FAST FOODS: UKZN WESTVILLE STUDENTS' AWARENESS OF THE HEALTH RISKS AND THEIR CONSUMPTION PATTERNS

RUVANIA GOVENDER

207 505 127

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SUPERVISOR: MR A. R. BOZAS

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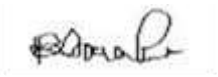
DECLARATION

I, Ruvania Govender, hereby declare that this research is my own work and I have acknowledged all my sources where applicable. This study has been submitted towards the completion of my Masters of Commerce in Marketing Management degree and for no other purpose.



Signature	Date
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ABSTRACT

The research reveals that although University of KwaZulu-Natal (UKZN) Westville students are aware of the health implications of excessive fast food consumption, they do not base their purchasing and consumption decisions on the risk factors. It has been found that students base their consumption decisions regularly on convenience. Majority of the registered students at the Westville Campus consume fast food at least two to three times a week whilst a few students do so more than once a day. It has also been determined that the risk factors of excessive fast food consumption do not directly influence the consumption behaviour of these students.

Consumers are overwhelmed by numerous advances from marketers with the intention of persuading consumers into making the ultimate consumption decisions for goods or services. This study entails the awareness of UKZN Westville students according to excessive fast food consumption and will analyse such perceptions relating to the independent variables (preferences, factors affecting choice, information, trends and patterns and health implications) and the dependent variable (consumption behavior).

According to the statistics from the South African Consumer Satisfaction Index (SAcsi), South African consumers rated fast food outlets with a 79% satisfaction score. However, UKZN Westville students have indicated that hunger (as a mean of satisfaction) does not occur. Moreover, whilst these individuals prefer fast food, the stronger preference is toward home cooked meals. This allows for the understanding of student preferences and the decisions relating to their ultimate consumption of fast food. The core focus provided the analysis of Westville students' awareness in relation to fast food consumption leading to unhealthy lifestyles.

In order to analyse these perceptions, 373 UKZN Westville students aided in administering questionnaires to understand the factors that influence these individuals into making the ultimate purchase. This convenience sampling occurred at the lecture venues, library as well as the main cafeteria in the Westville Campus. This study recommends that future research could be based on mediums such as the Internet due to its popularity, to discover if these aid in influencing consumers consumption decisions of fast food. It is also recommended that researcher be conducted in the wider Durban vicinity to acquire an adequate distribution sample.

Key Words: fast food consumption, consumption decisions, food preferences, lifestyles

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CHAPTER ONE

OVERVIEW OF STUDY

1.1 INTRODUCTION

Fast food consumption has increased in South Africa and throughout the world. Seubsman, Kelly, Yuthapornpinit and Sleigh (2009) have stated that one of the major changes over the last five decades is related to the development and marketing of Western-style fast foods. The proposed research intends to analyse fast food consumption patterns/behaviour of UKZN students on the Westville campus and whether students are aware of the health implications. Consumer consumption behaviour amounts to an integral factor in determining consumer awareness of the health implications of fast food consumption.

The increase in fast food outlets and consumption throughout the world has resulted to an even greater concern about unhealthy lifestyles of individuals and in this case, students. According to WHO (2003) as cited in Kumar, Palaha and Kaur (2013, p. 1), "frequent fast food consumption is also a health concern because most fast foods are rich in saturated fats, trans fats, simple carbohydrates and sodium." The increased pace of life and convenience of fast foods has resulted in increased consumption amongst consumers has provided marketers with the opportunity to create more awareness of fast food products. However, the extent to which consumers are aware of the health implications associated with high levels of fast food consumption is unclear and needs to be researched.

1.2 BACKGROUND

There is worldwide concern from governments especially in developed countries concerning the effects of fast food consumption such as obesity and individuals becoming ill and unfit. Obesity has been recognised as a global epidemic by the World Health Organisation (WHO) (Barilla, 2012). South African statistics have revealed that whilst there are numerous factors causing overweight and obesity, westernisation, poverty and lack of education are the most predominant (Van Heerden,

2013). In contrast to urbanisation, westernised lifestyles are permitting individuals to consume fast or convenience foods.

"The fast food culture is a vigorously uprising trend amongst the youngsters" (Kaushik *et al.,* 2011) as cited in (Kumar *et al.,* 2013, p. 1). Goyal & Singh (2007, p. 183) define fast food as "quickly prepared, reasonably priced and readily available alternatives to home cooked foods." An easily prepared processed food which can be served in restaurants as a quick meal or to be taken away is termed fast food (Oxford Dictionary, 2014a). Habib, Dardak and Zakaria (2011, p. 15) have defined fast food as "specialised food that can be prepared in short time for immediate consumption either on the premises or elsewhere and relatively inexpensive."

With the fast food industry being considered a rapidly growing industry in South Africa, it can be related to the diverse cultures within the country. However, the increasing awareness of the westernised culture has enabled the shift from traditional consumption patterns (Mehdi & Gupta, 2013). The busy lifestyles engaged in by South Africans results in people having unbalanced meals with convenience foods becoming the way out (Maumbe, 2010). Therefore, this study is designed to consider consumer awareness in over reliance on fast food consumption. Moreover, the research investigates the degree to which consumers are aware of the health risks related to high levels of fast food consumption.

1.3 PRELIMINARY LITERATURE AND REASONS FOR CHOOSING THE TOPIC

A study by Kumar *et al.,* (2013) entitled "Study of Consumption, Behaviour and Awareness of Fast Food among University Hostlers" was conducted in India with the aim of understanding the fast food habits of students in relation to their consumption and awareness. In "Consumers' Preference and Consumption towards Fast Food: Evidences from Malaysia" by Habib *et al.,* (2011), the researchers aimed to understand consumer preference relating to fast food in the Malaysia market.

The sustained increase in the demand for convenience foods over the years is in relation to the fast food consumption patterns in South Africa (Maumbe, 2010). Several authors have noted the impact of such consumption on children and related obesity levels, and that the children are more prone to

several diseases which will in turn affect their life spans. Chronic diseases, although preventable, have been identified as one of South Africa's silent killers (Mail & Guardian, 2012). The primary cause is that "South Africans eat and drink too much and exercise too little" (Mail & Guardian, 2012, p. 1). Statistics by GlaxoSmithKline in 2010 have revealed that 61% of the South African population is overweight, obese or morbid obese, with 70% being Black females over the age of 35 and 42% being children (GSK, 2013). This research will identify the awareness of students as to the health implications of fast food consumption.

Barilla (2012) made reference to the cause of obesity imposed by the social-economic environment. Therefore, the understanding of student perceptions of the social-economic factors namely; social, cultural, economic and infrastructural conditions will entail greater phenomena to consumption behaviour. The above mentioned factors can have a potential affect for an individual to lead an unhealthy lifestyle and the consumption of some foods may be unlimited by people's possibilities of choices (Barilla, 2012).

The research by Habib *et al.,* (2011) and Kumar *et al.,* (2013) is significant to the proposed study. This is indicative of whether or not similarities of fast food consumption awareness and patterns are prevalent amongst the vicinities. Since both studies have been based on university students within each region, though one of which concentrated on resident students, the researcher deemed it worthwhile to adopt specific aspects from each of the studies in order to compare the findings. Whilst Habib *et al.,* (2011) concentrated on the social development framework attributes namely; time, demographics, health, away home eating habits and taste, Kumar *et al.,* (2013) denoted the causal link between advertising, parent's roles and students behavioural patterns to fast food consumption. All of these aspects are being considered for this research.

In an unpublished dissertation by Govender (2012), consumption of fast food amongst Durban consumers was analysed against four variables namely; convenience, taste, financial implications and health risks. It was found that respondents paid scant attention to the health implications. Therefore, with the diversification and knowledge of students, it was thought it would be prudent to research their consumption choices.

The limitations from prior publications are based on micro level factors that influence fast food consumption and the findings not representative of all types of consumers (Habib *et al.,* 2011; Kumar *et al.,* 2013). This research will aim to overcome the former limitation by adopting other factors such as; market trends, market size, branding strategies, buying behaviour and current issues identified by Keynote (2003). This research provides a representation of all types of students on the Westville vicinity thanks to permission granted by the University of KwaZulu-Natal.

This research seeks to address the similarities and/or differences amongst fast food consumption awareness of students. There is an extensive amount of research surrounding fast food consumption throughout the world. However, the majority of the concentration lies on childhood obesity. This study will intend on making a significant contribution by determining the perceptions and awareness levels from students at Westville. The findings of this study will hopefully make a meaningful contribution in relation to whether or not students are aware of the health implications of fast food consumption and will propose ways to address any deficiencies in student health consciousness regarding fast foods.

1.4 RESEARCH PROBLEM

A critical aspect emanating from fast food consumption is the concern of health impacts. Whilst research has highlighted the health risks associated with regular fat food consumption, there is a dearth of information concerning student awareness of the risks of excessive fast food consumption and as such this research will be significant in determining student awareness of health risks associated with such. This research will aim to concentrate on the levels of awareness amongst consumers and their decision making process with regard to fast food consumption.

The problem is that fast foods globally have been shown to be harmful when consumed regularly. This research is aimed at determining the level of UKZN Westville students' awareness of the health implications surrounding fast food consumption and their views about fast foods.

1.4.1 Objectives

- To measure students' preferences of fast food consumption at UKZN
- To ascertain the different factors which affect students' choice of fast food at UKZN
- To understand the level of information students' have surrounding fast food consumption
- To measure students' trend and pattern of fast food consumption
- To determine the extent of students' perceptions of the risk in excessive fast food consumption at UKZN

1.4.2 Research Questions

- What are the preferred choices of food consumption for UKZN Westville students?
- Which are the factors that students consider in making consumption decisions?
- What forms of information are provided for fast food consumers?
- What trends and patterns are students most prone to when consuming fast food?
- Do students consider the risk of excessive fast food consumption?

1.4.3 Hypotheses

The hypotheses used for the purpose of this study are based on the independent variables (preferences, factors affecting choice, information, trends and patterns and risk) and the dependent variable (consumption behaviour). Based on the variables, the hypotheses that will be tested in Chapter 4 of the study are reflected as:

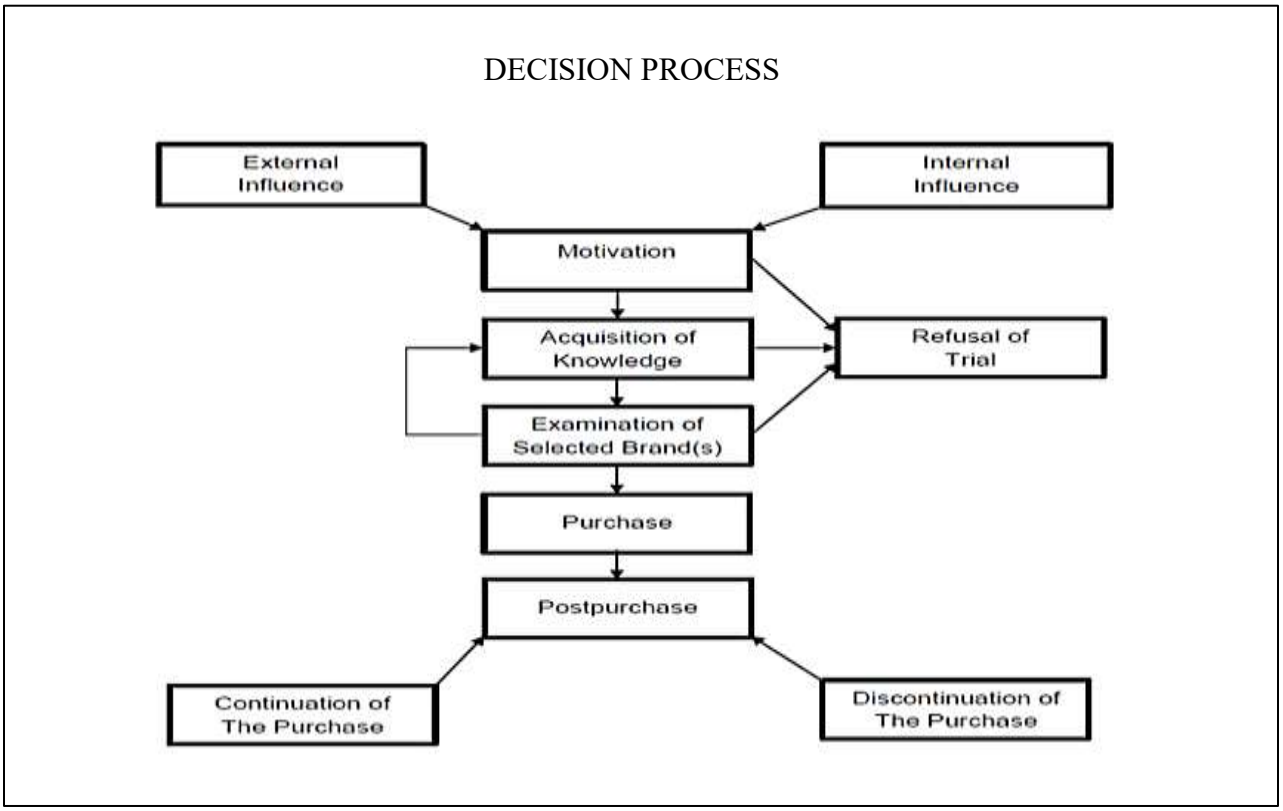
H_1: There exists significant relationships between preferences, factors affecting choice, information, trends and patterns and risk and consumption behaviour respectively.

$H_{0:}$ There exists no significant relationships between preferences, factors affecting choice, information, trends and patterns and risk and consumption behaviour respectively.

1.5 THEORETICAL FRAMEWORK

The theoretical framework published in 2001 is the consumers' decision-making process (CDP) as depicted in Figure 1.1 below is discussed will be adopted.

Figure 1.1 The Consumer Decision-Making Process



Source: Ko, 2001

The CDP model encapsulates the Engel-Blackwell-Miniard Model emphasising the basic dimensions of the purchasing process. This ideally formulates the understanding of the influential factors; environment, person-related and properties and brings into account consumer awareness which is the endpoint of the highly selective procedure (Foxall, 2005).

Consumers experience a mental process in determining their purchasing and consumption decisions (Ko, 2001). The consumer decision-making process strives to examine the product purchasing situations faced by consumers. Consumers are motivated into their purchasing and consumption

decisions based on internal and/or external influences. Internal stimuli are occurred through experiences such as hunger or thirst (Lamb, Hair & McDaniel, 2012). External stimuli are experienced by outside forces like a recommendation from a family member, friend or an advertisement on television (Lamb *et al.,* 2012).

Once consumers have recognised their need or want, they seek to obtain information about the product or service. This information is gathered from a host of sources such as advertisements, mass media or from group factors namely; family, culture, social classes, reference groups and opinion leaders. The more information sought about a product category, the better consumers will be able to compare and evaluate amongst different product categories (Ko, 2001).

After generating information and constructing a set of alternative products, consumers possess the ability to make a decision (Lamb *et al.,* 2012). However, consumers may not make a purchasing decision yet and may go back to the previous stage or lose complete interest in the product (Ko, 2001). Advertisers strive to obtain an instant action from consumers by providing consumers with incentives to purchase and consume the good or service.

When consumers have decided to make the actual purchase, the good or service will then be consumed. However, consumers will evaluate their experience with their consumption and will endure the post-purchase evaluation. Since consumers have certain expectations of a good or service, the evaluation will be based according to whether their expectations have been satisfied or not (Lamb *et al.,* 2012).

1.6 RESEARCH DESIGN

The research design is accommodative of the epistemological research philosophy. This constitutes the acceptable knowledge within the field of study (Saunders, Lewis & Thornhill, 2007). This research will thereby embrace the positivist approach as it allow for the adoption of the philosophical stance of the natural scientist (Saunders *et al.,* 2007). This will enable the production of credible data. Furthermore, Saunders *et al.,* (2007, p. 103) stated that “the researcher would be external to the process of data collection in the sense that there is little that can be done to alter the substance of the data collected.” The interpretivism approach is not conducive to the study as it

may cause a stem of bias within the findings. This is related to the researcher having to adopt an empathetic stance (Saunders *et al.*, 2007). Based on the approach and philosophical nature, the research will be deemed to be quantitative. Therefore, this empirical study will require primary sources of data.

1.7 RESEARCH METHODOLOGY

The research methodology entails the elaboration of the research design. The empirical nature of the research, based on a descriptive research design will be quantitative. A quantitative research methodology will be employed using a personally administered questionnaire. In relation to the sampling strategies, a non-probability convenience strategy for the quantitative research methodology is proposed as this refers to "the collection of information from members of the population who are conveniently available to provide it" (Sekaran & Bougie, 2010, p. 276). The awareness and perceptions amongst the registered students at the various Colleges will be compared. In addition, the research will establish similarities and/or differences amongst the students based on current findings.

1.7.1 Population

The target population is the complete group of objects or elements which are relevant for the study (Shukla, 2008). Sekaran and Bougie (2010) agree and state that population refers to the entire group of people, events or things which the researcher desires to investigate. The population is also defined in terms of the geographical boundaries and time.

Therefore, the population of this study refers to all registered students within the University of KwaZulu-Natal Westville Campus. This population will comprise of the three Westville campus colleges namely; College of Agriculture, Engineering and Science, College of Health Sciences as well as the College of Law and Management Studies. Each college is further divided into 13 Schools. The existent Schools within the Westville campus total seven; School of Chemistry and Physics, School of Life Sciences, School of Mathematics, Statistics and Computer Science, School of Health Sciences, Graduate School of Business and Leadership, School of Accounting,

Economics and Finance and the School of Management, Information Technology (IT) and Governance.

1.7.2 Sampling

The sampling technique selected for the research design is that of nonprobability sampling as "it is possible to specify the probability that any case will be included in the sample" (Saunders *et al.,* 2007, p. 226). Convenience sampling shall be used to draw the required sample from the population. The sample group is of great importance to the researcher as it will provide great insight to the selective consumption behaviour. The utilisation of the sample size guideline by Sekaran and Bougie (2010), given the population of 12 927 registered students within the campus, will appropriate the sample to that of 373 respondents at a confidence level of 95%, with 5% being for marginal error. It is envisaged that at least 120 students will be canvassed as the sample representation.

1.7.3 Data Collection

Based on the quantitative research method, the data instrument will be a personally administered questionnaire. The questionnaire will be adapted from Kumar *et al.*, (2013) and will be amended to include 5 point Likert scales as opposed to the use of yes/no questions. The Likert scales are an appropriate technique for the intended research, as it assists in the evaluation of awareness and ultimate consumer behaviour (Leedy & Ormrod, 2005). The questionnaire will also consist of a biographical section as well as open-ended questions. The researcher will engage in pilot testing over a small scale in order to determine any weaknesses in the design of the instrument (Saunders *et al.,* 2007).

1.7.4 Validity and Reliability

The questionnaire will be assessed by factor analysis for validity which will refer to measuring what is intended of the study (Saunders *et al.,* 2007). This will be ensured by including investigative

questions. Reliability measured by Cronbach's coefficient alpha is best suited as a measure for inter-item consistency and stability (Sekaran & Bougie, 2010).

1.7.5 Data Analysis

The quantitative data collected through personally administered questionnaires will be analysed through the Statistical Package for Social Sciences (SPSS). The data will further be analysed through the combination of descriptive and inferential statistics. A statistician will be consulted to determine the most viable tests that will correlate the findings.

1.7.6 Ethical Consideration

The research pertinent to this study will require Gatekeepers' Letter from the University of KwaZulu-Natal in order to proceed for ethical clearance. In account of ethical consideration, the researcher will ensure that all respondents have confidentiality and anonymity maintained from the outset. In addition, the researcher will acquire the necessary information on a voluntary basis from each sought out respondent and will provide an informed consent of participation.

1.8 LIMITATIONS

This research was subjected to limitations from the outset. It is prudent to explain that there were no intentions for limiting factors related to the exclusion of four of the five campuses at the University of KwaZulu-Natal as well as certain first year or first level of entry students. Each limitation identified herein is further explained in Chapter Six of the study.

1.9 STRUCTURE OF THE DISSERTATION

The study on the fast food consumption and the awareness of health implications was arranged in chapters. These ranged from chapter one to chapter six of the study. The details of the chapters are as below:

CHAPTER ONE: OVERVIEW OF STUDY. This chapter has introduced the topic in relation to the background and context motivating its relevance. The chapter has outlined a description of the research problem and a discussion of the factors underlying the importance of the research and its relevance to the research. It contains the aim, objectives and research questions of the study which are required to be achieved. Thereafter, it explained how this information will be obtained by utilising the research methodology set forth. The chapter has also demonstrated how the study will contribute to research about consumer behavioural patterns surrounding awareness of the health implications of excessive fast food consumption.

CHAPTER TWO: FAST FOOD CONSUMPTION AND HEALTH IMPLICATIONS. This chapter presents a review of the relevant literature, the extent of the findings with regard to the research objectives addressed in this study. The chapter begins with a complete understanding of consumer behaviour, focusing of food consumption and the food industry. It then identifies the consumption and preferences for fast food. It further explored the factors affecting choice, information available and the trends and patterns relating to fast food and culminates with the excessive consumption. These translated into analysing the consumer buying behaviour and UKZN Westville students' perceptions of fast food consumption and the awareness of health implications thereof.

CHAPTER THREE: RESEARCH METHODOLOGY. A description of the empirical research methodology used constitutes this chapter. It discusses the sampling techniques and the quantitative analysis utilised in aid of understanding the questionnaire construction as the data collection instrument. It will also place emphasis on the statistical test to be used as well as the validity and reliability of the research.

CHAPTER FOUR: PRESENTATION AND ANALYSIS OF RESULTS. This chapter presented the results or findings of the study. Furthermore, the results were interpreted in accordance to the study objectives. The quantitative results presented and interpreted were based on the analysed data from the Statistical Package of Social Sciences (SPSS).

CHAPTER FIVE: DISCUSSION OF RESULTS. Chapter five of the study elicits the critical discussion of the results relevant for this study. The main findings presented in Chapter four were explained in accordance to the objectives of the study. It provides the awareness of UKZN students' in relation to their consumption behaviour of fast food based on health implications.

CHAPTER SIX: RECOMMENDATIONS AND CONCLUSIONS. The culminating chapter of this study presents a summary of the study. It further discusses possible recommendations and the limitations of the study. Moreover, it provides suggestions for future research and concluding remarks.

1.10 CONCLUSION

This chapter has outlined the background and relevance of the study regarding the students awareness of the health risks related to high levels of fast food consumption. It has also introduced the research problem, objectives and appropriate questions which are needed throughout this study. The underlining of the analysis methods of the study in aid of understanding the awareness from students had been identified. Furthermore, the limitations of the research have been presented. The literature review follows.

CHAPTER TWO

FAST FOOD CONSUMPTION AND HEALTH IMPLICATIONS

2.1 INTRODUCTION

This chapter provides the literature surrounding fast food and the consumption thereof, as is relevant to the topic and the objectives of the research. The chapter commences with an understanding of consumer behaviour with concentration on the decision making process incurred by consumers. Thereafter, coverage surrounding fast food alongside the consumption is detailed within the South African context and throughout the world. The consumption of fast food places emphasis on the frequency, time of day and reasons for choice. This allows for a further connection to the consumer behavioural patterns. In light of this, the chapter provides for the consumers' preferences, factors affecting choice, information sought as well as the trends and patterns of fast food consumption. The health implications surrounding fast food consumption and frequency of consumption have been focussed on.

2.2 CONSUMER BEHAVIOUR

Consumer behaviour is usually associated with the consumption activities. Blythe (2001) stated that the concentration in the past focused on reasons as to why people purchase. However, the transition and key focus area has led to the understanding or investigation into how and why people consume.

According to Blackwell *et al.,* (2001) as cited in Blythe (2013) and Tyagi and Kumar (2004), consumer behaviour is referred to as the activities which are undertaken by individuals when obtaining, consuming and disposing of products and services. Whilst Blythe (2013, p. 6) acknowledges the definition of consumer behaviour by Blackwell *et al.,* (2001), the comparison is reflected by Bennett (1995) stating that the term is noted by "The dynamic interaction of affect and cognition, behaviour and environmental events by which human beings conduct the exchange aspects of their lives."

