	est	level	of ed	ducat	ion							
Please indicate yo	our	city o	of res	idend	ce e.g	g. Pre	toria					
What is your hom	e la	angua	age?									
What is your appr nearest R1000	oxi	mate	total	mon	thly h	ouse	hold	incon	ne ro	unde	d up to th	е
Monthly household Income	0	10000	20000	30000	40000	50000	60000	70000	80000	90000	100000	

What is your ma	arital	statu	s?								
			~								
How many people currently live in your household?											
	1	3	5	7	9	11	12	14	16	18	20
Number of people	le										
How many depe	ender	nt chil	ldren	unde	er the	age	of 18	are (curre	ntlv li	vina in vour
household?											3 ,
	0	4	0	2	4	-		7	0	0	10
Number of childre	0 en	1	2	3	4	5	ь	7	8	9	10
Consumer brea	akfas	t cer	eal p	urch	ase	and o	cons	umpt	ion b	ehav	viour
Who is respons	ible f	or the	aro	oery e	honr	oina i	n the	hous	ehole	1	
Who is respons	ible it	טו וופ	groc	ociy s	siiopļ	Jing ii	i iiie	nous	CHOIC	ı	
			~								
How many times	s per	mon	th do	you	purch	nase	break	(fast	cerea	11?	
	0	0	2	-		0	0	44	40	4.4	45
Times per mont	0 th	2	3	5	ь	8	9	11	12	14	15
How many times	How many times per week do you eat breakfast cereal?										
	0	2	3	5	6	8	9	11	12	14	15
Times per wee	k										



Myself and or household members in my family consume breakfast cereal most often as:

	~
--	---

How important are the following product attributes when you select a breakfast cereal?

	Not important at all	Slightly important	Moderately important	Very important	Extremely important
Single-serving size (e.g. 50g)	0	0	0	0	0
Standard box size (e.g. 500g - 1.5 kg)	0	0	0	0	0
Refill bag size (e.g. 2-5 kg)	0	0	0	0	0
Case pack size (e.g. 16 pack)	0	0	0	0	0
Fruity taste	0	0	0	0	0
Natural taste	0	0	0	0	0
Sweet taste	0	0	0	0	0
Savory taste	0	0	0	0	0
Smooth texture	0	0	0	0	0
Crunchy texture	0	0	0	0	0
Chewy texture	0	0	0	0	0
Creamy texture	0	0	0	0	000000
Energy (KJ) value	0	0	0	0	0
Vitamin and mineral content	0	0	0	0	0
Sugar content	0	0	0	0	0
Protein content	0	0	0	0	0
Fibre content	0	0	0	0	0
National brand (e.g. Kellogg or Jungle)	0	0	0	0	0
House brand (e.g. Pick n Pay no name)	0	0	0	0	0
A brand I frequently purchase	0	0	0	0	0
A brand I am familiar with	0	Ο	0	0	0

	Not important at all	Slightly important	Moderately important	∨ery important	Extremely important
Hygienic packaging	0	0	0	0	0
Attractively designed packaging	0	0	0	0	0
Convenient packaging	0	0	0	0	0
Colourful packaging	0	0	0	0	0
Informative packaging	0	0	0	0	0
Environmentally friendly packaging	0	0	0	0	0
A brand I am highly aware of	0	0	0	0	0
A brand that makes good quality products	0	0	0	0	0
A brand that makes a good impression	0	0	0	0	0
A brand that stands out	0	0	0	0	0
Best before/ use -by/ sell -by date	0	0	0	0	0
Statements/claims (e.g. Organic or natural)	0	0	0	0	0
Allergens	0	0	0	0	0
Nutritional table	0	0	0	0	0
Ingredients	0	0	0	0	0
Expensive price	0	0	0	0	0
Cheap price	0	0	0	0	0
Good value for money	0	0	0	0	0
Affordable price	0	0	0	0	0 0
Locally produced	0	0	0	0	0
Clearly marked country of origin	0	0	0	0	0
Prestigious country of origin	0	0	0	0	0
Country of origin associated with good quality products	0	0	0	0	0



Please rank the following product attributes in order of importance in your decision-making process where 1 = the most important and 10 = the least important

Pack size					
Taste					
Texture					
Brand					
Packaging					
Brand image					
Labelling					
Price					
Country of origin					
Nutritional profile					
Which of the following do you prefer when sho	opping f	or breakfa	st cer	eals	
	Never	Sometimes	About half the time	of the	Alway
Shopping at a discount retailer (e.g. Makro or Save Cash & Carry)	0	0	0	0	0

0

 \circ

O

0

0

0

0

O

0

0

0

0

0

0

0

0

0

0

0

0

0

Shopping at a hypermarket (e.g. Pick n Pay Hyper or

Shopping at a grocery store (e.g. SPAR, Checkers or

Shopping at a convenience store (e.g. Kwik SPAR or

Shopping at a specialty store (e.g. Woolworths or

Shopping at a spaza shop or street vendor

Checkers Hyper)

Pick n Pay)

Dischem)

Total garage)



A store with a wide range of breakfast cereal flavours to choose from A store with a wide variety of breakfast cereal types to choose from (e.g. oats, corn and rice-based cereals)	O Never	O Sometimes	About half the time	of the time	O Alway
A store with a deep assortment of breakfast cereal variants (e.g. Special K and Special K protein)	0	0	0	0	0
A store with frequent promotions	0	0	0	0	0
A store with informative advertisements	0	0	0	0	0
A store with a loyalty program	0	0	0	0	0
					

Block 3

Please look at the planogram and click on the product you are most likely to purchase



Why did you choose this product?