It is conferred that the most prudent to marketing is the understanding of consumer and buyer behaviour (Tyagi & Kumar, 2004). This relates to the psychological understanding of how

consumers think, feel, reason and select between alternatives (Perner, 2010). Moreover, it is critical to establish the influential environmental factors (culture, family and media) which relates to consumption decisions (Perner, 2010). The concentration can be placed on consumers' behaviour when making decisions. The behaviour can occur specifically for an individual, a group and/or an organisation.

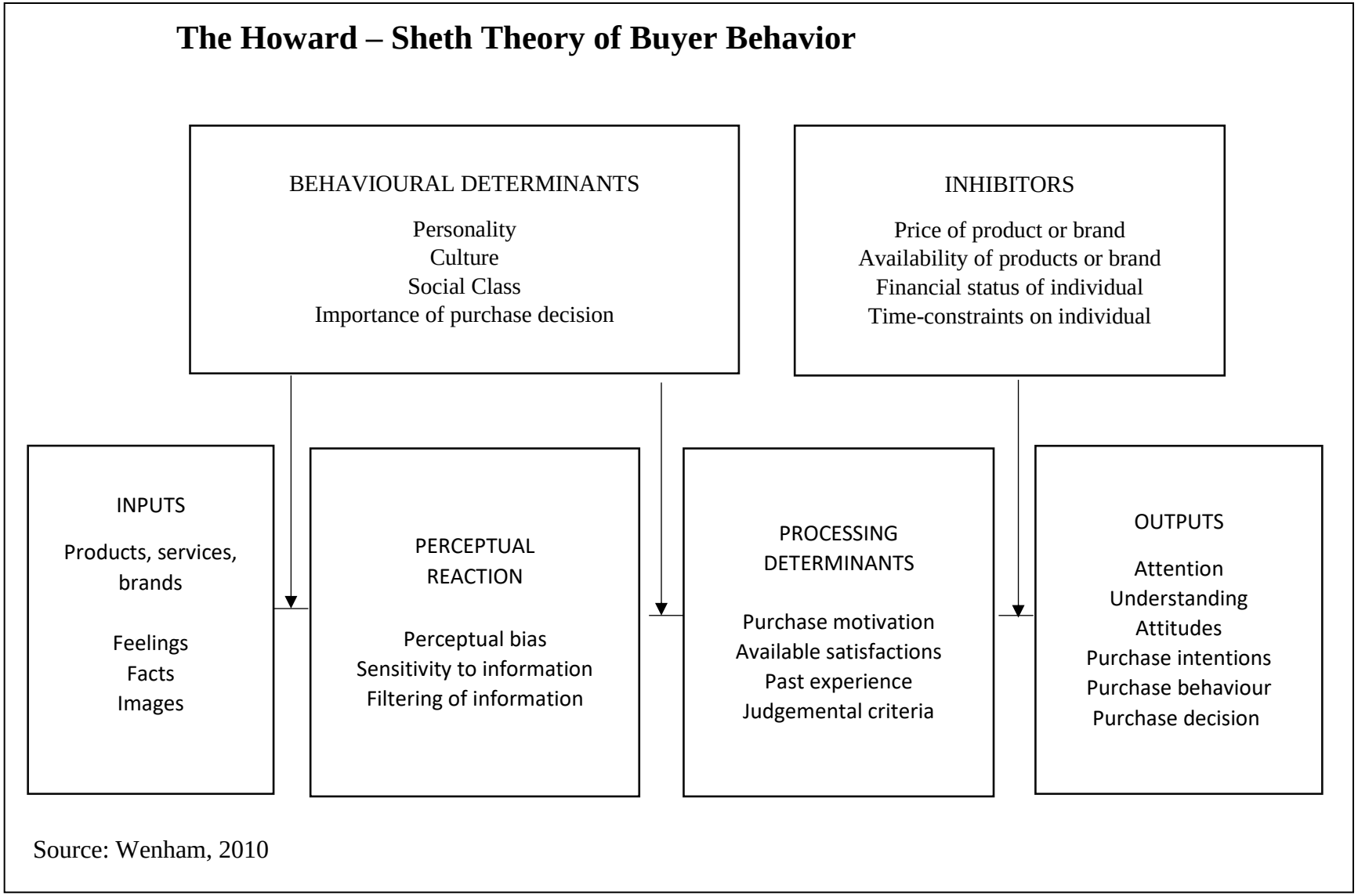
2.2.1 Consumer Decision Making

Consumer behaviour and consumer decision making have predominate concentration on food and nutrition, clothing and textiles and housing and interior merchandise in everyday living (Erasmus, Boshoff & Rousseau, 2001). Du Plessis, Rousseau and Blem (1999, p. 11) describe consumer decision making as "the behaviour patterns of consumers that precede, determine and follow on the decision process for the acquisition of need satisfying products, ideas or services." The development of consumer decision making models is widely used to structure theory and research. Moreover, such models provide conceptual frames which indicate interrelationship of variables to understand different consumer decision processes and marketing strategies which play an important role in the establishment of theory (Erasmus *et al.*, 2001). There are three distinctive consumer decision making models namely; Howard-Sheth Model, Engel-Kollat-Blackwell Model (Decision Process) and Nicosia Model (Erasmus *et al.*, 2001).

2.2.1.1 Howard-Sheth Model

The buying behaviour model was developed by John Howard and Jagdish Sheth in 1967, which placed emphasis on consumers' repetitive buying nature causing a cyclical effect on decisions (Markham, Gatlin-Watts & Cangelosi, 2006). The Howard-Sheth Theory of Buyer Behaviour redrawn is depicted as Figure 2.1 on the proceeding page. Based on the Howard-Sheth Model, there are notably three types of consumer decision making namely; routinised response, limited decision making and extended decision making.

Figure 2.1 The Howard-Sheth Theory of Buyer Behaviour



Source: Wenham, 2010

The routinised response also referred to as the routinised response behaviour (RRB) is reflective of the everyday purchase amounting to a low level of involvement from consumers (Perreau, 2014). This related to products which a consumer knows well and has the ability to select brands which is best suited. These consumers do not require excessive information or research surrounding the product and are able to make the decision quickly. Perreau (2014) further implies that the more the product has become a routine purchase, the less responsive the consumer will be toward stimuli or initiatives. The stimuli or initiatives referred to is indicative of promotional activities and/or advertising.

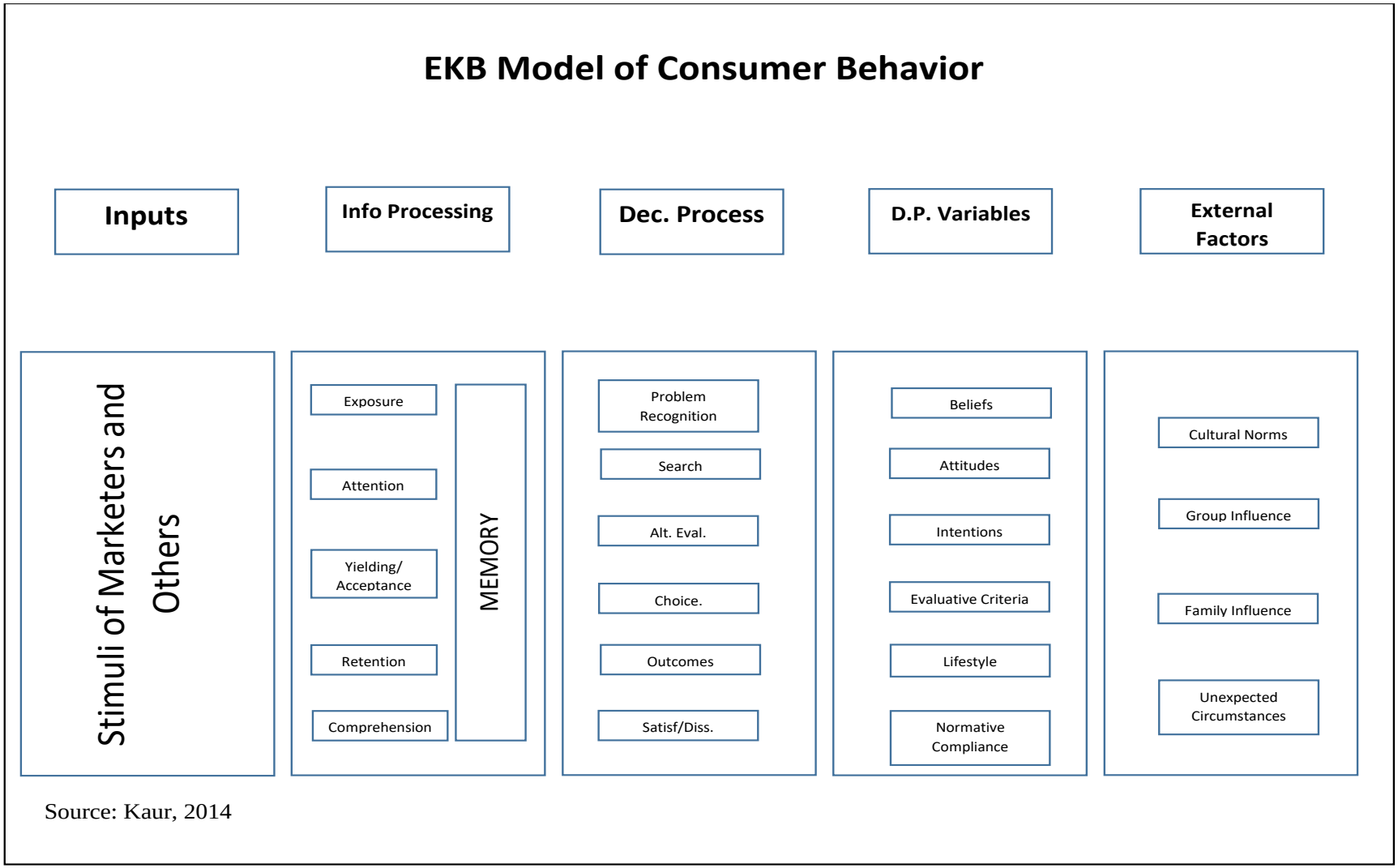
Limited decision making similarly known as limited problem solving (LPS) is where consumers possess a clear vision of the expectations and decision criteria (Wenham, 2010; Perreau, 2014). Whilst these consumers are knowledgeable or have prior experience with the product, these individuals are indecisive of the brand to select (Wenham, 2010). There is uncertainty of which brand will best suit their needs. These consumers will rely on information seeking on a moderate level to compare amongst the alternatives.

Extended decision making or extensive problem solving (EPS) is common when consumers discover a new product or category or a new desire relating to uncertainty of the risk (economical or psychological) or which may be particularly expensive (Perreau, 2014). The lack of experience with the product amounts to the predicament of lack of decision criteria. These consumers level of involvement become high as the consumer will seek as much information as there is available in order to make the purchasing or consumption decision. Moreover, the level of confusion and uncertainty surrounding the product choice can be extremely high. These consumers will spend a considerable amount of time in the purchasing process.

2.2.1.2 Engel-Kollat-Blackwell Model (Decision Process)

In the 1990s after several revisions and modifications, the Engel-Kollat-Blackwell Model also referred to as the EKB model was proposed (Sahney, 2005). This model depicted as Figure 2.2 on the proceeding page is reflective of the various consumer decision making components and the relationships or interactions among them. The EKB model consists of five parts namely; information input, information processing, decision process stage, decision process variables and external influences (Goodhope, 2013; Sahney, 2005; Erasmus *et al.*, 2001).

Figure 2.2 EKB Model of Consumer Behaviour



Source: Kaur, 2014

The information input consists of stimuli or information emanating from environmental factors (Goodhope, 2013). The stimuli or information is in relation to the quality, price, distinctiveness, availability and other accompanying services of the brand (Goodhope, 2013). The communication mean for this information is generally through mass media namely; broadcast and print media. Sahney (2005, p. 7) states that "consumers are exposed to marketing (advertising, publicity, personal selling, demonstrations, store displays, pint of purchase stimuli) and non-marketing sources (family, friends, peers) which provide information and triggers of the decision making process."

Information processing entails the customers' exposure, attention, perception, acceptance and retention of the information received (Goodhope, 2013). Due to the exposure of information as indicated from the input phase, the customers' focus will relate to the amount of attention of the information. The higher the level of attention, the more interpretation and comprehension will be accepted in short-term memory, thereafter retained and transferred to long-term memory (Sahney, 2005).

The decision process stage is comprised of the five basic decision making elements namely; problem recognition, search, alternative evaluation, selection and post-purchase evaluation (Sahney, 2005). Goodhope (2013) indicates that these five elements are affected by individual and environmental influences. Within this phase, the consumer develops a need or a want which is required to be satisfied. Thereafter, the consumer will seek out the information surrounding the products or services which will be available to satisfy the needs. The information gathered will relate to the consumer comparing the different elements of the products or services (Flekel, 2013). The elements which may be considered are that of the price, quality, colour or other factors (Flekel, 2013). Based on the criteria used for the decision, the consumer will now be equipped to make the purchasing decision. The post-purchase evaluation will occur based on the satisfaction received or not from the decision (Flekel, 2013).

The decision process variables are based on individual influences which affect the various stages within the decision making process as previously discussed. The individual characteristics include demographics, motives, beliefs, attitudes, personality, values, lifestyles and normative compliance (Sahney, 2005).

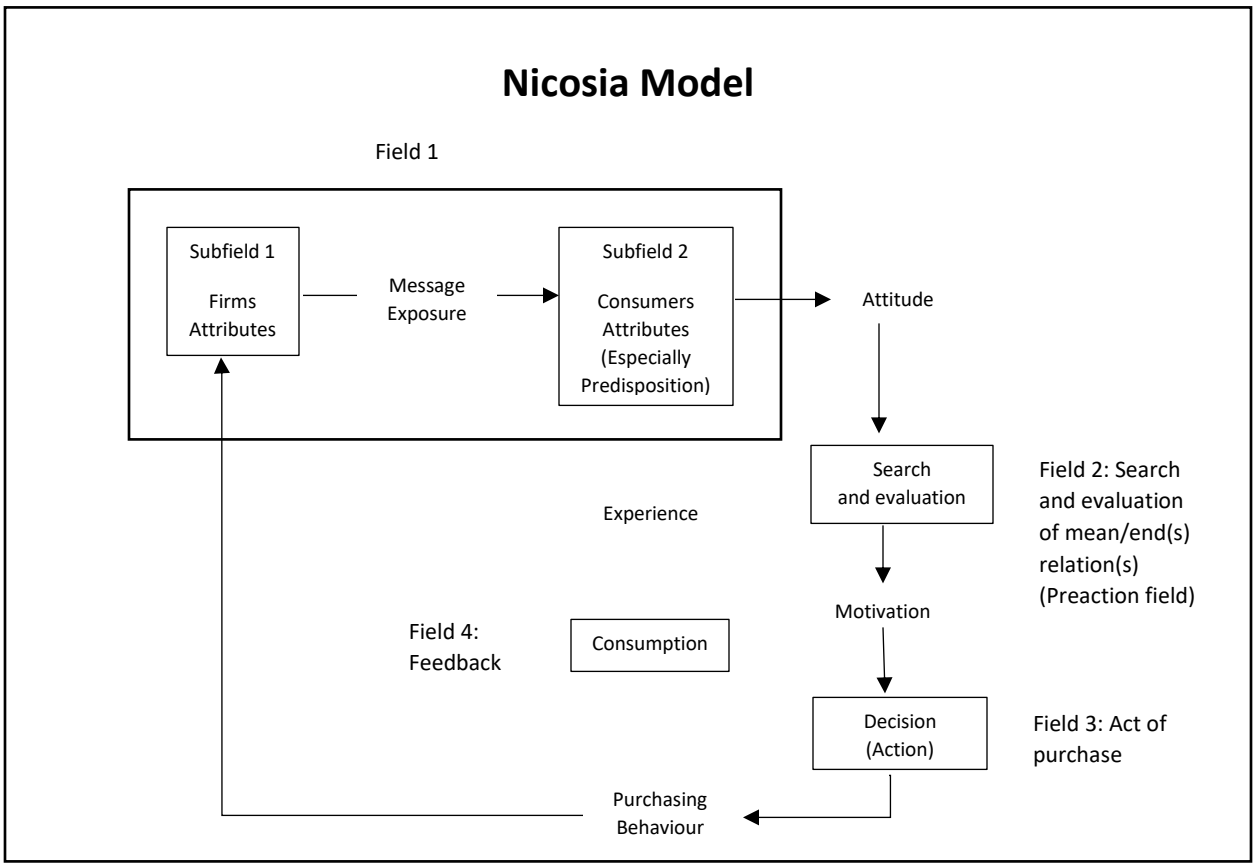
Sahney (2005) indicates that the external influences of the model concentrates on the environmental and situational influences which affect the decision making process. The environmental influences comprise of the consumers'; culture, sub-culture, social class, reference groups, families and other normative influences whilst the consumers' financial condition is inclusive of the situational influences (Sahney, 2005).

2.2.1.3 Nicosia Model

This model illustrated as Figure 2.3 on the next page, focuses on the relationship between organisations and its potential consumers. The organisation communicates with consumers using various types and forms of marketing messages and the consumer reacts to the messages by a purchasing or consumption response (Abdallat & El-Emam, 2008).

The Nicosia model is divided into four major fields; Field 1: the consumer attitude based on the firms' message, Field 2: search and evaluation, Field 3: the act of the purchase and Field 4: feedback (Abdallat & El-Emam, 2008).

Figure 2.3 Nicosia Model



Source: Kumar, 2010

Field 1 consists of the firms' marketing environment and communication as well as the characteristics of consumers. Within Field 2, consumers evaluate the firms brand in comparison to alternate brands. The firm will motivate the consumer through the different marketing strategies. Field 3 will relate to the effect of the motivation prompting or convincing the consumer to purchase (Abdallat & El-Emam, 2008). Field 4 of the model assesses the feedback for both the firm and the consumer after the purchase. Abdallat & El-Emam (2008) state that the firm will benefit from the sale and the consumer will base the feedback on the experience of the product or service purchased. This will affect the consumer's attitude and predisposition concerning future messages from the firm.

2.3 FOOD

Food is defined as any form of nutritious substance which is eaten, drank or consumed by people and animals or absorbed by plants in order to maintain life and growth (Oxford Dictionary, 2014b). Food is a basic necessity of life and has transformed into desires. This is mainly attributed to the changes in demographics, labour force participation and income distribution (Kinsey & Senauer, 1996). The development of food not only has an impact on the food production process but on the attitudes and beliefs of the way consumers' see food (Sijtsema, Linnemann, Van Gaasbeek, Dagevos & Jongen, 2002).

The food industry requires insight into the perceptions of food in order to develop new products successfully (Sijtsema *et al.,* 2002). The choice of food depends on the individual. As it was previously highlighted, consumers are unique with differing tastes and preferences. Factors or determinants including; demographics, preferences, attitudes, habits and status are influential for consumers' perceptions of a particular food product.

In 1992, the food guide pyramid was introduced by the United States Department of Agriculture (Paula, 2013). The pyramid was revamped in 2005 and again in 2011 to become known as MyPlate (Paula, 2013). Similar to the food guide pyramid, the plate indicates the six major food groups; fruits, vegetables, protein, dairy, grains and oils (Paula, 2013; Rees & Watson, 2000). Within each food grouping, there exists specifications for consumption based on demographic principles; age, sex and activity levels. Based on these categories, it is found that foods have been classified further into three categories; everyday (green) foods, select carefully (amber) foods and occasionally (red) foods (Elliot & Lemert, 2014). The green category is consistent with dietary guidelines, the amber has some unhealthy ingredients and the red is not consistent with the dietary guidelines especially amongst children and adolescents (Elliot & Lemert, 2014).

2.4 THE FAST FOOD INDUSTRY

According to Wilson (2014), fast food has been in existence for most of human civilisation. As far back as ancient Greece and Rome, inns and taverns generally served food to individuals who had reason to be away from home. The popularity of fast foods occurred in the Western societies in the late 18th century (Wilson, 2014).

According to Royle and Towers (2002, p. 141), “Fast food represents one of the fastest sectors of food.” Fast food is viewed as a quick service regarding the consumption of food. Fast food can be consumed within or outside the business premises and sometimes does not require plates (Royle & Towers, 2002). Fast food over the last three decades had infiltrated almost every home throughout the world. “An industry that began with a handful of modest hotdog and hamburger stands in Southern California has spread to every corner of the nation, selling a broad range of foods wherever paying customers may be found. Fast food is now served at restaurants and drive-throughs, at stadiums, airports, zoos, high schools, elementary schools and universities, on cruise ships, trains and airplanes, gas stations and even at hospital cafeterias” (Schlosser, 2002, p. 3).

The fast food industry also referred to as Quick Service Restaurants (QSR) is a modern system of food franchising (Franchise Help, 2014). These restaurants usually have a walk-up counter or a drive-through window to enable one to order and pick up food without having to wait in long queues (CYWH, 2014). Fast food outlets are popular because of the filling foods which do not cost a lot of money (CYWH, 2014).

According to statistics, the fast food industry in the United States (US) generated approximately 191 billion US dollars in 2013 (Statista, 2014). In 2004, the fast food industry generated approximately 170 billion US dollars (Statista, 2014). Therefore, it is evident that over the ten-year period, the industry generation increased by 12.3%. Statista (2014) revealed that 77.3% of the fast food industry comprised of on-premises restaurants and drive-throughs.

A report entitled “Fast Food Facts 2013,” reveals that in 2012 the fast food industry spent $4.6 billion to advertise mostly unhealthy products (Radar, 2013). Children and teenagers were the key audiences for the advertising. According to Jennifer Harris, a marketing director “Most advertising promotes unhealthy regular menu items and often takes unfair advantage of young people’s vulnerability to marketing, making it even tougher for parents to raise healthy children” (Radar, 2013, p. 1). Within the report, it was highlighted that there had been a few changes indicative of a positive development including healthier side items and beverages in most of the kid’s meals at fast food outlets. However, less than 1% of kids’ meals combinations at restaurants meet the nutrition standards recommended by experts (CYWH, 2014).

There is evidence that these outlets still have a lot more to do to promote healthier fast food options especially for children (Radar, 2013). Moreover, Radar (2013, p. 1) claims that “there were some

improvements, but they have been small, and the pace too slow. Without more significant changes, we are unlikely to see meaningful reductions in unhealthy fast food consumption by young people."

2.4.1 The Fast Food Industry in South Africa

South Africa has one of the fastest growing fast food industries in the world and despite changing lifestyles and a sluggish economy, South Africans are increasingly embracing the consumption of affordable, large-portioned and immediate fast food (Oni & Matiza, 2014). The modernisation of the South African economy has led to changes in eating habits and food trends. In the 1960's, South Africa experimented with fast food and the American hamburger franchise, Wimpy, was launched (Van Zyl, Steyn & Marais, 2010).

Over the decades the industry had grown substantially. Currently, 41% of the restaurants and fast food providers are listed members of the Franchise Association of South Africa (Van Zyl *et al.*, 2010). Moreover, the South African fast food industry has experienced a positive growth for the 2003 and 2004 year periods (Euromonitor International, 2005). In 2004, the total value sales of fast food amounted to 23.3 billion rands (R23.3 billion), which was an increase of 17 percent from the previous (Euromonitor International, 2005). Naidoo (2013) acclaimed that as per the 2012 evaluation, fast food sales reached over R24 billion.

In 2012, a study from the market research firm, Analytix BI, found that despite the increasing costs of fast food, South Africa's appetite for fast food is growing steadily and the growth of this popularity is attributed to deliberate large portions at low prices which appeals to consumers' desire for value for money (Moorad, 2013). The Corporate Executive, Kevin Hedderwick, of Famous Brands as cited in Moorad (2013, p. 1) concurred stating "Food service in the country can only grow. In emerging markets, for every 1% growth in gross domestic product, there's a 2% growth in food service."

The most predominant and popular QSRs in South Africa are; Debonairs, Kentucky Fried Chicken (KFC), McDonalds, Mimmos, Nando's, Scooters, Spur, Steers and Wimpy. These outlets serve food in the form of pizzas, chicken portions, burgers, wraps, chips, salads and desserts as well as beverages from alcoholic to non-alcoholic drinks. These fast food options are "generally high in energy, fat, saturated fats, added sugar and sodium and low in fibre and micronutrients" (Van Zyl

et al., 2010, p. 124). The varieties are available in different sizes and cater for individual and family meals. However, fast food is also being made available in the form of curries, braais and other local tastes and flavours to accommodate for the diversity within the country.

Despite the wide array of fast food, there are many international QSRs setting up within South Africa including TGI Fridays (the Texas based casual dining chain) and Burger King (Lefifi, 2014). "Burger King is set to open its first three stores in the country's economic hub, Gauteng, after an enthusiastic response to its stores in Cape Town. By the end of June 2015, Burger King wants to have 23 stores in the country" (Lefifi, 2014, p. 1). Moreover, Lefifi (2014) describes this intention as an assault on the success of their competitor McDonalds, as McDonalds first opened in South Africa in 1995 and has over 170 restaurants with the investment of R750 million in the country.

Aside from the international expansion plans for the South African market, there are local restaurant groups which have or intend on expanding. Nando's is one such franchise which operates in 26 countries through 1 010 outlets in locations such as; Fiji, Singapore and Bangladesh (Moorad, 2013). The parent company, Famous Brands, is taking Debonairs Pizza to India and Steers to the United Kingdom. The intention of Famous Brands is to add 55 restaurants throughout Africa (Moorad, 2013). This is due to markets becoming more westernised. Moorad (2013, p. 1) further states that "the South African market is a springboard to other emerging African countries is also piquing the interest of global brands."

2.4.2 The Presence of Fast Food at UKZN (Westville Campus)

The 2004 merger which created the University of KwaZulu-Natal (UKZN) brought together two major higher education institutions (SARUA, 2008). The former University of Durban-Westville was essentially an apartheid institution, reserved for the use of Indians students only and in 1984 the University defiantly opened its doors to students of all race groups (SARUA, 2008). As of 2014, the total registered students at the Westville Campus amounted to 12 927 students across the various races. These students are provided with a large cafeteria which accommodates the services rendered by V'City Chicks, Mrs Govender, Tender Taste, What's Up Dog, The Green Bean and The Upper Cafeteria. The campus also has two coffee shops as well as a cake and cupcake store. The outlets are generally opened from 07:00 to 19:00 during the semester week days and a few open during the weekends from 08:00 to 13:00.

The fast food outlets serve burgers, pastas, curries and rice, bunnies (unsliced bread filled with curries), toasted sandwiches, fried chips, pies, hot dogs, chicken pieces and more. The outlets cater for preferences related to chicken, mutton, beef and vegetable ingredients. The food is available for individuals', meals for two as well as meals for four. These are advertised and displayed in certain stores. These stores also advertise great deals for the students such as; get two burgers for a certain price, buy one wrap and get a certain brand cold drink for free as well as great specials on Thursdays.

These outlets also compete on with the non-alcoholic beverages from cold drinks, juices and milkshakes to energy drinks. There is also the sale of different types and brands of sweets, chocolates, chips and ice-cream which are available from different stores as well as vending machines.

2.5 CONSUMPTION OF FAST FOOD

The consumption of fast food is attributed to the factors including; demographic and lifestyle orientation pertaining to taste, nutrition, cost and convenience (Glanz, Basil, Maibach, Goldberg & Snyder, 1998). "Amongst other factors, the increase in fast food consumption in South Africa can be attributed to an increase in household income, a growth in the black middle class segment, an increase in the participation of women in the labour force, an increase in the value of household time and more pertinently the penetration of fast food outlets into South African townships and rural areas" (Hartford, 2012; Maumbe, 2012; eProp, 2012; Mboweni-de Klerk, 2008) as cited in (Oni & Matiza, 2014, p. 803).

The three most prevalent deciding factors for the choice of where to eat relates to; the time of day, the time spent eating and the price of the food (Kaynak & Chan, 1999). Ayo, Bonabana-Wabbi and Sserunkumma (2012) add that the time spent away from home, education level, disposable monthly income, household size and age explained the decisions to consume fast food. However, Ayo *et al.*, (2012, p. 6575) found that "occupation, distance from work place to restaurant, gender and marital status of respondents were not significant." Glanz *et al.*, (1998) further state that the consumption of fast food is generally by younger people, males and people with lower incomes.

"Two age groups that appear to have undergone the most dramatic changes in eating habits over recent decades are adolescents aged 12 to 18 years, and young adults aged 19 to 29 years. The fast food and food service industries have responded by making fast food outlets increasingly available to these clients by means of longer operating hours, delivery options and convenient locations, such as shopping malls and drive-through facilities" (Van Zyl *et al.*, 2010, p. 124).

In an article entitled "Barriers to avoiding fast food consumption in an environment supportive of unhealthy eating," authors Thornton, Jeffery and Crawford (2013) indicate that the supply and demand of fast food has increased in recent decades which have alluded to more frequent fast food consumption. This is in accordance to the discussion surrounding the impact on fast food revenue throughout the world. More specifically, an understanding as to the frequency, time of day and reason for consuming fast food is imperative.

2.5.1 Frequency of Fast Food Consumption

Although it is known that fast food may be consumed throughout the year, several studies intrinsically analyse the frequency of consumption for a month with concentration on weekly and daily basis. The study relating to the characteristics and factors influencing fast food intake of young adult consumers was conducted in Johannesburg, South Africa. This study sought to examine the fast food consumption patterns, socio-economic characteristics and other factors that influence fast food intake amongst the young adults (Van Zyl *et al.*, 2010). These elements are very similar to the objectives of this study within Durban, South Africa.

The quantitative study by Van Zyl *et al.*, (2010) comprised of 341 respondents within the Johannesburg Metropolitan area. There were 178 (52%) respondents enrolled at tertiary institutions. The study revealed that "Eleven percent of the participants ate fast food daily, 27.6% ate it two to three times a week, and 20.8% ate fast food at least once a week. Only 3.8% of participants had fast food less than once per month" (Van Zyl *et al.*, 2010, p. 126). Similar results from a Turkish sample revealed that 12.8% consumed fast food on a daily basis and 20.5% at least once a week (Akbay, Tiryaki & Gul, 2010).

"Males (50.3%, n = 81) consumed fast food more often than females (27.8%, n = 50) when adding the two to three times weekly and daily usage. It was interesting to note that, in the unemployed

group, 50% (n = 14) had fast food at least once per week or more, and that 21.4% (n = 6) of this group consumed fast food daily" (Van Zyl *et al.,* 2010, p. 126). Dave, An, Jeffery and Ahluwalia (2009) confirm that males consume more fast food than females. It is further implied that fast food is an integral part of the diet and that the frequency of fast food intake has increased significantly over the years (Dave *et al.,* 2009).

2.5.2 Consumption of Fast Food by Time of Day

Gunnars (2014, p. 1) points out that "there is a lot of confusing advice out there about the 'optimal' meal frequency." Sifferlin (2013) states that there are three most common meal times during a day; breakfast, lunch and supper with breakfast being the most important meal of the day. The question of whether to eat three meals or six small meals in a day also surrounded the subject area (Magee, 2014).

Fast food is generally found to be consumed mostly during the three main meals of the day whilst there are indications that the consumption occurs as snack times for generally shoppers at malls or in-between working hours and travelling. Low income consumers who travel long distances to and from work often eat on route in order to make the best use of their time (Euromonitor International, 2005). "The effect of time spent away from home and disposable monthly income on fast-food consumption was positive" (Ayo *et al.*, 2012, p. 6575).

Aloia, Gasevic, Yusuf, Teo, Chockalingam, Patro, Kumar and Lear (2013) stated that consumers are most likely to buy lunch or midday snack at a Western-style fast food restaurant and consider costs, mood of the restaurant, availability of various types of food, convenience, and location of the restaurant in their decision. Harris, Bargh and Brownell (2009) included that consumption of fast food especially amongst adult consumers occurs whilst watching television. The adults consumed healthy and unhealthy snacks during these times (Harris *et al.*, 2009).

2.5.3 Reasons for Consuming Fast Food

There are several reasons which became prevalent for consuming fast food namely; time, demographics, health, away home eating habits and taste (Habib *et al.*, 2011) as well as advertising, parent's roles and students behavioural patterns to fast food consumption (Kumar *et al.,* 2013).

Time, convenience and taste were the three most predominant factors identified (Van Zyl *et al.*, 2010). Eating from fast food outlets provides consumers with the ability to satisfy their hunger as well as the need for convenience, pleasure, entertainment, time saving, social interaction and the mood transformation (Park, 2004). In the 1980's it was established that the sociality was a key factor omitted by researchers and currently it is one that reveals significant reasoning (McCracken, 1988). Ayo *et al.*, (2012) had significant findings relating to consumption of fast food as a social gathering. "Some people consumed fast-food as a way of socialising with friends and family members or during social gatherings" (Ayo *et al.*, 2012, p. 6575).

In addition, with the increasing number of women in the work place and busier lifestyles in general, fast food became an important characteristic relating to the growth in the consumer foodservice industry (Euromonitor International, 2005). With the changes in consumer lifestyles, and the increase in working mothers and single parents, there is less time to prepare meals and fast food became a vital alternative. Furthermore, "longer working hours and a greater number of working couples have also led to the popularity of food prepared outside the home" (Euromonitor International, 2005, p. 1).

2.6 FAST FOOD PREFERENCES

The premise is to establish whether or not fast food is preferred over home cooked meals and the link that may or may not exist between the reasons for consumption to preferences.

Whilst it had been noted that there exists less time to prepare meals, home cooked meals are prepared. The younger generation, who are influenced by western lifestyles portrayed through television and advertisements, exhibit a preference for fast food restaurants (Akbay *et al.*, 2010). The growth of the fast food industry has attributed to the increase of fast food consumption over home cooked meals (Aloia *et al.*, 2013). "Results of a study that surveyed Indian adults in their 20s showed that, although they preferred home cooking over fast food, their main reasons for visiting fast food establishments were going there for fun, change of scenery, and socialising" (Aloia *et al.*, 2013, p. 2). On further inspection it was found that almost all of the respondents of the study reported preference toward home cooked meals and believed that it was healthier than restaurant food.

Distinctively, fast food preferences over home cooked meals may differ in accordance to demographics. Preferences also become evident amongst university students. The most common factors for university student preferences, especially amongst the resident students, include; changes in living arrangements, costs and financial resources and the availability of convenience and fast meals (Bagordo, Grassi, Serio, Idolo & De Donno, 2013). It had been established that the eating patterns of most university students' (students living at home and students living away from home) change significantly (Bagordo *et al.*, 2013).

Tuttle (2011, p. 1) stated that "Compared to traditional home cooking, fast food is more immediately gratifying and pleasurable and, well, faster to prepare and consume, from beginning to end." Fast food outlets have also created the additional cravings for the food. These are upsizing of meals to larger quantities, adding extras options such as cheese, pineapple, chips, beverages, deserts and so on. Most QSRs no longer serve complete meals (burgers with chips and a beverage, for example), rather items are sold separately and may prompt the purchasing of the full combo. This is also very much evident at the University of KwaZulu-Natal (Westville Campus).

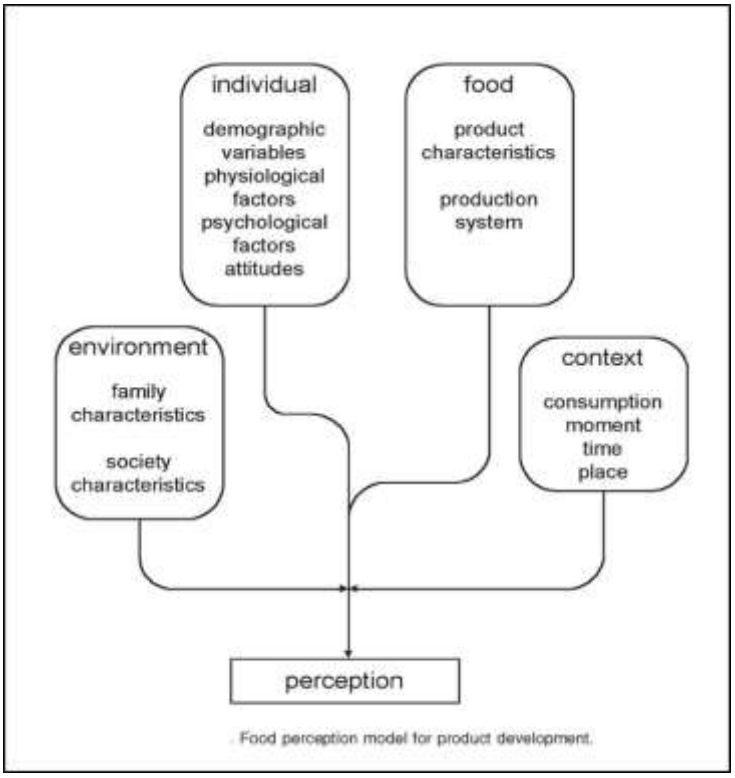
Whilst there may be a relationship between the reasons for consuming fast food to the preference of it, another distinctive factor relates to it being a family preference. Most households are already prone to the lack of communication as a result of technological advancement. Therefore, family meal times may not occur as much as in the previous generations. Also, another distinguishing factor is that every taste and preference may differ. As previously highlighted, the lack of time for preparing home meals is lessened and may pose further difficulty in satisfying the unique preferences. Fast food again becomes the option to cater for these differing preferences. Moreover, children are drawn toward the meals because of the toys and noteworthy is that KFC no longer provides the toy with the children's meals.

2.7 FACTORS AFFECTING CHOICE OF FAST FOOD CONSUMPTION

There are different models which explain the factors of choosing food. Almost all of the models structure the determinants related to three distinguishing characteristics; the person, the food and the environment (Van Zyl, 2009). These are evident by some of the models including; The model of food acceptance by Pilgrim (1957), Factors influencing food preference by Randall and Kahn (1981) and Factors influencing food choice by Gains (1994). The Food Perception Model as

illustrated in Figure 2.4 below is a comprehensive model created by Sijtsema *et al.,* (2002). This model was created for product development, based on four determinants and variables influencing food perception. It emphasises the individual's perception of food as not only being complex, but also highly variable (Van Zyl., 2009).

Figure 2.4 The Food Perception Model



Source: Van Zyl., (2009).

One of the main reasons for the consumption of fast food as previously highlighted is due to its convenience. A study by Bryant and Dundes (2008) as cited in Brindal (2010) found that most people rated taste and flavour as important factors for encouraging fast food consumption. It was also evident that cost and menu choices or the variety played an integral role toward the purchasing and consumption of fast food. The additional factor of fast food availability, relating to convenience, is as important for consumers and the fast food industry.

Based on the convenient nature of fast food, it was only inevitable to provide further understanding. Jekanowski, Binkley and Eales (2001) examined the definition of convenience in relation to fast food, as the time saved by not preparing meals. More distinguishable is that fast food is an

immediate service which provides consistency and a popular product (Jekanowski *et al.,* 2001). Rydell, Harnack, Oakes, Story, Jeffery and French (2008) reported that the factors that influenced the consumption decisions of fast food were due to it being quick and easy to get.

An attractive quality of food processing is that it can make foods more convenient to obtain and consume. Despite the convenience of fast food and the advantages, it is of little consequence unless the food is easily available (Jekanowski *et al.,* 2001). It is further added that consumers will not travel far and is therefore critical that fast food outlets be in nearby locations where it can be easily reached. This is extrinsically aligned to the context of the food perception model in Figure 2.4.

In order to compensate for the convenience, QSRs throughout the world have implemented drive-through facilities. These facilities assist with having to not wait in sometimes long queues within the stores and as the term imply to simply have the service from within the vehicle. "The drive-through window is a highly efficient means for customers to obtain and employees to dole out meals" (Ritzer, 2011, p. 168). "Various aspects of the work of employees at fast food restaurants are timed; this emphasis on speed often serves to affect adversely the quality of work, from the point of view of the employee, resulting in dissatisfaction, alienation and high turnover rates. Similarly, customers are expected to spend as little time as possible in the fast food restaurant" (Ritzer, 2011, p. 168). This allows for greater availability of the food and research has identified that there is a strong positive association between the availability of fast food and the consumption of fast food (Dunn, Sharkey & Horel, 2012).

Fast food is more costly than preparing home cooked meals (Tuttle, 2011). However, Carlo Gonzaga, CEO of Taste Holdings, the owner of Scooters Pizza, St Elmo's and Maxi's, stated "Food is not a luxury and quite honestly it is cheaper to eat fast food than it is to eat supermarket food in many cases." (Moorad, 2013, p. 1). It was found that the consumption of fast food increases significantly with that of disposable monthly income (Ayo *et al.,* 2012). This indicates that those with higher monthly incomes are likely to consume more fast food than those with lower incomes. "An increase in disposable monthly income has been reported to encourage both consumption and expenditure on fast-food in general" (Ayo *et al.,* 2012, p. 6576).

With a greater number of individuals present in the working environment, there may exist more households with income generation. The working environment includes for the various demographic characteristics. There is also the presence of younger individuals in this environment.

It was found that age significantly affects the consumption of fast-food (Ayo *et al.*, 2012). An increase in consumer's age by one year would decrease the probability of consuming fast-food by 0.2% (Ayo *et al.,* 2012). This could be due to a high preference for healthier foods as consumers grow older (Van Zyl *et al.,* 2010). Therefore, it is evident that the consumption of fast-food declines as individuals age. This links to the demographic variables within the food perception model illustrated in Figure 2.4.

Along with demographics and other individual factors, the food characteristics specifically relating to the variety of options available may affect the decision process. Royle and Towers (2002, p. 2) inform that QSRs come in a "wide variety of forms and varying product offerings ranging from hamburgers, pizzas, fish, baked potatoes and French bakery products to ethnic foods such as Indian curries and Chinese meals, Turkish or Greek kebabs, coffee shops and soup outlets. However, though sandwich shops, burgers, pizzas and other products are dominated by large companies, ethnic foods tend to be the domain of the small independent owner." The variety is not restricted to the menu offering. The variety is also evident by the number of different stores or outlets in the number of locations.

With the variety of offerings by different outlets, consumers are also able to make consumption decisions based on the taste and preference. Although the items may have similar characteristics, fast food outlets compete in order to gain market share. Each outlet is prone to its uniqueness in terms of the preparation of the food from using different sauces, spices and other blends. This is very much evident at the University of KwaZulu-Natal (Westville Campus) with the many outlets. Schlosser (2010) found that customers, competitors and food critics enjoyed the taste of McDonalds fries and that it had nothing to do with the potatoes, the processing or the restaurant equipment but rather that the secret was in the cooking oil.

Colour additives are used in processed foods to make the food more appealing. Schlosser (2010) describes the use of food colouring as serving the same purpose of lipstick, eye shadow and mascara. It is further implied that the colour of food can greatly affect the perceived taste. "Brightly coloured foods frequently seem to taste better than bland-looking foods, even when the flavour compounds are identical. Foods that somehow look off-colour often seem to have off tastes. For thousands of years, human beings have relied on visual cues to help determine what is edible" (Schlosser, 2010, p. 1).

2.8 INFORMATION SOUGHT/AVAILABLE ON FAST FOOD

The portion sizes of fast food have doubled over the last 50 years and it has become important to monitor the changes in nutritional content of these products (Young & Nestle, 2003). Rees and Watson (2000, p. 61) state that there is a food standards code which "primarily standardises food commodity categories." This code provides the general standards for labelling, food additives, contaminants and pesticide residues (Rees & Watson, 2000). Furthermore, the objectives of the food standards are:

- "the protection of public health and safety,
- the provision of adequate information relating to food to enable consumers to make informed choices and to prevent fraud and deception,
- the promotion of fair trading in food,
- the promotion of trade and commerce in the food industry and
- the promotion of consistency between domestic and international food standards where these are at variance" (Rees & Watson, 2000, p. 62).

Ayo *et al.*, (2012, p. 6576) state that "those who are highly educated are less likely to consume fast-food because education increases their knowledge of nutrition aspects of fast-food, limiting its consumption and shifting to healthier food options." It is reiterated that individuals with higher education level (≥15 years spent in school) spend less on consumption of fast-food because they understand the importance of health and are more likely to obtain, process, interpret, and apply knowledge that shapes nutritional or dieting practices (Ayo *et al.*, 2012).

It is imperative to understand the type of information gathered by consumers when making fast food consumption decisions. This understanding will assist with further knowledge toward the marketing attempts by the fast food outlets. It is also imperative to understand the measures taken by consumers in acquiring the necessary information about fast food. The exploration of the information made available by fast food outlets become a critical factor. Therefore, it is only immanent to see how the marketing mix elements (four Ps; product, price, place and promotion) of fast food are made available to consumers.

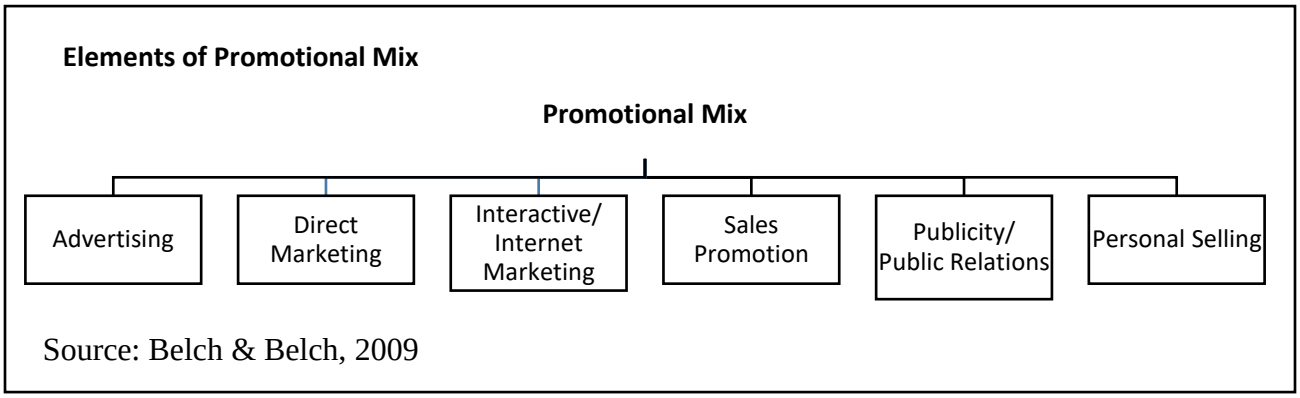
With the advancement of technology, fast food stores are able to advertise their products and offerings on a number of platforms. In the past, advertising was a relatively simple process which

allowed companies to position advertisements in the mass media and deliver the intended message to a large number of consumers (Belch & Belch, 2009). “However, today’s marketers recognise that the rapidly changing media environment is making it increasingly difficult to reach their target audiences and communicate effectively with them. The mass media are losing their viewers, listeners and readers to the highly fragmented but more narrowly targeted digital media that allow consumers to be more actively engaged in the communications process” (Belch & Belch, 2009, p. 5).

Marketing is generally perceived as advertising. However, this is only a small component of the subject matter. In order to attract consumers and impart information, marketers use the process of integrated marketing communications (IMC). “Integrated marketing communication is a strategic business process used to plan, develop, execute and evaluate coordinated, measurable, persuasive brand communications programs over time with consumers, customers, prospects, employees, associates and other target relevant external and internal audiences. The goal is to generate both short-term financial returns and build long-term brand and shareholder value” (Schultz, 2004) as cited in (Belch & Belch, 2009, p. 12).

Promotion is a critical component of IMC and involves setting up channels of information and persuasion to sell or promote goods, services or ideas (Belch & Belch, 2009). The promotional mix as illustrated in Figure 2.5 below provides the basis tools used to accomplish the organisational goals and objectives.

Figure 2.5 Elements of Promotional Mix



Source: Belch & Belch, 2009

It has been established that individuals need to take cognisance of the calorie and nutritional information. The Recommended Dietary Allowances (RDAs) are generally used by dieticians to provide standards for good nutrition. RDA is defined in terms of the intake of essential nutrients which varies according to the biographical data such as gender, age, weight and height of the individual (Van Den Honert, 2012). Therefore, consumers are required to have an understanding of the intake which is sufficient for themselves. Once this is established, consumers will then be required to make decisions based on such details.

In order to collate nutritional content of fast food, information surrounding energy content, saturated fat, sugar, sodium and serving size must be gathered (Young & Nestle, 2003). According to FDA (2015), nutritional labelling is a requirement in chain restaurants and retail food establishments. Furthermore, such information will provide consumers with "clear and consistent nutrition information in a direct and accessible manner for the foods they eat and buy for their families. Posting calories on menus and menu boards and providing other nutrient information in writing will fill a critical information gap and help consumers make informed and healthy dietary choices" (FDA, 2015: p. 1).

Researchers at the Arizona State University sought to measure the effectiveness of the calorie listing that McDonalds has been providing over the past three years. The study revealed that the affluent and educated consumers were the most likely to notice and use the information. It was also found that "while the majority of customers noticed the labels, a very small percentage reported using them to influence their purchasing decisions" (Huffman, 2015).

2.9 TRENDS AND PATTERNS SURROUNDING FAST FOOD CONSUMPTION

Fast food consumption is coherent with a vast number of factors; availability, accessibility and choice, which can then be influenced by geography, demography, income, globalisation, marketing, culture, religion as well as consumer attitudes (Kearney, 2010). It is noteworthy to understand the phenomenon of these factors relating to consumption.

With a global increase in unemployment rates, South Africa too exhibits extraordinary contribution figures. However, it is found that South Africans employed, are generally working longer hours. As a result, there is a decrease in family time and time spent at home. Therefore, eating out has become a popular measure (Euromonitor International, 2005). Family time is more often spent at a

dining outlet which caters for a family as a whole. As previously discussed, there is a difference in portion sizes of meals available. The larger sizes which are termed "value for money" becomes sometimes difficult to consume as a meal time element. It is often found that the "leftovers" are "taken away" or "doggy bagged" which leads to these paid for meals generally being packed as a lunch item. This has been justified as a common practice globally (Euromonitor International, 2005).

The preparation of lunch items is commonly performed by the female or "mother" figure within households. However, with the fast paced and busy lifestyles, more individuals are seeking alternate options. Generally, lunch is prepared either the night before or early parts of the morning either for an individual or a family. Due to individual preferences more evident, it becomes somewhat of a major task to prepare individual meal preferences. Therefore, due to time constraints and the thought process, food preparation as lunch items are easily available by utilising leftovers from dinners, processed or prepacked foods, as well as spending money to purchase fast food. This makes it easier or more convenient to prepare food.

A staggering acclamation by Ayo *et al.,* (2012) is that it is often more convenient and cheaper for smaller households to consume fast food compared to bigger households. It has also been found that single women and groups of women are now eating out more often than before due to women being more present in the workplace. Women have also been establishing themselves in professional positions with good levels of disposable incomes (Euromonitor International, 2005). Many places of leisure have now established a "ladies' night" concept leading to restaurants offering discounts on specific days of a week. There have been developments indicating that consumptions patterns are greater amongst females than males and with the growing middle class of black South Africans emanates to a rise in eating out patterns.

"The latest household expenditure survey by University of South Africa's (Unisa) Bureau for Market Research, carried out in 2003, found that the main increases in household expenditure by black consumers between 1993 and 2003 in terms of entertainment were on holidays or weekends away (up 44% per year over the period) and recreation (up 29%). At the same time, busier schedules had a positive impact on the fast food and 100% home delivery/takeaway sectors throughout the review period" (Euromonitor International, 2005, p. 3).

Thus far, it has been established that eating out or the consumption of fast food can be based on the convenience and lack of time. Furthermore, fast food outlets have encapsulated this and has made it not only easier to consume but due to the convenience packaging and disposable material, less time is spent cleaning up crockery and cutlery. Households have experienced the nature of consumption and the benefits presented and are now consuming out of habit. This decision making may lead to learning patterns developing amongst the younger generations.

Whilst it may seem as though adults or head of households are responsible for the decision making, Ayo *et al.,* (2012) have presented results indicative of fast food consumption based on children's preferences. Van Zyl *et al.,* (2010, p. 127) found that "more females (n = 40, 22.2%) than males (n = 23, 14.3%) were influenced by family and friends to purchase fast food, and that more males (n = 24; 14.9%) than females (n = 17; 9.4%) indicated that the availability of fast food was their main reason for having it." It is the premise to establish that the variety and availability of options is dependent ultimately on decision making and choice selection.

2.10 EXCESSIVE FAST FOOD CONSUMPTION

The consumption of fast food has revealed itself as an increasing trend throughout the world. This has representation of contribution to the global economies. As such, companies have and continue to experience increase in production and sales volume. This contribution can be based on the increase of consumption over the years. However, it is deemed necessary to exhibit these consumption patterns amongst the consumers to understand the industries' revelation. It is imperative to comprehend fast food in relation to the quantity consumed, the decision of choices made and the effect of consumption.

Fast food service industries have responded to the changing environment by increasing the availability of fast food outlets. This has been presented by operating at longer durations, offering delivery services, and operating at various and convenient locations such as shopping malls (Van Zyl *et al.,* 2010). The consumption of fast food has not only increased overall, but it has seen an increase in individuals' consumption. Section 2.4 entitled Consumption of Fast Food within the present chapter has presented the frequency, time of day and reasons for consuming fast food. In summation, the ease of access, convenience and pricing has led to an increase in the frequency of

consumption behavior amongst consumers throughout the world. This reiterated implies that the frequency of fast food consumption is no longer consumed occasionally.

With the immense variety and positioning of fast food outlets and the increasing growing industry, consumers are ideally spoilt for choice. The reasons for choice has been explored with time, convenience and taste being predominately identified. However, an exploration to the effects of the combination of frequency and choice of fast food is immanent.

Fast food outlets have long been critiqued as unhealthy and a contributor toward global epidemics. One such case study entitled "Supersize Me" sought to highlight the unhealthiness of consuming regularly from a popular global fast food outlet, McDonalds. Whilst this case has led to overweight and obesity the rebuttle by John Cisna, a science teacher from Des Moines, Iowa, ate nothing but McDonalds for 90 days and wound up losing 37 pounds (Pomeroy, 2014). The teacher further proclaimed, "So this isn't something where you say, 'well he went to McDonalds and he only had the salads.' No, I had the Big Macs, the quarter pounders with cheese. I had sundaes, I had ice cream cones" (Pomeroy, 2014: p. 1).

Whilst this study is not aimed at the medical or clinical evidence, it is prudent to acknowledge that the same case study has provided opposite effects for both individuals. Therefore, there is no direct proven element that fast food consumption (in this case of McDonalds) leads to overweight and obesity. However, this study sought to explore the consumption behaviour and understand if healthy consumption is provided for and practiced.

The fast food industry is seen to promote foods which are often high in fat, sugar and sodium which emanates to being highly energy dense (Van Zyl *et al.,* 2010). CYWH (2014), state that due to high level of fat and sodium, fast food should not be consumed on a regular basis. This is based on health professionals concern in light of the growing obesity "epidemic" in the world (Van Zyl *et al.,* 2010).

Based on such information and concern, it is only obligated to deliver the prevalent statistics:

> "The prevalence of obesity is increasing globally. In the US the rate of childhood obesity and overweight have almost tripled since 1974. Currently 30% of children aged 6-19 years are overweight or at risk to become overweight. Some publications state that in 1999 nearly 50 million adults in the US were obese or morbidly obese. South Africa and other developing countries are following the same trend. Data suggests that up to 10% of children

> under the age of 2 years and between 5-20% of children under the age of 6 years are overweight. An average of 7.9% adult men and 27.5% woman are obese, with the highest incidence occurring for men within the white population and for woman within the black population. Obesity appears to be due to a combination of genetic and environmental factor that include excessive kilojoule intake and decreased physical activity. Furthermore, overweight and obesity in childhood may predispose persons to morbidity in adulthood. Overweight and obesity in children is of particular concern because of the associated developmental abnormalities and the long exposure to enlarged adipose tissue stores acquired by excessive early-onset weight gain. Blood pressure, fasting blood cholesterol and insulin concentration has been shown to be higher in overweight than normal weight children. The preference of high fat, high kilojoule foods in adults has been attributed to tastes cultivated in childhood. The fast food industry recognize this and aggressive marketing of fast foods to children are of particular concern" (Van Zyl, 2009, pp. 12-14).

This premise is acknowledged by several authors and one such is that of Johansen (2012, p. 20) proclaiming "Approximately, two-thirds of adults 20 and older in America are overweight or obese. And it's been recently projected that 42 percent of Americans could be obese by the year 2030." Furthermore, a study entitled "The Potential Impact of a 20% tax on Sugar-Sweetened Beverages on Obesity in South African Adults:A Mathematical Model" co-authored by Professor Benn Sartorius, revealed that more than half of South Africa's adults are overweight and 42% of females and 13% of males were described as obese (Dlamini, 2014). Therefore, it is clear for South African and global consumers to become concerned with health and weight issues.

The extension of concerns evident are:

> "Both quality food and health issues are now prime concerns amongst social groups with higher disposable incomes and who pay more attention to their lifestyles. New and old consumer foodservice chains are repositioning themselves as quality food entities, offering healthier options as an attractive alternative to traditional standardised and global fast food products. However, despite this growing interest in healthier lifestyles, according to the 2003/4 South African Health Review, chronic non-infectious diseases usually associated with lifestyle (heart disease, strokes, cancer, chronic obstructive pulmonary disease and

diabetes) resulted in 37% of deaths in South Africa over those two years" (Euromonitor International, 2005, p. 3).

Based on the epidemic concerns especially surrounding childhood obesity, Rydell *et al.,* (2008) further imply that QSRs do not necessarily have nutritious foods to offer. This has led to some European countries implementing legislation terminating marketing and imposing restrictions on advertising of fast foods to children (Van Zyl *et al.,* 2010). It is perceived that this will aid on the decrease of childhood obesity.

Whilst preventative measures in terms of legislation is in place, consumers are often cautioned to eat fast food in moderation to avoid possibilities of health implications. CYWH (2014) place emphasis on healthier eating practices and for consumers to not get carried away with the popularity, filling and tasty foods which do not necessarily cost a lot of money.

There are many fast food outlets which are changing their menus, offering healthier options. Ultimately, the decision is left to the consumers to practice healthier eating plans. This control or decision can be made in an individual or a combination of patterns such as; adding less toppings, controlling portion sizes, choosing healthier side options and concentrate on eating as an individual activity (CYWH, 2014). Nutritional facts are also becoming available at certain fast food outlets. This illustrates the calorie content of food which is either depicted on menus or can be requested at stores. This labelling requirement is proposed by the FDA for all fast food restaurants to enable consumers with a guide for selection, information and educational purposes (CYWH, 2014).

2.11 CONCLUSION

This chapter has presented the review of the literature. The literature has been presented based on the research objectives and questions. It has underpinned models relating to consumer decision making and consumer behaviour as a whole. Moreover, emphasis placed on the health implications based on the literature surrounding consumption of fast food intake. This has been illustrated by presenting consumer preferences, factors affecting choice, information sought as well as the trends and patterns of fast food consumption. Chapter three contains the research methodology.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

Marketers have the responsibility of conducting research using various methods. This equips marketers with the ability to use information and acquire the necessary data. The main reason for conducting research is to find methods of solving problems which may occur. Marketers need to consider the various methods and select the most appropriate to be able to use the correct techniques to analyse the collected data. Successful campaigns will entail exercising the correct strategies and will not result in inefficient, ineffective and expensive campaigns.

This chapter entails the discussion of the research methodology used throughout this study. It provides the clarification and recognition pertaining to the selected methods. It discusses the sources of data and the importance of data collection methods. This chapter will outline the importance of research methods and will amplify the accurate and reliable methods selected.

The methodology used entails providing a thorough analysis of the theoretical framework as well as data collection methods pertaining to a quantitative research study. It underlines the importance of the sampling methods and data collection relating to questionnaire design and construction. It also provides the information vital for the data analysis by identifying the different techniques and tests which have been applied. In light of this, the chapter demonstrates the validity and reliability of the study.

3.2 RESEARCH DESIGN

According to Sekaran (2003), research entails the process of problem solving after a comprehensive study and analysis of the situational factors. Once the problem has been identified, researchers can utilise a method to collect data and analyse the data in order to develop the required solution.

Due to the influential factors pertaining to fast food consumption, this research was conducted in relation to the identifiable problem. The research has entailed the collection of data of the identified

problem, thereafter sought to analyse the data in order to develop possible solutions to overcome the problem (Sekaran & Bougie, 2011).

There are four categories of research which include exploratory, hypothesis testing, analytical or explanatory research and descriptive (Sekaran, 2003, Collis & Hussey, 2003).

Exploratory studies refer to situations where not much is known of the area or where no or little research has been done in the past (Sekaran, 2003). These types of studies entail a comprehensive and thorough understanding of a specific problem which requires a better and more intense analysis of the situation. This study will not be appropriate as there have been several studies pertaining to the influence of fast food consumption of consumers.

Hypothesis testing refers to studies whereby the explanation of relationships, group differences or a comparison of two or more factors in a situation is necessary (Sekaran, 2003). Collis and Hussey (2003:10) add that hypothesis testing is for an "association or causality by deducing logical consequences generally by observation or experience".

Hypothesis testing can further explain the relations which exist in the variance of dependent variables or which may be used to predict organisational outcomes. Due to the several variables which exist in relation to the influence of fast food consumption, it will not be feasible to utilise this test. The other reason is due to several perceptions from consumers in respect of the influential factors.

A further research design has been identified as analytical or explanatory research (Collis & Hussey, 2003). This research is referred to as a continuation of descriptive research. This research goes beyond the description of characteristics of analysing and explaining the occurrence. It aims to understand the phenomena by identifying and measuring the causal relationships (Collis & Hussey, 2003). It assists the researcher with controlling the variables within the research activities.

Descriptive studies are embarked on to determine and describe the characteristics of the variables of interest (Sekaran, 2003). This research design is the most appropriate as it allows for the understanding of the factors namely; preferences, price, convenience, information, trends and patterns and risk that influence consumption decisions in marketing. It provides the ability to clarify, learn and describe the variables which are influential specifically for fast food. This research

design will aid in identifying the awareness consumers have relating to the health implications of fast food consumption in its success and will highlight the causes and consequences thereof.

A positivist approach was used to underpin the quantitative research design. This constitutes the acceptable knowledge within the field of study (Saunders *et al.*, 2007). This research will thereby embrace the positivist approach as it allow for the adoption of the philosophical stance of the natural scientist (Saunders *et al.*, 2007). This will enable the production of credible data. Furthermore, Saunders *et al.,* (2007, p. 103) stated that "the researcher would be external to the process of data collection in the sense that there is little that can be done to alter the substance of the data collected." The interpretivism approach is not conducive to the study as it may cause a stem of bias within the findings. This is related to the researcher having to adopt an empathetic stance (Saunders *et al.*, 2007). Based on the approach and philosophical nature, the research will be deemed to be quantitative. Therefore, this empirical study will require primary sources of data.

3.3 SOURCES OF DATA

Data is obtained from either primary or secondary sources and may include a combination of the two (Sekaran, 2003). Primary data refers to information which can be obtained directly by a researcher (Sekaran, 2003). This information will be related to the variables of interest and which will be specific to the study. Data can be obtained from a primary source of individuals, focus groups, panels of respondents which have been set up by the researcher and unobtrusive methods (Sekaran, 2003).

The researcher is responsible and involved in all aspects of transforming the data into knowledge. This entails the design of the data collection instrument, the data collection, the coding, checking for errors and analysing and interpreting the data (Hair, Babin, Money & Samouel, 2003). The research which has been conducted at the University of KwaZulu-Natal (Westville Campus) is pertaining to that of a primary source whereby quantitative research was selected.

On the other hand, researchers may utilise secondary data which is referred to as information gathered and implemented from existing sources (Sekaran, 2003). Secondary sources consist of company records, archives, government publications and industry analyses offered on the media,

corporate websites and the Internet (Sekaran, 2003). The internet can also form part of primary data when questionnaires are administered over it.

The secondary data transpires over information collected for other research purposes and researchers are able to gather this data free or may be purchased much less than the cost of collecting primary data (Hair *et al.*, 2003). Technology has allowed researchers with the ability to access a whole host of such data and may gather the necessary data much faster. There are two distinct advantages of secondary data sources which are saving time and money.

The choice of primary data for this research is due to the lack of research pertaining to the Durban consumers specifically for students within the Durban region. It will now entail understanding sampling with reference to the population and the sample size selected for the research.

3.4 SAMPLING

Researchers select the individuals, objects and events to collect data from, in determining the accuracy of the answers obtained and requires an appropriate sample (Sekaran & Bougie, 2011). Therefore, sampling is seen as the process of selecting these candidates, objects or events as representatives of the entire population for the study (Sekaran & Bougie, 2011). The aim of sampling is to obtain reliable data by considering observations from which a population can be estimated to derive a sample. Zikmund (2003) describes sampling as the involvement of selecting a small portion of the population to make a conclusion for the entire population.

The main reason for sampling is to allow the researcher to avoid acquiring hundreds and thousands of respondents from the population. It can be seen as almost impossible of collecting data from every single element which is one respondent from the entire population (Sekaran & Bougie, 2011). This aids in saving time, money and actually makes the research possible (Sekaran & Bougie, 2011).

The sampling process includes the following steps; defining the target population, choosing the sample frame, selecting the sample design, determining the sample size and implementing the sampling plan (Hair *et al.*, 2003, Sekaran & Bougie, 2011). These characteristics have aided the

researcher with the ability to discuss the relevant information on population, sampling design and the sample size for the study.

3.4.1 Population

The target population is the complete group of objects or elements which are relevant for the study (Hair *et al.*, 2003). Sekaran and Bougie (2011) agree and state that population refers to the entire group of people, events or things which the researcher desires to investigate. The population is also defined in terms of the geographical boundaries and time. This research entails acquiring information based on UKZN students' awareness of the health implications surrounding excessive consumption of fast food. Therefore, the population of this study refers to all registered students within the University of KwaZulu-Natal Westville Campus.

3.4.2 Sample Frame

The sampling frame is the representation of every element within the population from which a sample may be derived (Sekaran & Bougie, 2011). Therefore, a comprehensive list of elements is required to draw a sample. These lists have to be up-to date and accurate to be able to determine the appropriate sample (Hair *et al.*, 2003). The sample frame for this study has been determined according to the number of colleges at the Westville Campus. This frame will comprise of the three Westville campus colleges namely; College of Agriculture, Engineering and Science, College of Health Sciences as well as the College of Law and Management Studies. Each college is further divided into 13 Schools. The existent Schools within the Westville campus total seven; School of Chemistry and Physics, School of Life Sciences, School of Mathematics, Statistics and Computer Science, School of Health Sciences, Graduate School of Business and Leadership, School of Accounting, Economics and Finance and the School of Management, Information Technology (IT) and Governance.

3.4.3 Sampling Design

There are two types of sampling design which are probability and nonprobability sampling (Hair *et al.,* 2003, Sekaran & Bougie, 2011). A probability sample is defined as every element within the population has a known, non-zero probability or chance of being selected as respondents for the sample (Zikmund, 2003). Probability sampling can either be restricted or unrestricted and entails either simple random sampling, systematic, stratified random, cluster or double sampling. Due to the time factor, probability sampling was not the chosen design for the study.

Nonprobability sampling on the other hand refers to the elements that do not have a known or predetermined chance of being selected as participants for the research (Sekaran & Bougie, 2011). It basically implies that the inclusion or exclusive of elements in a sample is left to the discretion of the researcher (Hair *et al.,* 2003). With nonprobability sampling it means that the sample cannot be confidently generalizable to the population. Nonprobability sampling consists of convenience, judgement and quota sampling.

Convenience sampling is the collection of information from members of the population who are available to provide it (Sekaran & Bougie, 2011). This study entailed a nonprobability sampling using convenience sampling due to the advantages of being quick, convenient and less expensive. The disadvantage on the other hand is that convenience sampling is not generalizable at all (Sekaran & Bougie, 2011). Despite this disadvantage, the advantages of this design were imperative for the study.

3.4.4 Sample Size

A sample size can be drawn from large or small populations. The sample size needs to consider various factors. These factors are related to the research objectives, confidence intervals, confidence levels, population variability, cost and time constraints and the size of the population itself (Sekaran & Bougie, 2011). The utilisation of the sample size guideline by Sekaran and Bougie (2010), given the population of 12 927 registered students within the campus, will appropriate the sample to that of 373 respondents at a confidence level of 95%, with 5% being for marginal error.

3.4.5 Sampling Plan

The sample plan has been executed due to the researcher having agreed on the elements required for sampling. This implies that the population was defined, the sampling frame and method were selected and the appropriate sample size was selected. The researcher was now equipped with the ability to collect data from the 373 UKZN Westville students required for the study.

3.5 DATA COLLECTION

Data is referred to as the raw numbers or facts which are processed into information (Waters, 2001). Therefore, it can be concluded that there is a difference between data and information. In order for data to be collected for this study, it has required that of ethical clearance as well as Gatekeepers' Letters.

There are two data collection techniques which may be utilised which are that of quantitative and qualitative data. Qualitative data is referred to as the descriptions of information without assigning numbers directly (Hair *et al.,* 2003). This type of data is generally constructed through unstructured interviews such as focus groups and depth interviews. Sekaran & Bougie (2011) refer to qualitative data as information which can be gathered in a narrative form through interviews and observations. Interview notes, focus group and video recording transcripts, open-ended questionnaire answers, observation and news articles are examples of qualitative data.

Most exploratory research provides qualitative data as exploratory research with the general aim to provide a greater understanding of a concept or problem (Zikmund, 2003). This data collection method has not been used for the study as the results would have been more difficult to interpret due to various perceptions from different students.

However, this study has been implemented through the use of quantitative research. Quantitative data are the measurements in which numbers are used directly to identify the properties (Hair *et al.,* 2003). Due to the use of numbers, it will require statistical analysis. The information can therefore be represented in the form of graphs and tables and can be expressed visually and numerically. Waters (2001) stated that quantitative data is much easier and more precise than qualitative data.

The choice of quantitative data allowed the researcher to develop a questionnaire in order to obtain the necessary data. This data has been coded, categorised and keyed in so that the decisions were made to allow for analysis.

3.5.1 Questionnaires

Questionnaires are defined as the set of pre-formulated questions or statements which are presented to the respondents or participants (Sekaran & Bougie, 2011). These respondents have been selected as students from the Westville Campus. Questionnaires can be seen as an efficient method of collecting data as the researcher has the ability to collect information pertaining to the requirements of the study. The different types of questionnaires are personally administered, mailed to respondents or electronically distributed (Sekaran & Bougie, 2011). This study has focused on personally administered questionnaires using the quantitative data research.

3.5.1.1 Personally Administered Questionnaires

Personally administered questionnaires are when the researcher administers the questions or statements oneself to the respondents (Sekaran & Bougie, 2011). This method has been feasible due the confinement of a local area which allowed for the geographical access to participants. The researcher was present during the administration of the questionnaires to elaborate and provide respondents with clarification on any issues which arose. This allowed the researcher to collect the necessary information or data from respondents in a short period of time. It corresponds with the time horizon of the study which can entail either cross sectional or longitudinal studies.

Cross sectional studies which have been used for this research, refers to studies undertaken to gather data only once, over a period of time to achieve the objectives of the study (Sekaran & Bougie, 2011). It is also referred to as a one-shot study and can be obtained over a period of days, weeks or months (Sekaran & Bougie, 2011). The researcher had collected the data over a period of two weeks from the various Schools within the Colleges at the UKZN Westville Campus. The purpose of the study was to collect the data pertinent for the objectives and research questions.

The other type of study is that of longitudinal where the researcher conducts the study on a group of people at more than one point in time (Sekaran & Bougie, 2011). This allows the researcher to analyse the before and after effects of a change experienced and is generally more costly due to the longer periods of time. This form of study entails an experimental design because of the collection of data at different points in time (Sekaran & Bougie, 2011).

By using the primary data collection method, the researcher had the ability to introduce the research topic as well as motivate respondents to participate and contribute to the research. It was found that certain respondents had been reluctant to participate but was assured that responses were anonymous and confidential.

Respondents could also be given blank questionnaires which could have been completed and sent back to the researcher. For this study the researcher had decided to be present and collect the data immediately from respondents to avoid delays and from respondents not returning the questionnaires.

Due to selecting quantitative research using questionnaires, the researcher was adequately prepared to acquire a total of 373 students from the Westville Campus to administer the questionnaires. However, the researcher had to carefully design and construct the questionnaire to avoid any mistakes, confusion or bias.

3.5.1.2 Questionnaire Design

There are three important issues needed for consideration when designing a questionnaire to avoid bias. This relates to the wording, planning and general appearance (Sekaran & Bougie, 2011). The reason for such considerations is related to several questionnaires failing due to the incorrect questions asked or the right questions asked in the incorrect way.

The wording of the questionnaire needs to be appropriate in respect of the language. Due to the sample consisting of UKZN Westville students, the language used was English as this is the prominent language within the university. The respondents were not asked to state their names on the questionnaire document but the researcher had kept a record in a private document. The respondents were informed of this and all questionnaires used a numerical system as completed to

maintain anonymity should the questionnaires have fallen into the hands of an unauthorised person or organisation.

The questionnaire consisted of 35 questions in total with 34 being closed questions and one open-ended question. Closed questions were devised to ask respondents to make choices from a set of alternatives provided by the researcher. These questions aided the respondents with the ability to make quick decisions from the alternatives (Sekaran & Bougie, 2011). The final question of the questionnaire was that of an open-ended question which allowed respondents to answer in any way they chose. This allowed respondents to comment on the topic they believed was important and answers have been categorised for data analysis.

When designing the questionnaire, the researcher avoided positively and negatively worded, double-barrelled, ambiguous, recall dependent, leading, loaded and socially desirable questions. The reason for this was to avoid bias by prompting respondents into making a specific selection. The researcher also took into consideration the length of questions by keeping each statement simple and short and not exceeding the rule of thumb of 20 words (Sekaran & Bougie, 2011).

The questionnaire was neat and well organised and consisted of three sections, each with a title and instructions to allow the respondent to answer without difficulty. The first section was personal details requiring students to provide their gender, age, race, school and level of study. As per the instructions, respondents were informed that these details were for statistical purposes only. The researcher had also informed respondents of this.

The second section was to analyse UKZN students' awareness of the health implications surrounding excessive fast food consumption. This section provided an even distribution of questions relating to the dependent variable (consumption behaviour) and the independent variables (preferences, factors affecting choice, information, trends and patterns and risk). In order to acquire the responses pertaining to the independent variables the section consisted of a table using a 5 point Likert scale from strongly disagree to strongly agree. The questionnaire had instructions for respondents to be able to understand the requirements and the researcher also assisted.

The third and final section of the questionnaire allowed consumers to make any further comment/s or suggestion/s should they have desired. In total the questionnaire amounted to one page (back to back) due to the respondents being students who would possibly have been reluctant to participate

if they were to be interrupted from attending lectures and/or studying. The researcher was able to clearly introduce and convey the purpose of the questionnaire as well as establish a rapport with the respondents to motivate them to participate enthusiastically. The researcher also thanked the respondents for their participation and taking the time to complete the questionnaire.

3.5.1.3 Advantages and Disadvantages of Questionnaires

The researcher chose the quantitative research of personally administered questionnaires due the several advantages.

The advantages of the personally administered questionnaires experienced included:

- The ability to establish a rapport with the respondent
- To motivate the respondent
- To collect data from large groups at a time
- To clarify any doubts
- Less expensive
- High response rate
- Anonymity allowance

However, the disadvantage was that several students were reluctant to sacrifice their time to participate in the questionnaire.

3.5.1.4 Pre-Testing of the Questionnaire

It is important for researchers to pre-test the questionnaire to ensure that it is suitable and well understood by respondents (Sekaran & Bougie, 2011). The pre-testing, also referred to as pilot testing, involves a small number of participants to administer the questionnaire. This allows the researcher to rectify any issues which arise from the pre-test before actually collecting data. The researcher had acquired approximately 5% of the sample size to pre-test the questionnaire before having it administered by the total sample size.

3.6 DATA ANALYSIS

Data analysis occurs after the collection of data in order to interpret the results (Collis & Hussey, 2003). The analysis may occur for qualitative and quantitative data. However, this study concentrates on the analysis pertaining to a quantitative data research. The data analysis for this research was compiled using Statistical Package for the Social Sciences (SPSS) Version 21.

This research used the computer software program to capture the raw data. The data was coded as per the questionnaire and the researcher had checked each questionnaire for missing elements. The researcher found that there was no blank entries and would therefore not amount to any inconsistencies.

According to Sekaran and Bougie (2011), there are two types of statistics for quantitative data analysis which are descriptive and inferential statistics.

3.6.1 Descriptive Statistics

Descriptive statistics are used to describe the phenomena of interest (Sekaran & Bougie, 2011). The variables are provided by frequencies, measures of central tendency and dispersion (Sekaran & Bougie, 2011). These results have been obtained from the SPSS software which is designed to produce the results for the various data types.

3.6.1.1 Frequencies

Frequencies refer to the number of times various subcategories of interest occur and allow for the derivation of percentages and cumulative percentages (Sekaran & Bougie, 2011). The frequencies have been obtained for several categories acknowledged by the researcher as per the questionnaire. These frequencies have been described in Chapter Four.

3.6.1.2 Graphical Representation of Data

The frequencies which have been obtained have also been visually displayed in the form of tables. The tables utilised by the researcher was suitable for presenting and summarising the frequency data. The type of data helped the respondent to select the appropriate graphical representation. The researcher used line charts to illustrate the non-parametric testing.

3.6.1.3 Measures of Central Tendency and Dispersion

There are three common measures of central tendency which include the mean, median and mode. The mean is known as the average value of the data collected (Sekaran & Bougie, 2011). The median refers to the central item within the group and can be arranged either in an ascending or descending order (Sekaran & Bougie, 2011). The median points out the middle value and if there is an even number within the sample, then the median is calculated by averaging the two middle values. The mode describes the value which occurs most frequently (Sekaran & Bougie, 2011). This measure of central tendency has been referred to in Chapter Four in order to understand the fast food consumption decisions made by UKZN Westville students.

Measures of dispersion on the other hand include the range, standard deviation and variance. A range refers to the extreme values observed within a given set (Sekaran & Bougie, 2011). It is calculated by subtracting the lowest value from the highest. The variance is calculated by subtracting each value from the mean and then taking the square of each difference and dividing it by the total number of observations (Sekaran & Bougie, 2011). The variance provides an indication of how dispersed the data is in the data set.

Once the variance has been calculated, the researcher is able to calculate the standard deviation. This is basically taking the square root of the variance (Sekaran & Bougie, 2011). Since the mean and standard deviations are commonly used for descriptive statistics, the researcher included these measures in Chapter Four.

3.6.2 Cross Tabulations

The researcher also found it useful to analyse the data by cross tabulations. A cross tabulation is an arrangement of a frequency distribution which presents bivariate data which is the analysis of two variables (Collis & Hussey, 2003). The analysis also entailed the inclusion of multivariate data analysis which analyses more than two variables (Collis & Hussey, 2003). The researcher made use of cross tabulations due to finding it particularly useful for analysing nominal data.

3.7 HYPOTHESIS TESTING

A hypothesis is a logically assumed relationship between two or more variables (Sekaran & Bougie, 2011). This is formulated by creating null and alternate hypotheses. The null hypothesis is referred to as a proposition which states a definitive, exact relationship between the variables of interest. The null hypothesis is expressed as no relationship between two variables or illustrating no significant difference between the variables (Sekaran & Bougie, 2011). The null hypothesis has been described in Chapter One.

The alternate hypothesis is the opposite of the null hypothesis and expresses a relationship between the variables or illustrates a significant difference between the variables (Sekaran & Bougie, 2011). The alternate hypothesis has been described in Chapter One. The hypothesis testing for the independent variables (preferences, factors affecting choice, information, trends and patterns and risk) and the dependent variable (consumption behaviour) was conducted in Chapter Four using correlations and regressions.

3.7.1 Correlations

A correlation indicates the strength, direction and significance of the relationships amongst all the variables measured (Sekaran & Bougie, 2011). Therefore, the correlation assesses the variations in one variable as another variable varies. The researcher has used the correlation to indicate the strength, direction and significance of the independent variables (preferences, factors affecting choice, information, trends and patterns and risk) as the dependent variable (consumption behaviour) varies. This is empirically tested in Chapter Four.

This has been analysed using the decision rule of accepting the alternate hypothesis and rejecting the null hypothesis when $p<0.05$ (Sekaran & Bougie, 2011). This rule also allowed the researcher to accept the null hypothesis and reject the alternate hypothesis when $p>0.05$ (Sekaran & Bougie, 2011). The Pearson R enables a researcher to determine the strength and the direction of the relationship (Sekaran & Bougie, 2011).

3.7.2 Regressions

A regression is a statistical analysis which assesses the association between two variables (Sekaran & Bougie, 2011). Therefore, this aids in determining the predictive relationship between two variables. This study utilised a simple linear regression in aid of determining the predictive relationship between the independent variables (preferences, factors affecting choice, information, trends and patterns and risk) and the dependent variable (consumption behaviour).

The R^2 reflects the percentage of variance in the dependent variable, explained by the variation in the independent variable (Sekaran & Bougie, 2011). The closer R^2 is to 1, the more variation can be explained by the regression model and the closer R^2 is to 0, then more of the variation cannot be explained by the regression model (Sekaran & Bougie, 2011). This has been analysed in Chapter Four.

3.8 MEASUREMENT

The research has explained how the variables have been defined and applied to the various scales. However, it is important to ensure that researcher develops a measure for particular concepts to accurately measure the variable and that the measure is used for exactly what is needed to be measured (Sekaran & Bougie, 2011). This will ensure that the researcher does not overlook important dimensions and elements or include irrelevant ones (Sekaran & Bougie, 2011). In order for the researcher to implement correct and accurate measurements is to establish reliability and validity.

3.8.1 Reliability

Reliability is a test which illustrates the consistency of a measuring instrument used for measuring a concept (Sekaran & Bougie, 2011). Reliability therefore indicates the stability and consistency of the instrument used for measurement. A method used for measuring the stability is through the test-retest reliability. This entails administering the questionnaire to the same respondents over different periods of time and selecting the responses with the higher coefficient (Sekaran & Bougie, 2011).

The researcher did perform an interitem consistency reliability using the Chronbach's coefficient alpha. This test reflected the respondents' consistency of answering the statements within the questionnaire. The higher the coefficient displayed and the closer it is to 1.0, the better the instrument (Sekaran & Bougie, 2011).

3.8.2 Validity

Validity is the test to demonstrate how well the instrument used measures of the intended concepts (Sekaran & Bougie, 2011). The researcher aimed to examine the validity of the questionnaire itself. Validity tests are grouped under three broad headings which include content validity, criterion-related validity and construct validity (Sekaran & Bougie, 2011).

Content validity describes how well the elements have been defined and ensures that the measure is adequate and represents the concepts necessary for the study (Sekaran & Bougie, 2011). Criterion-related validity is formulated when a measure differentiates individuals on a criterion it is expected to predict (Sekaran & Bougie, 2011).

Construct validity tests how well the results obtained from the questionnaire tie in with theories (Sekaan & Bougie, 2011). The researcher was able to implement construct validity by cross referencing the statements against those set out by Schiffman and Kanuk (2010), the authors of Consumer Behaviour.

3.9 CONCLUSION

This chapter has presented and highlighted the importance of research methods pertaining to this study. All the procedures have been specifically implemented according to the research design which is descriptive in nature. It allowed for the understanding of the necessary steps required to collect the primary data.

The chapter also presented the vital techniques of the sampling process. This allowed the researcher to adequately make the appropriate selection of respondents required for the study. This also illustrated the use of nonprobability convenience sampling after considering the constraints mentioned.

The researcher had the ability of effectively collecting quantitative data by applying the questionnaire as the instrument. This was a reflection of the advantages which was pertinent for the study. This chapter also presented the methods necessary for valid and reliable data analysis. Therefore, this chapter is seen as the foundation of the research and interpretations of the research instrument are based on the data analysis in the proceeding chapter. Chapter four presents the findings.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF RESULTS

4.1 INTRODUCTION

This chapter reports on the results of the personally administered questionnaires which have been conducted for this quantitative study. The results are presented and analysed in the format which is essentially aligned to the research questions and objectives which have been established and provided in Chapter One of this study. This chapter begins with the descriptive analysis for each subsequent section (demographics, consumption behaviour, preferences, factors affecting choice, information, trends and patterns and risks). The frequencies and percentages are highlighted alongside the measures of central tendency and dispersion. The chapter proceeds with the inferential analysis (correlations, regressions and Anova) specifically to determine and test the hypotheses of the study. Thereafter, the validity (factor analysis) and reliability (Cronbach's Coefficient Alpha) measures have been provided. The chapter then culminates with the summary and conclusion. It is critical to place emphasis that this chapter simply describes the results of the questionnaires. Therefore, the discussion of the results is not be provided within this chapter they are presented in Chapter Five (Discussion of Results).

4.2 DESCRIPTIVE ANALYSIS

The descriptive analysis is based on the all the data acquired from the respondents. The analysis is separated into the following sections; demographics, consumption behaviour, preferences, factors affecting choice, information, trends and patterns and risk. These sections with the exception of demographics are all related to the objectives of the study. The presentation of the descriptive analysis has been statistically produced on SPSS. However, the representation of the data according to each section will be illustrated within tables. The representation will be inclusive of the frequencies and percentages of each response and a summary of the responses will be provided for each section indicative of the measures of central tendency and dispersion.

4.2.1 Demographics

The total number of respondents for this quantitative study was that of 373. These respondents were required to complete in their demographic profiles which was Section A of the questionnaire. The demographic characteristics which were pertinent to this study were that of gender, age, race, school and level of study. Therefore, Tables 4.1 to 4.5 provide the frequencies and percentages of the results for each characteristic respectively and Table 4.6 indicates the measures of central tendency and dispersion.

Table 4.1 Gender

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	194	52.0	52.0	52.0
	Male	179	48.0	48.0	100.0
	Total	373	100.0	100.0	

Based on Table 4.1 the results indicate that majority of the respondents were female (52%) whilst the remaining 48% of the respondents were male.

Table 4.2 Age

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 18years	7	1.9	1.9	1.9
	18-20years	171	45.8	45.8	47.7
	21-23years	117	31.4	31.4	79.1
	24-26years	18	4.8	4.8	83.9
	Above 26years	60	16.1	16.1	100.0
	Total	373	100.0	100.0	

As per Table 4.2 above, it is indicative of 77.2% of the respondents aged between 18 years to 23 years. However, there were more than 20% of the respondents above the age of 24 years.

Table 4.3 Race

Race					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Black	179	48.0	48.0	48.0
	Coloured	8	2.1	2.1	50.1
	Indian	174	46.6	46.6	96.8
	White	12	3.2	3.2	100.0
	Total	373	100.0	100.0	

The demographics, more specifically based on racial groups of the respondents reveals that majority were Black (48%) followed by Indians (46.6%). Whites accounted for 3.2%, whilst Coloureds accounted 2.1% of the total respondents.

Table 4.4 School

School					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Accounting, Economics and Finance (AEF)	116	31.1	31.1	31.1
	Chemistry & Physics	27	7.2	7.2	38.3
	Graduate School of Business & Leadership (GSB&L)	1	.3	.3	38.6
	Health Sciences	30	8.0	8.0	46.6
	Life Sciences	46	12.3	12.3	59.0
	Maths ,Stats & Comp	17	4.6	4.6	63.5
	Management, IT & Governance (MIG)	136	36.5	36.5	100.0
	Total	373	100.0	100.0	

Whilst Table 4.4 above indicates the respondents within each School of the University of KwaZulu-Natal, Westville Campus, these Schools fall within three distinct Colleges namely; College of Agriculture, Engineering and Science (CAES), College of Health Sciences (CHS) and the College of Law and Management Studies (CLMS). CAES is accommodated by Chemistry and Physics, Life Sciences and Maths, Stats and Comp which accumulates to 90 respondents (24.1%). CHS is represented by Health Sciences with an 8% participation rate. The majority of the respondents (two

thirds) were from CLMS (AEF, GSB&L and MIG) with a total participatory rate of 253 students.

Table 4.5 Level of Study

Level of Study					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1st year	110	29.5	29.5	29.5
	2nd year	126	33.8	33.8	63.3
	3rd year	90	24.1	24.1	87.4
	4th year	11	2.9	2.9	90.3
	Honours	9	2.4	2.4	92.8
	Masters/MBA	25	6.7	6.7	99.5
	PhD/Doctoral	2	.5	.5	100.0
	Total	373	100.0	100.0	

Based on Table 4.5 above, a little over 90% of the respondents' level of study was at the undergraduate level. The remaining 36 respondents were studying at a post-graduate level.

Table 4.6 Measures of Central Tendency and Dispersion for Demographics

Statistics						
		Gender	Age	Race	School	Level of Study
N	Valid	373	373	373	373	373
	Missing	0	0	0	0	0
Mean		1.48	2.87	2.05	4.23	2.37
Median		1.00	3.00	2.00	5.00	2.00
Mode		1	2	1	7	2
Std. Deviation		.500	1.101	1.037	2.578	1.394
Range		1	4	3	6	6
Minimum		1	1	1	1	1
Maximum		2	5	4	7	7
Sum		552	1072	765	1577	885

Based on the information presented in Table 4.6 on the previous page, it is found that the majority of the respondents were female, between the ages of 18 years to 20 years, Black, from the School of MIG and were mostly second year students at the University of KwaZulu-Natal, Westville Campus. This evidence is based on the mean results as indicated for each of the statistical variables.

4.2.2 Consumption Behaviour

The respondents were provided with three statements within the instrument to acquire an understanding of their fast food consumption behaviour. These statements required knowledge as to the number of times within any given week that Westville Campus students' are most prone to consuming fast food as well as the time of day and reason that the consumption is most likely to occur. The statistical outcome for each individual statement is provided in Tables 4.7 to 4.9 below and the measures of central tendency and dispersion within Table 4.10.

Table 4.7 Frequency of Fast Food Consumption

Frequency of fast food consumption					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	More than once a day	26	7.0	7.0	7.0
	4-5 times a week	30	8.0	8.0	15.0
	2-3 times a week	192	51.5	51.5	66.5
	At least once a week	124	33.2	33.2	99.7
	Not at all	1	.3	.3	100.0
	Total	373	100.0	100.0	

Table 4.7 provides clarity as to the number of times within a week that the respondents of this study may or may not consume fast food. With the exception of one respondent, 372 respondents all consume fast food whilst at the campus. There were 30 respondents who indicated that fast food is consumed almost every day of the week and 7% indicated that the consumption occurs more than once a day. Over half of the respondents (51.5%) indicated that the consumption is either 2 or 3 days within a week whilst on campus.

Table 4.8 Time Fast Food Consumed

Time fast food consumed					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Before 10:00	9	2.4	2.4	2.4
	10:00 - 11:59	75	20.1	20.1	22.5
	12:00 - 13:59	183	49.1	49.1	71.6
	14:00 - 15:59	76	20.4	20.4	92.0
	From 16:00 onwards	30	8.0	8.0	100.0
	Total	373	100.0	100.0	

The respondents have indicated that the consumption of fast food whilst at the University of KwaZulu-Natal occurs between noon to 13:59pm (N=183). However, just under a third of the respondents (N=106) indicated that the consumption behaviour is prevalent from 2pm, whilst there were 9 respondents who indicated that the consumption of fast food is before 10am.

Table 4.9 Reason for Fast Food Consumption

Reason for fast food consumption					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Get Hungry	164	44.0	44.0	44.0
	Quick/fast	52	13.9	13.9	57.9
	Convenience	92	24.7	24.7	82.6
	Forgot lunch at home	45	12.1	12.1	94.6
	Socialise	20	5.4	5.4	100.0
	Total	373	100.0	100.0	

Table 4.9 provides the reasons for students consuming fast food whilst on campus and the majority of respondents (N=164) indicated that hunger is the main reason for their choice. This is followed by fast food being convenient (N=92), quick/fast (N=52) and because they forget their lunch at home (N=45). The results also indicate that there are 5.4% of the respondents who consume fast food whilst on campus for wanting to socialise.

Table 4.10 Measures of Central Tendency and Dispersion for Consumption Behaviour

Statistics				
		Frequency of fast food consumption	Time fast food consumed	Reason for fast food consumption
N	Valid	373	373	373
	Missing	0	0	0
Mean		3.12	3.12	2.21
Median		3.00	3.00	2.00
Mode		3	3	1
Std. Deviation		.831	.901	1.270
Range		4	4	4
Minimum		1	1	1
Maximum		5	5	5
Sum		1163	1162	824

Based on the information provided in Table 4.10 above, it is evident, based on the means that significantly, more students consume fast food between one to three times a week (3.12, N=373), between noon and 2pm (3.12, N=373) because they get hungry (2.21, N=373). Although the ranges for the three statements are equivalent to four, the variables between the minimum and maximum differed for each of the statements.

4.2.3 Preferences

The descriptive analysis for preferences, relates to Objective One of the study. The results are indicative of the five statements which were provided within the questionnaire. The responses to the statements will reveal the preferences that students at the Westville campus have towards fast food and the consumption thereof.

Table 4.11 Frequencies and Percentages for Objective One

	Preferences											
	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Preference Over Home Cooked Meals	118	31.6	99	26.5	98	26.3	33	8.8	25	6.7	373	100.0
Fast food is readily available	49	13.1	42	11.3	115	30.8	124	33.2	43	11.5	373	100.0
Additional Items to Fast Food Consumed	72	19.3	86	23.1	92	24.7	82	22.0	41	11.0	373	100.0
Fast Food is a Family Preference	155	41.6	110	29.5	72	19.3	28	7.5	8	2.1	373	100.0
Fast Food Satisfies Hunger	54	14.5	56	15.0	102	27.3	106	28.4	55	14.7	373	100.0

Based on the results from Table 4.11 above, more than half of the respondents (58.1%) preferred home cooked meals to fast food, whilst only 15.55 of the respondents preferred fast food. The preference toward the readily available fast foods was concurred by 167 of the 373 respondents whilst 31% of the respondents neither agreed nor disagreed. Out of the 373 respondents, 123 (33%) indicated that additional items are consumed with the meals, while 158 did not and 92 respondents neither agreed nor disagreed with the statement. With regards to fast food as a family preference, over 70% of the respondents indicated that this was not true and only 36 respondents somewhat agreed. The statement of fast food satisfying hunger revealed that only 42.4% agreed whilst 29.5% disagreed.

Table 4.12 Measures of Central Tendency and Dispersion for Preferences

Statistics						
		Preference over home cooked meals	Fast food is readily available	Additional items to fast food consumed	Fast food is a family preference	Fast food satisfies hunger
N	Valid	373	373	373	373	373
	Missing	0	0	0	0	0
Mean		2.32	3.19	2.82	1.99	3.14
Median		2.00	3.00	3.00	2.00	3.00
Mode		1	4	3	1	4
Std. Deviation		1.198	1.183	1.279	1.051	1.260
Range		4	4	4	4	4
Minimum		1	1	1	1	1
Maximum		5	5	5	5	5
Sum		867	1189	1053	743	1171

The results from Table 4.12 above provide the measures of central tendency and dispersion for Objective One of the study. Based on the medians, it is established that the majority of responses for preferences of fast food over home cooked meals and fast food as a family preference yielded disagreement responses. The statements for the readily availability, additional items consumed and hunger satisfaction of fast foods generated neutral responses. In summation, fast food is generally preferred by students at the Westville Campus because it is readily available and it allows for hunger satisfaction.

4.2.4 Factors Affecting Choice

The descriptive analysis for factors affecting choice, relates to Objective Two of the study. The results are indicative of the five statements which were provided within the questionnaire. The responses to the statements will reveal the factors which affect the choices that students at the Westville campus have towards fast food and the consumption thereof.

Table 4.13 Frequencies and Percentages for Objective Two

Factors Affecting Choice												
	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Fast food based on price	38	10.2	56	15.0	110	29.5	114	30.6	55	14.7	373	100.0
Variety of options	33	8.8	56	15.0	123	33.0	132	35.4	29	7.8	373	100.0
Availability of outlets	35	9.4	37	9.9	114	30.6	152	40.8	35	9.4	373	100.0
Fast food is convenient	25	6.7	51	13.7	104	27.9	142	38.1	51	13.7	373	100.0
Fast Food is Tasty	21	5.6	32	8.6	89	23.9	145	38.9	86	23.1	373	100.0

The table above indicates that just under half of the sample purchase and consume fast food based on the price. However, 25% of the respondents do not make their decision according to the price. It is also noteworthy that 43.2% consume fast food due to the variety of options and half (50.2%) base their choice because of the availability, whereas 23.8% and 19.3% respectively did not consider these factors when making their consumption decisions. Whilst more than half of the respondents make their choice because of the convenience element, 20.4% do not use convenience as a factor in their decision making. Almost two thirds of the sample indicated that the taste of the food is used as a decision making factor, whereas 14.2% do not do so. However, for each of the statements, 23.9% to 33% of the respondents neither agreed nor disagreed with the statements respectively.

Table 4.14 Measures of Central Tendency and Dispersion for Factors Affecting Choice

Statistics						
		Fast food based on price	Variety of options	Availability of outlets	Fast food is convenient	Fast food is tasty
N	Valid	373	373	373	373	373
	Missing	0	0	0	0	0
Mean		3.25	3.18	3.31	3.38	3.65
Median		3.00	3.00	4.00	4.00	4.00
Mode		4	4	4	4	4
Std. Deviation		1.182	1.067	1.080	1.090	1.096
Range		4	4	4	4	4
Minimum		1	1	1	1	1
Maximum		5	5	5	5	5
Sum		1211	1187	1234	1262	1362

The results from Table 4.14 above provide the measures of central tendency and dispersion for Objective Two of the study. Based on the medians, it is established that the majority of responses for the factors that affect the choice of fast food based on price and the variety of options yielded neutral responses. Whereas the means for each of the factors previous highlighted do indicate that there is some form of agreement. The statements related to the availability of the outlets, the convenience and the taste generated levels of agreement by the respondents. This is also verified by the means and modes. In summation, the five factors namely; price, variety, availability, convenience and taste are generally considered by more than 43% of the respondents from the University of KwaZulu-Natal Westville Campus students when making their consumption decisions.

4.2.5 Information

The descriptive analysis for information, relates to Objective Three of the study. The results are indicative of the five statements which were provided within the questionnaire. The responses to the statements will reveal the information that students at the Westville campus acquire about fast food and the consumption thereof.

Table 4.15 Frequencies and Percentages for Objective Three

Information												
	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Special Offers from Advertisements	41	11.0	66	17.7	87	23.3	141	37.8	38	10.2	373	100.0
Friends Influence	60	16.1	105	28.2	100	26.8	76	20.4	32	8.6	373	100.0
Family Influence	87	23.3	124	33.2	99	26.5	53	14.2	10	2.7	373	100.0
Aware of Nutritional Content	46	12.3	62	16.6	80	21.4	133	35.7	52	13.9	373	100.0
Aware of Calorie Content	60	16.1	70	18.8	74	19.8	101	27.1	68	18.2	373	100.0

Table 4.15 reflects that information is gathered from the advertisements whilst almost one third of the respondents do not gather information from the advertising. In relation to obtaining information based on friends and family influence respectively, 295 and 16.9% agreed respectively while 44.3% and 56.5% respectively disagree. The results for information related to the awareness of the nutritional and calorie content of the fast foods respectively indicated that almost half of the sample agreed with having such knowledge. However, there were 108 (28.9%) and 130 (34.9%) of the respondents who indicated that they were not aware of the nutritional content and calorie content respectively.

Table 4.16 Measures of Central Tendency and Dispersion for Information

Statistics						
		Special offers from advertisements	Friends influence	Family influence	Aware of nutritional content	Aware of calorie content
N	Valid	373	373	373	373	373
	Missing	0	0	0	0	0
Mean		3.18	2.77	2.40	3.22	3.13
Median		3.00	3.00	2.00	3.00	3.00
Mode		4	2	2	4	4
Std. Deviation		1.171	1.193	1.074	1.236	1.349
Range		4	4	4	4	4
Minimum		1	1	1	1	1
Maximum		5	5	5	5	5
Sum		1188	1034	894	1202	1166

The results from Table 4.16 above provide the measures of central tendency and dispersion for Objective Three of the study. Based on the medians, it is established that the majority of responses for information specifically related to advertisements, friends influence, awareness of nutritional and calorie content yielded neutral responses. Whereas the means for each of the factors previous highlighted with the exception of friends influence do indicate that there is some form of agreement. The statement related to the family influence generated a disagreement. This is also verified by the mean and mode. In summation, information surrounding fast food consumption is attained from advertisements, nutritional and calorie content.

4.2.6 Trends and Patterns

The descriptive analysis for preferences, relates to Objective Four of the study. The results are indicative of the five statements which were provided within the questionnaire. The responses to the statements will reveal the trends and patterns that students at the Westville campus have towards fast food and the consumption thereof.

Table 4.17 Frequencies and Percentages for Objective Four

Trends and Patterns												
	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Prepared Food for Lunch	66	17.7	65	17.4	50	13.4	80	21.4	112	30.0	373	100.0
Fast Food as a Status	118	31.6	97	26.0	96	25.7	41	11.0	21	5.6	373	100.0
Easier to Consume	36	9.7	52	13.9	109	29.2	138	37.0	38	10.2	373	100.0
Habitual	54	14.5	92	24.7	100	26.8	99	26.5	28	7.5	373	100.0
Consume with Family and Friends	29	7.8	35	9.4	107	28.7	150	40.2	52	13.9	373	100.0

As highlighted in Table 4.17 above, a little over half of the respondents indicated that prepared food is brought for lunch whereas over a third did not. Over a half of the respondents did not consume fast food as a status element but there were 62 respondents who did. With regards to fast food being easier to consume, 47.2% of the respondents agreed and 23.6% disagreed. There was an almost equivalent response rate for eating fast food out of habit with 34% agreement and 39.2% disagreement. The consumption of fast food with family and friends had revealed that 202 (54.1%) respondents liked to do so whilst 64 (17.2%) did not.

Table 4.18 Measures of Central Tendency and Dispersion for Trends and Patterns

Statistics						
		Prepared food for lunch	Fast food as a status	Easier to consume	Habitual	Consume with family and friends
N	Valid	373	373	373	373	373
	Missing	0	0	0	0	0
Mean		3.29	2.33	3.24	2.88	3.43
Median		4.00	2.00	3.00	3.00	4.00
Mode		5	1	4	3	4
Std. Deviation		1.490	1.190	1.117	1.175	1.087
Range		4	4	4	4	4
Minimum		1	1	1	1	1
Maximum		5	5	5	5	5
Sum		1226	869	1209	1074	1280

The results from Table 4.18 above provide the measures of central tendency and dispersion for Objective Four of the study. The mode for bringing prepared food for lunch yielded a strong agreement and there is agreement for the ease of consumption and consumption with family and friends. There is also a strong disagreement for consuming fast food as a status element. In summation, the trends and patterns evident by the respondents is indicative of bringing lunch from home, not consuming as a status element, finding fast food easier to consume and enjoy consumption of fast food with family and friends.

4.2.7 Risk

The descriptive analysis for preferences, relates to Objective Five of the study. The results are indicative of the five statements which were provided within the questionnaire. The responses to the statements will reveal the awareness of risk that students at the Westville campus have towards fast food and the consumption thereof.

Table 4.19 Frequencies and Percentages for Objective Five

	Risk											
	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Self-conscious of healthier options	43	11.5	49	13.1	97	26.0	117	31.4	67	18.0	373	100.0
Excessive Amounts Leading to Overweight and Obesity	7	1.9	10	2.7	38	10.0	126	33.8	192	51.5	373	100.0
Choice of Healthier Options	25	6.7	52	13.9	108	29.0	104	27.9	84	22.5	373	100.0
Frequent Consumption Leads to Unhealthy Lifestyles	7	1.9	18	4.8	41	11.0	133	35.7	174	46.6	373	100.0
Health Eating and Exercising Leads to Healthy Lifestyles	6	1.6	5	1.3	33	8.8	96	25.7	232	62.2	372	99.7

Almost 50% of the respondents indicated that they are self-conscious of the healthier options provided by fast food outlets while 24.6% were not. Majority of the respondents agreed that excessive amounts of fast food lead to overweight and obesity whereas 4.6% did not. Just over 50% of the respondents stated that they would choose the healthier options provided by fast food outlets and 77 of the 373 respondents indicated that they do not. Although the majority of respondents agreed that frequent consumption of fast food leads to unhealthy lifestyles and that a combination of healthy eating and exercising will amount to a healthier lifestyle, 6.7% and 2.9% respectively did not believe so.

Table 4.20 Measures of Central Tendency and Dispersion for Risk

Statistics						
		Self-conscious of healthier options	Excessive amounts leading to overweight and obesity	Choice of healthier options	Frequent consumption leads to unhealthy lifestyles	Healthy eating and exercising leads to healthy lifestyles
N	Valid	373	373	373	373	372
	Missing	0	0	0	0	1
Mean		3.31	4.30	3.46	4.20	4.46
Median		3.00	5.00	4.00	4.00	5.00
Mode		4	5	3	5	5
Std. Deviation		1.238	.896	1.176	.948	.838
Range		4	4	4	4	4
Minimum		1	1	1	1	1
Maximum		5	5	5	5	5
Sum		1235	1605	1289	1568	1659

The results from Table 4.20 above provide the measures of central tendency and dispersion for Objective Five of the study. The modes indicated strong agreement for the statements related to excessive consumption of fast food leading to overweight, obesity and unhealthy lifestyles and a combination of healthy eating and exercising leading to healthy. There is an agreement that the respondents are self-conscious of the healthier options. In summation, although the respondents from the University of KwaZulu-Natal Westville Campus are aware of the risks of excessive fast food consumption, are self-conscious of the healthier options and eating healthily in conjunction with exercising, there were only just over 50% of the respondents who indicated that they choose the healthier options of fast food available to consume.

4.3 INFERENTIAL STATISTICS

The inferential statistics utilised for this study to satisfy the five objectives is that of Chi-Square, Non-parametric testing, correlations and regressions. This is to exhume the significant relations and differences amongst each of the study objectives. The results of the analysis is presented and described in the following sections.

4.3.1 Chi-Square

Table 4.21 Chi-Square: Test Statistics

Test Statistics			
	Frequency of fast food consumption	Time fast food consumed	Reason for fast food consumption
Chi-Square	348.408[a]	241.893[a]	169.748[a]
df	4	4	4
Asymp. Sig.	.000	.000	.000
a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 74.6.			

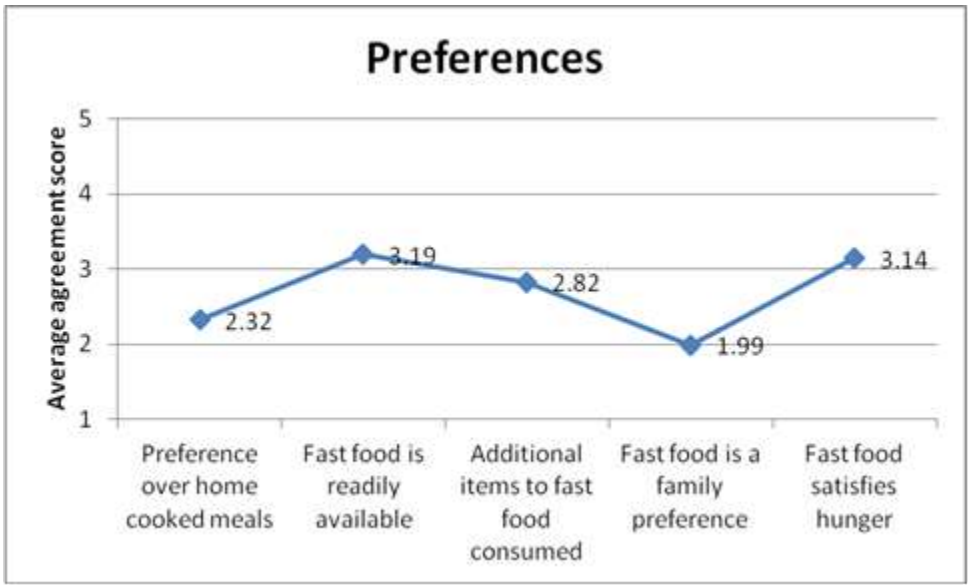
The analysis shows that significantly more than expected students consume fast foods from 1 to 3 times a week ($\chi^2(4,N=373) = 348.408$, $p<.0005$); between noon and 2pm ($\chi^2(4,N=373) = 241.893$, $p<.0005$); because they are hungry ($\chi^2(4,N=373) = 169.748$, $p<.0005$).

4.3.2 Non-parametric Testing (Wilcoxon Signed Ranks Test)

For each of the following sections related to the study objectives, the average score is calculated and then applied to the Wilcoxon signed ranks test to determine whether there is a significant agreement (mean>3) or a significant disagreement (mean<3).

4.3.2.1 Preferences

Figure 4.1. Wilcoxon Signed Ranks Test: Preferences



As per Figure 4.1 above, the mean average scores have been illustrated to provide indication of further testing using Wilcoxon Signed Ranks Test. The means greater than 3 relating to fast food readily available and satisfying hunger reveals significant agreement. However, preference of home cooked meals, additional items consumed and fast food as a family preference have mean scores less than 3 indicating significant disagreement. These mean scores have been executed for the testing on the proceeding page.

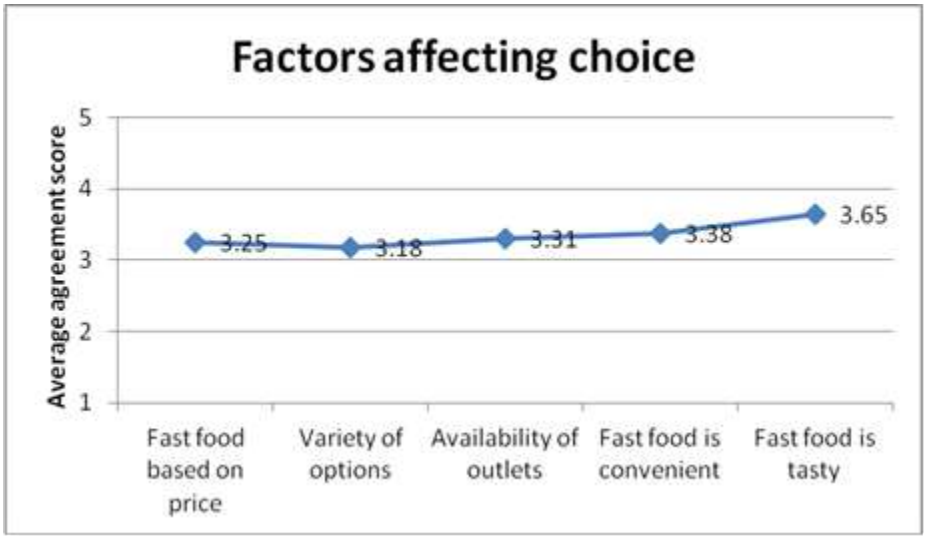
Table 4.22 Wilcoxon Signed Ranks Test: Preferences

Test Statistics[c]					
	threes - Preference over home cooked meals	threes - Fast food is readily available	threes - Additional items to fast food consumed	threes - Fast food is a family preference	threes - Fast food satisfies hunger
Z	-9.138[a]	-2.418[b]	-2.780[a]	-13.005[a]	-1.722[b]
Asymp. Sig. (2-tailed)	.000	.016	.005	.000	.085
a. Based on negative ranks.					
b. Based on positive ranks.					
c. Wilcoxon Signed Ranks Test					

As per Table 4.22 above, there is significant agreement that fast food is readily available (Z(N=373) = -2.418, p=.016) and significant disagreement that; fast food is preferred over home cooked meals (Z(N=373) = -9.138, p<.05), additional items are added to fast food (Z(N=373) = -2.780, p=0.005) and fast food is a family preference (Z(N=373) = -13.005, p<.05).

4.3.2.2 Factors Affecting Choice

Figure 4.2 Wilcoxon Signed Ranks Test: Factors Affecting Choice



As per Figure 4.2 on the previous page, all means scores for the factors affecting choice are greater than 3 indicating significant agreement. These mean scores have been executed for the testing within Table 4.23 below.

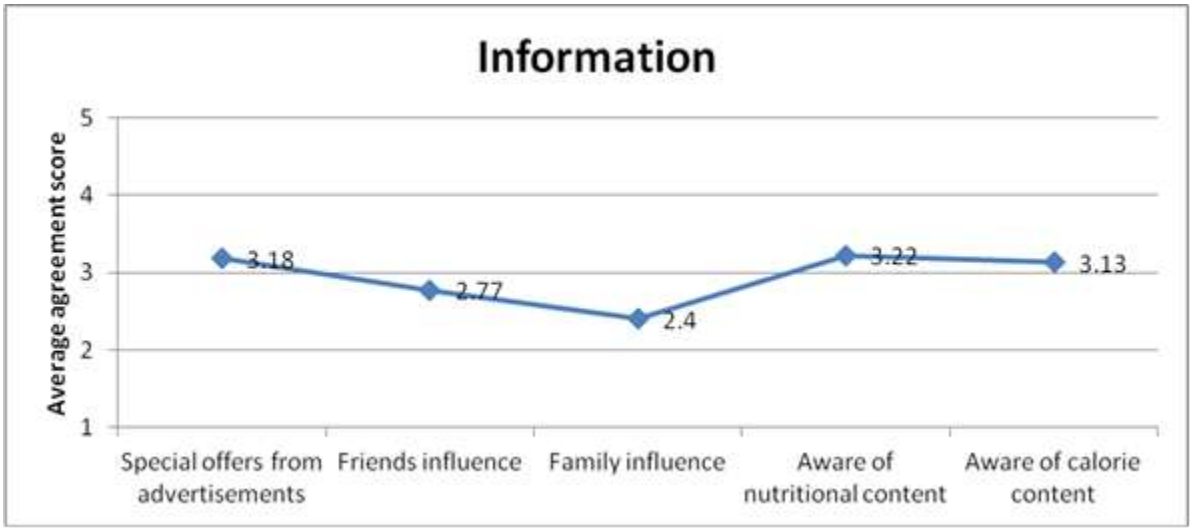
Table 4.23 Wilcoxon Signed Ranks Test: Factors Affecting Choice

Test Statistics[b]					
	threes - Fast food based on price	threes - Variety of options	threes - Availability of outlets	threes - Fast food is convenient	threes - Fast food is tasty
Z	-3.647[a]	-2.918[a]	-4.775[a]	-6.118[a]	-9.402[a]
Asymp. Sig. (2-tailed)	.000	.004	.000	.000	.000
a. Based on positive ranks.					
b. Wilcoxon Signed Ranks Test					

As per Table 4.23 above, there is significant agreement with; fast food based on price ($Z(N=373) = -3.647$, $p<.05$), variety of options ($Z(N=373) = -2.918$, $p=0.004$), availability of outlets ($Z(N=373) = -4.775$, $p<0.05$), fast food is convenient ($Z(N=373) = -6.118$, $p<0.05$) and fast food is tasty ($Z(N=373) = -9.402$, $p<.05$).

4.3.2.3 Information

Figure 4.3 Wilcoxon Signed Ranks Test: Information



As per Figure 4.3 on the previous page, the mean average scores have been illustrated which indicates that the means greater than 3 are special offers from advertisements, awareness of nutritional content and calorie content have significant agreement. However, the influences from friends and family have mean scores less than 3 indicating significant disagreement. These mean scores have been executed for the testing within Table 4.24 below.

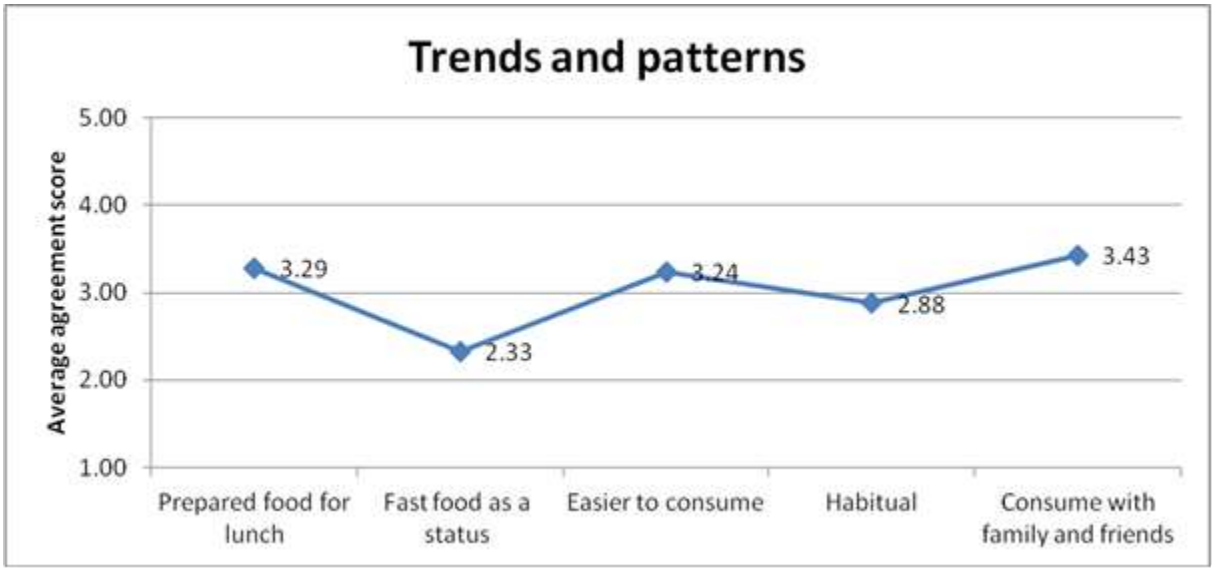
Table 4.24 Wilcoxon Signed Ranks Test: Information

Test Statistics[c]					
	threes - Special offers from advertisements	threes - Friends influence	threes - Family influence	threes - Aware of nutritional content	threes - Aware of calorie content
Z	-2.657[a]	-3.601[b]	-9.409[b]	-3.030[a]	-1.573[a]
Asymp. Sig. (2-tailed)	.008	.000	.000	.002	.116
a. Based on positive ranks.					
b. Based on negative ranks.					
c. Wilcoxon Signed Ranks Test					

As per Table 4.24 above, there is significant agreement with special offers from advertisements ($Z(N=373) = -2.657$, $p=.008$) and awareness of nutritional content ($Z(N=373) = -3.030$, $p=0.002$). There is significant disagreement with friends influence ($Z(N=373) = -3.601$, $p<.05$) and family influence ($Z(N=373) = -9.409$, $p<.05$).

4.3.2.4 Trends and Patterns

Figure 4.4 Wilcoxon Signed Ranks Test: Trends and Patterns



As per Figure 4.4 above, the mean average scores have been illustrated which indicates that; prepared food for lunch, easier to consume and consumption with family and friends have means greater than 3. This shows that these variables have significant agreement. However, fast food as a status element and consumption out of habit have mean scores less than 3 indicating significant disagreement. These mean scores have been executed for the testing within Table 4.25 below.

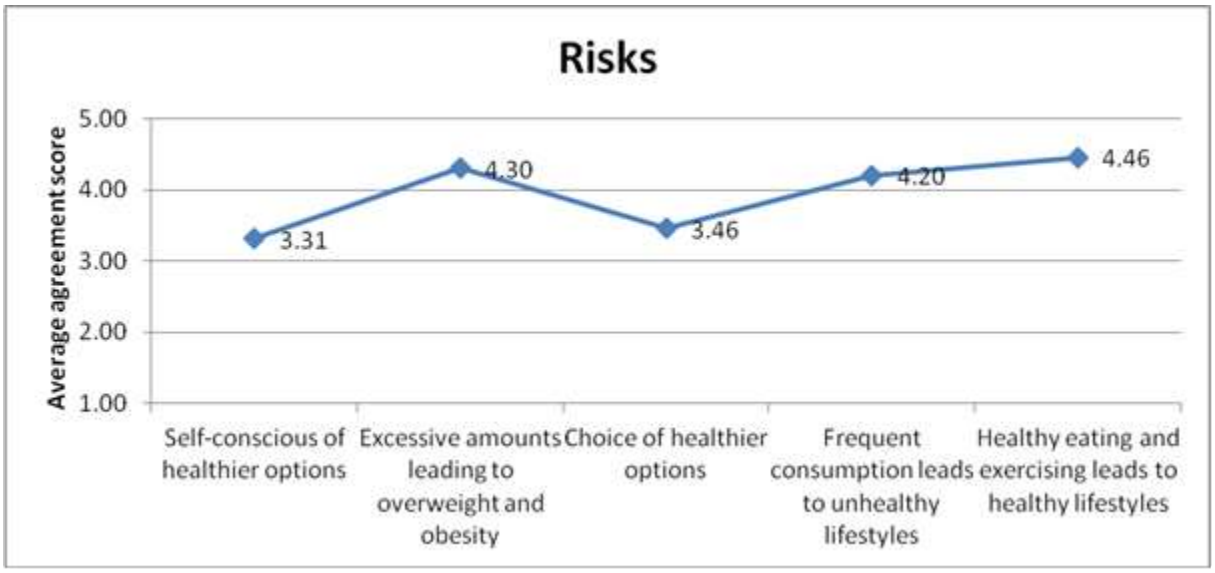
Table 4.25 Wilcoxon Signed Ranks Test: Trends and Patterns

Test Statistics[c]					
	threes - Prepared food for lunch	threes - Fast food as a status	threes - Easier to consume	threes - Habitual	threes - Consume with family and friends
Z	-3.656[a]	-9.312[b]	-3.675[a]	-2.159[b]	-6.635[a]
Asymp. Sig. (2-tailed)	.000	.000	.000	.031	.000
a. Based on positive ranks.					
b. Based on negative ranks.					
c. Wilcoxon Signed Ranks Test					

As per Table 4.25 on the previous page, there is significant agreement with; bringing prepared food for lunch (Z(N=373) = -3.656, p<0.05), fast food being easier to consume (Z(N=373) = -9.312, p<0.05) and consuming fast food with family and friends (Z(N=373) = -6.635, p<0.05). There is significant disagreement with consuming fast food as a status (Z(N=373) = -3.675, p<.05) and consuming fast food out of habit (Z(N=373) = -2.159, p=.031).

4.3.2.5 Risk

Figure 4.5 Wilcoxon Signed Ranks Test: Risk



As per Figure 4.5 above, all means scores for the risks relating to fast food consumption are greater than 3 indicating significant agreement. These mean scores have been executed for the testing within Table 4.26 on the proceeding page.

Table 4.26 Wilcoxon Signed Ranks Test: Risk

Test Statistics[b]					
	threes - Self-conscious of healthier options	threes - Excessive amounts leading to overweight and obesity	threes - Choice of healthier options	threes - Frequent consumption leads to unhealthy lifestyles	threes - Healthy eating and exercising leads to healthy lifestyles
Z	-4.294[a]	-15.073[a]	-6.856[a]	-14.512[a]	-15.835[a]
Asymp. Sig. (2-tailed)	.000	.000	.000	.000	.000
a. Based on positive ranks.					
b. Wilcoxon Signed Ranks Test					

As per Table 4.26 above, there is significant agreement with; self-consciousness of healthier options ($Z(N=373) = -4.294$, $p<.05$), excessive amounts leading to overweight and obesity ($Z(N=373) = -15.073$, $p<.05$), choice of healthier options ($Z(N=373) = -6.856$, $p<.05$), frequent consumption of fast food leading to unhealthy lifestyles ($Z(N=373) = -14.512$, $p<.05$) and healthy eating and exercising leads to healthy lifestyles ($Z(N=373) = -15.835$, $p<.05$).

4.3.3 Bivariate Analysis

For each of the tables below, significant differences will be tested for each of the different categories against each of the demographic variables. The test for the ordinal measures, with concentration on the likert scale, was Kruskal Wallis. For each of the testing measures, the mean scores will indicate the greater likelihood and thereafter the second phase of testing will produce the significant measures. The demographic variable, school, was not included in the testing as it was for description of the sample. The demographic variable, level of study, was also excluded from testing as it modelled the similar idea toward the variable, age.

4.3.3.1 By Gender

Table 4.27a Kruskal Wallis Test: By Gender

	Female (N=194)		Male (N=179)	
	Mean	Std. Deviation	Mean	Std. Deviation
Easier to consume	3.11	1.128	3.38	1.092

Table 4.27b Kruskal Wallis Test Statistics: By Gender

Test Statistics[a,b]			
	Chi-Square	df	Asymp. Sig.
Easier to consume	5.225	1	.022
a. Kruskal Wallis Test			
b. Grouping Variable: Gender			

Based on the results generated within Tables 4.27 (a) and (b), males agree significantly more than females that fast food is easier to consume ($\chi^2(1,N=373) = 5.225$, $p=.022$).

4.3.3.2 By Age

Table 4.28a Kruskal Wallis Test: By Age

	<18 years (N=7)		18-20 years (N=171)		21-23 years (N=117)		24-26 years (N=18)		>26 years (N=60)		Total (N=373)	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Preference over home cooked meals	3.00	1.414	2.50	1.205	2.39	1.196	1.61	.698	1.83	1.076	2.32	1.198
Additional items to fast food consumed	3.57	.976	2.84	1.234	3.06	1.302	2.67	1.328	2.27	1.219	2.82	1.279
Fast food is a family preference	2.71	1.496	1.99	1.060	2.10	1.037	1.44	.705	1.85	1.022	1.99	1.051
Fast food satisfies hunger	4.29	.951	3.24	1.258	3.29	1.182	2.67	1.237	2.57	1.240	3.14	1.260
Variety of options	3.14	1.069	3.25	.946	3.33	1.059	2.83	1.295	2.80	1.246	3.18	1.067
Fast food is tasty	3.86	.900	3.88	1.013	3.64	1.078	3.44	1.199	3.07	1.148	3.65	1.096
Self-conscious of healthier options	3.43	1.272	3.19	1.246	3.22	1.218	3.72	1.406	3.70	1.124	3.31	1.238

Table 4.28b Kruskal Wallis Test Statistics: By Age

Test Statistics[a,b]			
	Chi-Square	df	Asymp. Sig.
Preference over home cooked meals	23.928	4	.000
Additional items to fast food consumed	18.305	4	.001
Fast food is a family preference	10.376	4	.035
Fast food satisfies hunger	22.790	4	.000
Variety of options	12.171	4	.016
Fast food is tasty	24.681	4	.000
Self-conscious of healthier options	11.354	4	.023
a. Kruskal Wallis Test			
b. Grouping Variable: Age			

Based on the results generated within Tables 4.28 (a) and (b) on the previous page, respondents below the age of 18 years agree significantly more than those above the age of 18 years that fast food is preferred more than home cooked meals ($\chi^2(4,N=373) = 23.928$, $p<0.05$).

Different age groups responded differently to additional items consumed with fast food ($\chi^2(4,N=373) = 18.305$, $p=0.001$). Specifically, those below 18 years (3.57) showed more agreement than those over 26 years (2.27).

The respondents between the ages of 24 to 26 (1.44) years had less agreement than those between the ages of 18 to 20 (1.99) years and 21 to 23 (2.10) years that fast food is a family preference ($\chi^2(4,N=373) = 10.376$, $p=0.035$).

The respondents over the age of 26 years (2.57), had the least agreement with fast food satisfying hunger, whilst those below the age of 18 years (4.29) had the most agreement ($\chi^2(4,N=373) = 22.790$, $p<0.05$).

Those between the ages of 21 to 23 years old agreed more significantly than those above 26 years old, with the variety of options being a factor which affects their choice relating to fast food consumption ($\chi^2(4,N=373) = 12.171$, $p=0.016$).

The respondents below the age group of 23 years old, agreed more significantly that fast food is tasty over the respondents above 26 years ($\chi^2(4,N=373) = 24.681$, $p<0.05$).

Different age groups respond significantly differently to whether they are self-conscious of the healthier fast food options ($\chi^2(4,N=373) = 11.354$, $p=.023$). Specifically, the over 26 year olds (3.70) showed more agreement than the 18 - 20 year olds (3.19).

4.3.3.3 By Race

Table 4.29a Kruskal Wallis Test: By Race

	Black (N=179)		Coloured (N=8)		Indian (N=174)		White (N=12)		Total (N=373)	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Additional items to fast food consumed	2.80	1.278	2.50	1.195	2.94	1.262	1.67	1.073	2.82	1.279
Fast food is a family preference	1.93	1.110	2.38	1.061	2.07	0.986	1.42	0.900	1.99	1.051
Fast food satisfies hunger	3.06	1.333	2.88	1.356	3.32	1.147	1.92	0.900	3.14	1.260
Variety of options	3.01	1.107	3.38	1.188	3.39	.0972	2.58	1.165	3.18	1.067
Availability of outlets	3.12	1.158	2.38	1.188	3.53	0.929	3.58	1.084	3.31	1.080
Fast food is tasty	3.46	1.191	3.50	1.195	3.86	0.954	3.58	1.084	3.65	1.096
Prepared food for lunch	2.77	1.446	3.25	1.753	3.79	1.337	3.83	1.586	3.29	1.490
Fast food as a status	2.59	1.221	2.38	1.061	2.11	1.101	1.58	1.240	2.33	1.190
Easier to consume	3.46	1.088	2.38	.916	3.14	1.088	2.00	.853	3.24	1.117
Habitual	3.06	1.193	2.25	1.035	2.79	1.120	2.00	1.206	2.88	1.175
Consume with family and friends	3.22	1.124	3.88	.641	3.61	1.052	3.67	.651	3.43	1.087
Self-conscious of healthier options	3.49	1.177	3.50	1.414	3.13	1.257	3.17	1.467	3.31	1.238
Choice of healthier options	3.64	1.079	3.13	1.553	3.27	1.236	3.58	1.084	3.46	1.176

Table 4.29b Kruskal Wallis Test Statistics: By Race

Test Statistics[a,b]			
	Chi-Square	df	Asymp. Sig.
Additional items to fast food consumed	11.708	3	.008
Fast food is a family preference	9.843	3	.020
Fast food satisfies hunger	14.975	3	.002
Variety of options	15.678	3	.001
Availability of outlets	17.588	3	.001
Fast food is tasty	9.227	3	.026
Prepared food for lunch	43.072	3	.000
Fast food as a status	20.462	3	.000
Easier to consume	28.928	3	.000
Habitual	13.402	3	.004
Consume with family and friends	12.840	3	.005
Self-conscious of healthier options	8.024	3	.046
Choice of healthier options	8.507	3	.037
a. Kruskal Wallis Test			
b. Grouping Variable: Race			

Based on the results generated within Table 4.29 (a) on the previous page and Table 4.29 (b) above, Black (2.80) and Indian (2.94) respondents agree significantly more than White (1.67) respondents that additional items are consumed with fast food ($\chi^2(4,N=373) = 11.708$, p=.008).

With regards to fast food as a family preference, there is no specifics in relation to the difference, but there is a significant difference ($\chi^2(4,N=373) = 9.843$, p=.020).

Blacks (3.06) and Indians (3.32) have more significant agreement over Whites (1.92) that fast food satisfies hunger ($\chi^2(4,N=373) = 14.975$, p=.002).

Indians (3.39) and Coloureds (3.38) agree more significantly than Whites (2.58) that the variety of options is a factor leading to the choice of fast food ($\chi^2(4,N=373) = 15.678$, p=.001).

There is a more significant agreement ($\chi^2(4,N=373) = 17.588$, p=.001) by Indians than Balcks with the availability of outlets.

Indians (3.86) have more significant agreement than Blacks (3.46) that fast food is tasty ($\chi^2(4,N=373) = 9.227$, $p=.026$).

Indians (3.79) and Whites (3.83) have more significant agreement than Blacks (2.77) with bringing prepared food for lunch ($\chi^2(4,N=373) = 43.072$, $p<.05$).

Blacks (2.59) and Coloureds (2.38) agree more significantly than Indians (2.11) and Whites (1.58) that fast food is consumed as a status element ($\chi^2(4,N=373) = 20.462$, $p<.05$).

The Coloured (2.38) and White (2.00) respondents have less significant agreement than Black (3.46) respondents that fast food is easier to consume ($\chi^2(4,N=373) = 28.928$, $p<.05$).

There is a more significant agreement ($\chi^2(4,N=373) = 13.402$, $p<.004$) by Blacks (3.06) than Whites (2.00) about consuming fast food out of habit.

Coloureds (3.88) agree more significantly than Blacks (3.22) about eating fast food with family and friends ($\chi^2(4,N=373) = 12.840$, $p=.005$).

Blacks (3.49) show significantly more agreement than Indians (3.13) and Whites (3.17) about being self-conscious of eating healthier fast food options ($\chi^2(4,N=373) = 8.024$, $p=.046$).

Blacks (3.64) and Whites (3.58) agree more significantly than Coloureds (3.13) and Indians (3.27) about choosing healthier options when consuming fast food ($\chi^2(4,N=373) = 8.507$, $p=.037$).

4.3.3.4 By Time of Day that Fast Food is Consumed

Table 4.30a Kruskal Wallis Test: By Time of Day that Fast Food is Consumed

	Before 10:00 (N=9)		10:00-11:59 (N=75)		12:00-13:59 (N=183)		14:00-15:59 (N=76)		From 16:00 (N=30)		Total (N=373)	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Special offers from advertisements	3.22	1.302	3.27	1.070	3.20	1.199	3.32	1.157	2.53	1.106	3.18	1.171
Self-conscious of healthier options	2.56	.882	3.04	1.289	3.43	1.211	3.43	1.204	3.20	1.324	3.31	1.238

Table 4.30b Kruskal Wallis Test Statistics: By Time of Day that Fast Food is Consumed

Test Statistics[a,b]			
	Chi-Square	df	Asymp. Sig.
Special offers from advertisements	10.513	4	.033
Self-conscious of healthier options	10.060	4	.039
a. Kruskal Wallis Test			
b. Grouping Variable: Time fast food consumed			

Based on the results generated within Tables 4.30 (a) and (b) above, there is a significant difference in the average agreement score for the different time of day consumption categories with regard to the awareness of special offers ($\chi^2(4,N=373) = 10.513$, $p=.033$). Specifically, average agreement for after 16:00 is significantly lower than average agreement for 10:00 to 15:59.

There is a significant agreement with being self-conscious of the healthier options between 12:00 to 15:59 than before 10:00 ($\chi^2(4,N=373) = 10.060$, $p=.039$).

4.3.3.5 By Reasons for Eating Fast Food

Table 4.31a Kruskal Wallis Test: Reasons for Eating Fast Food

	Get Hungry (N=164)		Quick/Fast (N=52)		Convenience (N=92)		Forgot lunch at home (N=45)		Socialise (N=20)		Total (N=373)	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Additional items to fast food consumed	3.00	1.243	2.75	1.235	2.72	1.261	2.36	1.351	3.10	1.373	2.82	1.279
Fast food satisfies hunger	3.42	1.228	3.31	1.147	2.78	1.175	2.69	1.459	3.05	1.099	3.14	1.260
Consume with family and friends	3.62	1.076	3.10	1.125	3.34	1.062	3.24	.981	3.60	1.188	3.43	1.087
Self-conscious of healthier options	3.07	1.261	3.19	1.299	3.58	1.170	3.76	1.069	3.35	1.137	3.31	1.238
Choice of healthier options	3.39	1.180	3.12	1.149	3.67	1.178	3.76	1.111	3.20	1.105	3.46	1.176
Frequent consumption leads to unhealthy lifestyles	4.13	.994	4.10	.995	4.32	.889	4.53	.726	3.80	.951	4.20	.948

Table 4.31b Kruskal Wallis Test Statistics: Reasons for Eating Fast Food

Test Statistics[a,b]			
	Chi-Square	df	Asymp. Sig.
Additional items to fast food consumed	11.708	4	.024
Fast food satisfies hunger	21.512	4	.000
Consume with family and friends	13.300	4	.010
Self-conscious of healthier options	16.820	4	.002
Choice of healthier options	12.904	4	.012
Frequent consumption leads to unhealthy lifestyles	13.424	4	.009
Additional items to fast food consumed	11.708	4	.024
a. Kruskal Wallis Test			
b. Grouping Variable: Reason for fast food consumption			

Based on the results generated within Tables 4.31 (a) and (b) on the previous page, there is a significant agreement that additional items are consumed more for when respondents get hungry (3.00) than when lunch is forgotten at home (2.36).

There is a more significant agreement that fast food satisfies hungry with the reason of being hungry over fast food being convenient or forgetting lunch at home ($\chi^2(4,N=373) = 21.512$, $p<.05$).

Consumption of fast food with family and friends shows more significant agreement for being hungry over it being quick/fast ($\chi^2(4,N=373) = 13.300$, $p=.010$).

The respondents indicated a more significant agreement with being more self-conscious of healthier options when fast food is convenience and they had forgotten lunch at home over being hungry ($\chi^2(4,N=373) = 16.820$, $p=.002$).

There is significant agreement that the choice of healthier options is done less when it is quick/fast over when lunch is forgotten at home ($\chi^2(4,N=373) = 12.904$, $p=.012$).

The respondents who indicated that frequent consumption leads to unhealthy lifestyles is significantly agreed more by those who consume because they forgot their lunch at home than those who get hungry ($\chi^2(4,N=373) = 13.424$, $p=.009$).

4.3.4 Correlations

The correlations below have been tested for each of the five objectives of the study and are specifically related to the hypotheses. The tables below will indicate the level of significance amongst each of the variables in accordance to the strength, direction and nature of relationship.

Table 4.32 Correlations for Objective 1

Correlations						
		Preference over home cooked meals	Fast food is readily available	Additional items to fast food consumed	Fast food is a family preference	Fast food satisfies hunger
Preference over home cooked meals	Pearson Correlation	1	.384**	.227**	.322**	.242**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	373	373	373	373	373
Fast food is readily available	Pearson Correlation	.384**	1	.354**	.178**	.365**
	Sig. (2-tailed)	.000		.000	.001	.000
	N	373	373	373	373	373
Additional items to fast food consumed	Pearson Correlation	.227**	.354**	1	.233**	.374**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	373	373	373	373	373
Fast food is a family preference	Pearson Correlation	.322**	.178**	.233**	1	.350**
	Sig. (2-tailed)	.000	.001	.000		.000
	N	373	373	373	373	373
Fast food satisfies hunger	Pearson Correlation	.242**	.365**	.374**	.350**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	373	373	373	373	373
**. Correlation is significant at the 0.01 level (2-tailed).						

Based on the correlation conducted for Objective One of the study, Table 4.32 above indicates that all relationships between the variables preference over home cooked meals, fast food is readily available, additional items to fast food consumed, fast food is a family preference and fast food satisfies hunger respectively are moderate positive and significant relationships. These relationships are all significant with $p<.01$. Therefore, there exists a moderate positive and significant relationship for preferences of fast food consumption.

Table 4.33 Correlations for Objective 2

Correlations						
		Fast food based on price	Variety of options	Availability of outlets	Fast food is convenient	Fast food is tasty
Fast food based on price	Pearson Correlation	1	.186**	.126*	.102*	.145**
	Sig. (2-tailed)		.000	.015	.050	.005
	N	373	373	373	373	373
Variety of options	Pearson Correlation	.186**	1	.490**	.337**	.356**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	373	373	373	373	373
Availability of outlets	Pearson Correlation	.126*	.490**	1	.406**	.275**
	Sig. (2-tailed)	.015	.000		.000	.000
	N	373	373	373	373	373
Fast food is convenient	Pearson Correlation	.102*	.337**	.406**	1	.321**
	Sig. (2-tailed)	.050	.000	.000		.000
	N	373	373	373	373	373
Fast food is tasty	Pearson Correlation	.145**	.356**	.275**	.321**	1
	Sig. (2-tailed)	.005	.000	.000	.000	
	N	373	373	373	373	373
**. Correlation is significant at the 0.01 level (2-tailed).						
*. Correlation is significant at the 0.05 level (2-tailed).						

Based on the results depicted in Table 4.33 above, it is found there exists significant weak positive relationships between fast food based on price against the variety of options and fast food being tasty respectively ($p<.01$). There is also significant weak positive relationships between fast food based on price against the availability of outlets and fast food being convenient respectively ($p<.05$). The relationships between variety of options to that of the availability of outlets, fast food being convenient and fast food being tasty respectively are all moderate positive and significant relationships ($p<.01$). The relationship between the availability of outlets with that of the convenience and taste yielded moderate positive and significant relationships ($p<.01$) respectively. There also exists a moderate positive and significant relationship between the convenience of fast food and the taste of fast food ($p<.01$). Therefore, all relationships for the factors affecting fast food are positive and significant.

Table 4.34 Correlations for Objective 3

Correlations						
		Special offers from advertisements	Friends influence	Family influence	Aware of nutritional content	Aware of calorie content
Special offers from advertisements	Pearson Correlation	1	.182**	.138**	.118*	.052
	Sig. (2-tailed)		.000	.008	.022	.321
	N	373	373	373	373	373
Friends influence	Pearson Correlation	.182**	1	.308**	-.057	-.064
	Sig. (2-tailed)	.000		.000	.275	.218
	N	373	373	373	373	373
Family influence	Pearson Correlation	.138**	.308**	1	-.022	-.016
	Sig. (2-tailed)	.008	.000		.670	.757
	N	373	373	373	373	373
Aware of nutritional content	Pearson Correlation	.118*	-.057	-.022	1	.671**
	Sig. (2-tailed)	.022	.275	.670		.000
	N	373	373	373	373	373
Aware of calorie content	Pearson Correlation	.052	-.064	-.016	.671**	1
	Sig. (2-tailed)	.321	.218	.757	.000	
	N	373	373	373	373	373
**. Correlation is significant at the 0.01 level (2-tailed).						
*. Correlation is significant at the 0.05 level (2-tailed).						

Based on the correlations for Objective Three of the study, there exists weak positive and significant relationships between special offers from advertisements to that of friends influence ($p<.01$), family influence ($p<.01$) and awareness of nutritional content ($p<.05$) respectively. There is also a moderate positive and significant relationship between friends influence and family influence ($p<.01$). A strong positive and significant relationship is also evident between the awareness of nutritional content to that of the awareness of calorie content ($p<.01$). Therefore, it is found that despite the positive and significant relationships for information about fast food, these relations are weak in nature.

Table 4.35 Correlations for Objective 4

Correlations						
		Prepared food for lunch	Fast food as a status	Easier to consume	Habitual	Consume with family and friends
Prepared food for lunch	Pearson Correlation	1	-.026	-.158**	-.299**	-.019
	Sig. (2-tailed)		.614	.002	.000	.721
	N	373	373	373	373	373
Fast food as a status	Pearson Correlation	-.026	1	.270**	.155**	.004
	Sig. (2-tailed)	.614		.000	.003	.939
	N	373	373	373	373	373
Easier to consume	Pearson Correlation	-.158**	.270**	1	.301**	.109*
	Sig. (2-tailed)	.002	.000		.000	.036
	N	373	373	373	373	373
Habitual	Pearson Correlation	-.299**	.155**	.301**	1	.218**
	Sig. (2-tailed)	.000	.003	.000		.000
	N	373	373	373	373	373
Consume with family and friends	Pearson Correlation	-.019	.004	.109*	.218**	1
	Sig. (2-tailed)	.721	.939	.036	.000	
	N	373	373	373	373	373
**. Correlation is significant at the 0.01 level (2-tailed).						
*. Correlation is significant at the 0.05 level (2-tailed).						

As per Table 4.35 above, there exists weak negative and significant relationships between prepared food for lunch to that of fast food being easier to consume ($p<.01$) and consuming fast food out of habit ($p<.01$) respectively. There relationships between fast food as a status with fast food being easier to consume and consuming fast food out of habit yields weak positive and significant relationships respectively ($p<.01$). There is a moderate positive and significant relationship between easier to consume and consuming out of habit ($r=.301$, $p<.01$). There is also a weak positive and significant relationship between fast food being easier to consume and consuming with family and friends ($r=.109$, $p=.036$). The variables relating to consuming out of habit and consuming with family and friends yields a weak positive and significant relationship ($r=.218$, $p<.01$). It is established that all the relationships between easier to consume and consuming out of habit are significant respectively.

Table 4.36 Correlations for Objective 5

Correlations						
		Self-conscious of healthier options	Excessive amounts leading to overweight and obesity	Choice of healthier options	Frequent consumption leads to unhealthy lifestyles	Healthy eating and exercising leads to healthy lifestyles
Self-conscious of healthier options	Pearson Correlation	1	.356**	.527**	.331**	.111*
	Sig. (2-tailed)		.000	.000	.000	.033
	N	373	373	373	373	372
Excessive amounts leading to overweight and obesity	Pearson Correlation	.356**	1	.392**	.604**	.328**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	373	373	373	373	372
Choice of healthier options	Pearson Correlation	.527**	.392**	1	.437**	.249**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	373	373	373	373	372
Frequent consumption leads to unhealthy lifestyles	Pearson Correlation	.331**	.604**	.437**	1	.371**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	373	373	373	373	372
Healthy eating and exercising leads to healthy lifestyles	Pearson Correlation	.111*	.328**	.249**	.371**	1
	Sig. (2-tailed)	.033	.000	.000	.000	
	N	372	372	372	372	372
**. Correlation is significant at the 0.01 level (2-tailed).						
*. Correlation is significant at the 0.05 level (2-tailed).						

Based on the correlation conducted for Objective Five of the study, Table 4.36 above indicates that all relationships between the variables self-conscious of healthier options, excessive amounts leading to overweight and obesity, choice of healthier options, frequent consumption leads to unhealthy lifestyles and healthy eating and exercising leads to healthy lifestyles respectively are moderate or strong positive and significant relationships. These relationships are all significant with $p<.01$ with the exception of being self-conscious of healthier options and a combination of healthy eating and exercising leading to healthier options ($r=.111$, $p=.033$) which is a weak positive and significant relationship. Therefore, there exists a positive and significant relationship for the risk of fast food consumption.

4.3.5 Regressions

The regressions below have been tested for each of the five objectives of the study and are specifically related to the hypotheses. The table below will indicate the level of variance for each of the objectives alongside the predictors. The regressed effect has been highlighted by the R Square (R^2) and denotes the multiple regressions.

Table 4.37 Regressions for Study Objectives

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
Objective One	.157	.025	.012	.826
Objective Two	.171	.029	.016	.824
Objective Three	.166	.028	.014	.825
Objective Four	.144	.021	.007	.828
Objective Five	.189	.036	.023	.821

Based on Table 4.37 above, it is found that 2.5% of the variance for Objective One has been significantly explained by the set of predictors.

There is only 2.9% of the variance significantly explained by the set of predictors for Objective Two of the study.

Objective Three of the study produces 2.8% of the variance significantly explained by the set of objectives.

There is 2.1% and 3.6% of the variance for Objective Four and Objective Five of the study significantly explained by the set of predictors respectively.

4.4 VALIDITY

Validity of the study had been implemented using factor analysis. This allows for the many variables (25) to be reduced. This implies that the similar variables have been grouped in order to accommodate for the reduction. The extraction relating to the communalities and the total variance are described in the tables 4.38 and 4.39 below.

Table 4.38 Validity of Study

Communalities		
	Initial	Extraction
Preference over home cooked meals	1.000	.567
Fast food is readily available	1.000	.562
Additional items to fast food consumed	1.000	.406
Fast food is a family preference	1.000	.677
Fast food satisfies hunger	1.000	.501
Fast food based on price	1.000	.533
Variety of options	1.000	.615
Availability of outlets	1.000	.707
Fast food is convenient	1.000	.536
Fast food is tasty	1.000	.527
Special offers from advertisements	1.000	.607
Friends influence	1.000	.531
Family influence	1.000	.677
Aware of nutritional content	1.000	.798
Aware of calorie content	1.000	.825
Prepared food for lunch	1.000	.632
Fast food as a status	1.000	.646
Easier to consume	1.000	.552
Habitual	1.000	.693
Consume with family and friends	1.000	.503
Self-conscious of healthier options	1.000	.614
Excessive amounts leading to overweight and obesity	1.000	.652
Choice of healthier options	1.000	.627
Frequent consumption leads to unhealthy lifestyles	1.000	.670
Healthy eating and exercising leads to healthy lifestyles	1.000	.581
Extraction Method: Principal Component Analysis.		

The communalities based on Table 4.38 on the previous page is indicative of the amount of variance from the variables accounted for by the extracted factors. It is found that 82.5% and 79.8% of the variance for awareness of calorie content and awareness of nutritional content has been accounted for. All other factors have between 50% to 70% of variance accounted for, with the exception of additional items of fast food consumed which has only 40.6% of variance has accounted for.

Table 4.39 Total Variance of Study

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.586	18.345	18.345	4.586	18.345	18.345
2	2.671	10.684	29.029	2.671	10.684	29.029
3	1.818	7.271	36.300	1.818	7.271	36.300
4	1.519	6.075	42.375	1.519	6.075	42.375
5	1.427	5.709	48.084	1.427	5.709	48.084
6	1.122	4.489	52.573	1.122	4.489	52.573
7	1.080	4.320	56.893	1.080	4.320	56.893
8	1.017	4.069	60.962	1.017	4.069	60.962
9	.940	3.758	64.720			
10	.877	3.507	68.228			
11	.793	3.172	71.400			
12	.756	3.023	74.423			
13	.708	2.833	77.256			
14	.661	2.646	79.902			
15	.626	2.504	82.405			
16	.603	2.413	84.819			
17	.587	2.349	87.168			
18	.527	2.108	89.276			
19	.490	1.962	91.238			
20	.471	1.885	93.122			
21	.424	1.696	94.818			
22	.374	1.496	96.314			
23	.339	1.357	97.671			
24	.330	1.321	98.991			
25	.252	1.009	100.000			
Extraction Method: Principal Component Analysis.						

Table 4.39 on the previous page shows all the factors extractable from the analysis along with the Eigenvalues, the percentage of variance and the cumulative variance of the factor and the previous factors. It is found that the first factor accounts for 18.345% of the variance, the second 10.684% and the third accounts for 7.271% of the variance. In total the first eight factors account for a cumulative 60.962% of variance. The remaining factors are not significant.

4.5 RELIABILITY

Reliability of the study was imperative and was calculated using Cronbach's Coefficient Alpha. The results of the reliability measure has been construed for each of the objectives of the study as well as for an overall reliability measure taking into account all likert scale variables. The results are depicted in Table 4.40 below.

Table 4.40 Reliability of Objectives of the Study

Reliability Statistics			
Objectives	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Objective 1	.785	.785	5
Objective 2	.748	.754	5
Objective 3	.786	.830	5
Objective 4	.754	.827	5
Objective 5	.740	.746	5
Overall Reliability of the Study	.796	.802	25

As the rule of thumb highlighted in Chapter Three (Methodology) of the study, it is evident that all reliability measures for each of the objectives are at an acceptable level. This is due to the Cronbach's Alpha being greater than .7. It is also evident that the reliability measure for all likert scale items (25) reveals an acceptable level. The Cronbach's Alpha based on Standardised Items is not commented on due to all individual scale items being scaled the same. Based on the results, it is evident that this study is reliable.

4.6 CONCLUSION

This chapter provided the critical representation of the analysed results analysed. The results had been presented initially reflecting the descriptive statistics. This was based on the collective data obtained from the 373 completed questionnaires. Based on such data, the chapter further provided the inferential statistics strategically aligned to the set objectives. The hypothesis testing revealed that there exist relationships between the tested variables to that of consumption behaviour. The presented results purely described are critically discussed in the proceeding chapter.

CHAPTER FIVE

DISCUSSION OF RESULTS

5.1 INTRODUCTION

This study sought to determine UKZN Westville students' awareness and views of the health implications of excessive fast food consumption. Therefore, the present chapter seeks to encapsulate the results of this study to that of the existing literature. In doing so, this chapter will explore the findings based on each of the objectives initially presented in Chapter One. The research objectives derived to address the research problem were:

- To measure students preferences of fast food consumption at UKZN;
- To ascertain the different factors which affect students' choice of fast food at UKZN;
- To understand the level of information students have surrounding fast food consumption;
- To measure students trend and pattern of fast food consumption and
- To determine the extent of students perceptions of the risk in excessive fast food consumption at UKZN

The results analysed in the preceding chapter will be discussed against the literature provided in Chapter Two of this study.

5.2 OBJECTIVE ONE: FAST FOOD CONSUMPTION PREFERENCES

In order to understand fast food consumption as a preference, if so, was to determine the nature of the preference by UKZN Westville students. It had been identified from literature that the younger generation specifically are influenced by westernised lifestyles, thereby exhibiting preferences for fast food consumption (Akbay *et al.,* 2010). This research objective sought to measure fast food preferences; over home cooked meals, the availability, additions, family preference and/or ability to satisfy hunger.

The research instrument was utilised to gather data on each dimension mentioned above. The frequency results obtained and analysed from UKZN Westville students reveal that 58.1% of the

respondents do not prefer fast food over home cooked meals. This is congruent with the results compiled from a survey of Indian adults in their 20s who preferred home cooked meals and believed that it was healthier than restaurants (Aloia *et al.*, 2013). This further relates to data of 44% of these respondents indicating that their consumption of fast food is due to getting hungry whilst on the campus. Moreover, 42.4% of the study's respondents indicated that the preference of consuming fast food is based on their hunger being satisfied.

Research by Bagordo *et al.*, (2013) and Tuttle (2011) indicate that fast food is mostly preferred by resident university students. One of the main factors identified was in relation to the availability of the convenience of fast food. Whilst 44.7% of UKZN Westville students had indicated that fast food was preferred due to the availability, it is difficult to decipher the living arrangements of these students.

In relation to preferring fast food based on adding items to meals, the results yielded 33% agreeing and 42.4% in disagreement. Fast food outlets including those present at the UKZN Westville cafeteria, sell items separately thereby prompting combo purchases.

Fast food is consumed by families based on lack of time for food preparation and individual preferences. However, results from this study indicate that fast food preferences are not derived from family preferences (71.1%). This indicates that it is based on individual preferences which is one of the reason for the possibility on lack of food preparation.

5.3 OBJECTIVE TWO: FACTORS AFFECTING CHOICE OF FAST FOOD

The food perception model developed by Sijtsema *et al.*, (2002) and presented as Figure 2.4, described the variables of individuals, environment, context and food as influential factors. Each variable relates back to the consumer decision making process as highlighted in Chapter Two of this study. The present objective to ascertain different factors affecting choice of fast food consumption was sought by determining choices based on price, variety, availability of outlets, convenience and taste.

Research by Tuttle (2011) and Moorad (2013) posed contradicting in relation to the cost of fast food. Tuttle (2011), found that fast food cost more than home cooked meals, whilst Moorad (2013) determined that fast food was cheaper to eat. Further research provided insight relating to higher

incomes purchasing and consuming more fast food. This study found that UKZN Westville students purchased and consumed fast food based on its price. This implies relation to the study of Ayo *et al.,* (2012) as it assumes that students are not yet earning a substantive form of income but still consume fast food.

Moreover, 43.2% of the respondents indicated that variety as a factor influenced their decision. It was discussed extensively that variety was not only present in terms of menu offering but also evident by the number of outlets. The UKZN Westville cafeteria boosts this sort of variety providing various opportunities for selection amongst students. This poses competiveness amongst the outlets to gain market share by ensuring uniqueness in food preparation.

Rydell *et al.,* (2008) reported on availability in terms of food being provided "quickly" as an influential factor for consumption decision. In order to compensate for this factor, QSRs have implemented drive through facilities and are situated in easily accessible locations. At the UKZN Westville campus, the cafeteria with majority of these outlets are positioned central within the vicinity. A little over half of the respondents (50.2%) consumed fast food due to the availability. However, these respondents had indicated that fast food available quickly or fast was not a significant reason for their consumption.

The factor relating to convenience was amongst the most popular reasons presented in literature for fast food consumption. The data analysed revealed that convenience was the second most popular reason for students to consume fast food whilst on campus. This was reaffirmed by 51.8% of the respondents in agreement that fast food was consumed due the convenient nature.

Consumers also made consumption decisions of fast food based on taste. Food items have similar characteristics but can be differentiated by preparation using spices and sauces (Schlosser, 2010). Food colouring, specifically brighter colours although makes food seem more appealing, greatly affected the perceived taste. This study has revealed that 62.0% of students based consumption and purchasing decisions on the taste.

The results concerning factors affecting fast food choice is congruent with that of the literature available.

5.4 OBJECTIVE THREE: INFORMATION SURROUNDING FAST FOOD CONSUMPTION

Another objective within this study was to understand what information was obtained by students when making decisions surrounding fast food consumption. A crucial objective of food standards is to make provision of adequate information relating to food enabling consumers to make informed choices (Rees & Watson, 2000). The type of information gathered by consumers assists further with marketing initiatives. One common marketing technique is the use of advertising as a promotional mix element as illustrated in Figure 2.5. The respondents of this study (40.8%) indicated that fast food decisions are based on special offers advertised.

Based on the EKB Model of Consumer Behaviour presented as Figure 2.2 in Chapter Two, consumers are likely to commence processing information based on information input from the stimuli of marketers and others. The element of "other" relates to the family, friends, leaders, etc. This information once transpired from the traditional form of marketing called word-of-mouth (WOM) has now been more explicit in the technological advancements as electronic word-of-mouth (e-WOM). Social media has played a contributing factor to the sharing of information. Although not a significant portion of respondents, but fast food consumption decisions were influenced more by friends than family.

It was further established that consumers need to take cognisance of nutritional and calorie content of food intake. Due to the changes in portion sizes, it is imperative to monitor nutritional content (Young & Nestle, 2003). As previously highlighted, consumers need to consume in accordance to individual Recommended Dietary Allowances (RDA). Information surrounding energy content, saturated fat, sugar, sodium and serving size must be available to consumers (Young & Nestle, 2003), in the form of required nutritional labelling in chain restaurants and retail food establishments (FDA, 2015). Huffman (2015) reported that whilst consumers acknowledged such labelling, only a few used this information as an influential decision making process. Based on the frequencies presented in Table 4.15, more than half of the respondents aware of nutritional and calorie content in fast food consumed.

5.5 OBJECTIVE FOUR: TRENDS AND PATTERNS OF FAST FOOD CONSUMPTION

The discussion to follow is based on lunch brought from home as well as fast food consumed either or a combination as a status element, easier to consume, out of habit and/or with family and friends.

The respondents of this study have indicated that food from home is brought for lunch (51.4%) and 35.1% have indicated that they do not bring lunch from home. Based on statistics from Euromonitor International, eating out has become increasingly popular and leftovers are generally packed as lunch items. Therefore, it is uncertainty of the type of food brought as lunch items by those who indicated as such.

With regards to consuming fast food as a status element, 57.6% of the respondents indicated that this was not true whilst there have been 16.6% who perceive this trait. The Howard-Sheth Theory of Buyer Behaviour illustrated in Figure 2.1 confirms that the financial status of an individual is an inhibiting factor. In South Africa, it was established that the increase in household income attributed to an increase in fast food consumption (Hartford, 2012; Maumbe, 2012; eProp, 2012; Mboweni-de Klerk, 2008) as cited in (Oni & Matiza, 2014) and expenditure on fast food in general (Ayo *et al.,* 2012). However, whilst the increase in fast food consumption is acknowledged, Glanz *et al.,* (1998), found this was true amongst younger people with lower incomes.

With the increase noted in fast food consumption, fast food outlets have made it easier to consume, developed convenient and disposable packaging material to avoid time spent cleaning up. This study has found that 57.2% of UKZN Westville students are in agreement that fast food is easier to consume due to the benefits presented.

A habit is defined as an acquired behaviour pattern regularly followed until it has become almost involuntary (Dictionary.com, 2016). In a study of Americans, it was found that one out of four people consume some type of fast food every day (Schlosser, 2014). This study's findings presented that whilst 34.0% acknowledge eating out of habit, 39.2% have stated that fast food is not consumed out of habit. This study further reveals that one in fourteen students at the UKZN Westville campus consume fast food more than once a day and one in every twelve students consume fast food every day. Caldwell (2016) proclaims that the creation of fast food consumption as a habit is due to the ease and convenience presented and breaking this habit may lead to saving of money and experiencing health benefits.

Another trend and pattern established amongst students at the UKZN Westville campus was that these students liked to eat fast food with their friends and family. The reasons for liking to consume with company was not established in this study. However, this study has found, based on results in Table 4.29a, that consuming with friends and family is preferred more by Coloured, Indian and White students compared to Black students. Furthermore, research by Van Zyl *et al.,* (2010) implies that more females are influenced to purchase fast food than males.

5.6 OBJECTIVE FIVE: PERCEPTIONS OF RISK IN EXCESSIVE CONSUMPTION OF FAST FOOD

For several decades, fast food has obtained the stigma of unhealthy offerings and a contributor to the increasing global rates in overweight and obesity amongst other diseases and illnesses. Therefore, the final objective of this study was to determine students' perceptions of the risk in excessive fast food consumption. This was based on the following:

- being self-conscious of healthier fast food options;
- consuming healthier fast food options;
- belief of excessive fast food consumption leading to overweight and obesity;
- belief of frequent fast food consumption leading to unhealthy lifestyles and
- combining healthy eating and exercising leading to healthier lifestyles

The frequency of fast food consumption throughout the world has been explained through the accessibility, convenience, pricing and taste of the offerings. The significant growth of the fast food industry boasts greater variety. However, this industry has also been critiqued as the promotor of foods which are high in fat, sugar and sodium (Van Zyl *et al.*, 2010) which should not be consumed on a regular basis (CYWH, 2014). This has been viewed as unhealthy content by health professionals (Van Zyl *et al.*, 2010).

Fast food outlets are presenting healthier options on their menus and it is left to the consumer to practice healthier eating by selecting the healthier options (CYWH, 2014). This study has revealed that 49.4% of UKZN Westville students are self-conscious of healthier options and 50.4% consume the healthier options. However, this implies that almost one half of the students at the UKZ Westville campus do not consume healthier offerings of fast food. This is despite the results

indicating that 85.3% of the students believe that excessive fast food consumption leads to overweight and obesity and 82.3% believing that frequent fast food consumption leads to unhealthy lifestyles. Another staggering result is that 87.9% of these students agree that to exhibit healthier lifestyles includes a combination of healthy eating and exercising. These results are ultimately congruent with three distinctive consumer decision making models; the Howard-Sheth Model, the Engel-Kollat-Blackwell Model (Decision Process) and the Nicosia Model and the link to the Food Perception Model.

5.7 CONCLUSION

Based on the results presented and discussed in the current chapter, it is evident that the findings are congruent to the literature available. In essence, the present chapter has provided insight that UKZN Westville students' fast food consumption behaviour is similar to that of consumers previously researched irrespective of demographics. Furthermore, this also outlined that based on the research problem, UKZN Westville students' consume according to convenience and taste despite the knowledge and awareness of the possible health implications. This also translated to adding to the existing body of knowledge whereby not many of the students are aware or even enquire into to the nutritional and calorie content of fast food. Above all, the discussion and findings permit for recommendations and areas for future research in the proceeding and concluding chapter.

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.1 INTRODUCTION

The global increase in demand for fast food purchasing and consumption has experienced enormous recognition and satisfaction for marketers. This has made provision for marketers to develop innovative strategies and enhance or capitalise on existing strategies in an attempt to further increase consumption decisions amongst consumers. The research explored throughout this study in aid of understanding UKZN Westville students' awareness of the health implications surrounding fast food consumption and their views about fast foods will be outlined in the present chapter. This would entail the provision of the study's summary imperative for achievement of the research objectives and research questions. In light of such, the chapter will offer recommendations for marketers and consumers, specifically university students' in relations to the awareness of health implications of excessive fast food consumption. Thereafter, this chapter will provide the limitations and areas for future research to enhance the viability of the study.

6.2 SUMMARY OF THE STUDY

The summary of the study is in relation to the empirical findings. This study was important in determining the UKZN Westville students' awareness of the health implications surrounding excessive fast food intake. As per the literature discussed in Chapter Two of the present study, it discovered that consumers throughout the world consume fast food most specifically for convenience, as a time saving strategy, for the taste as well as according to the price of the food. The primary data collected from students at the UKZN Westville Campus showcased that whilst these consumers frequently purchased and consumed fast food, such decisions exhibited somewhat ignorance to preferences (R=.157), factors affecting choice (R=.171), understanding of information (R=.166), trends and patterns (R=.144) and risk (R=.189) in excessive consumption. This implies that UKZN Westville students' consumption behaviour is extremely low when considering their preferences, choices, information available, trends and patterns and the risk.

These variables described above as being somewhat ignored can only be explained by 44% of students who indicated being hungry as a predominate reason for frequent fast food consumption. This consumption decision exhibited by the students has congruently aligned to the three distinctive consumer decision making models; Howard-Sheth Model, Engel-Kollat-Blackwell Model and the Nicosia Model conceptually framed indicative of understanding the different consumer decision processes.

This study has strived to concentrate on students' awareness of the health risk of excessive fast food consumption due to the global concern regarding the unhealthy lifestyles amongst consumers. The reason for the concern is in relation to the prevalent high levels of overweight and obesity. Fast food outlets have been blamed and placed under scrutiny for lack of nutrition and have therefore implemented healthier menu options for consumers. However, this study sought to determine the perceptions of UKZN Westville students in respect of the present day healthier options offered by fast food outlets.

It was found that whilst students at UKZN Westville Campus are aware of the healthier menu options present in the various fast food outlets, majority of these individuals do not consume these options. These consumers are also aware of what constitutes to healthier lifestyles but do not pursue this avenue. As such, student consumers are responsible for making the incorrect consumption decisions and are therefore adding to the increasing rate of overweight and obesity levels.

This study has also provided indication that fast food outlet advertisements have started emphasising on healthier options but students refrain from consuming these options. It is prudent to acknowledge that students have become somewhat attached and familiar with regular consumption. This attachment has transpired even more due to the convenience and availability of these foods. It also demonstrated that whilst these students are health conscious, more Coloureds and Indians than Blacks and Whites and students younger than 26 years old, do not follow the healthy lifestyles required. These findings allow for recommendations to be made for marketers as well as student consumers.

6.3 RECOMMENDATIONS

This study aimed to determine UKZN students' awareness of the health implications surrounding fast food consumption. Based on the results presented by this research conducted, the following recommendations are made;

The purpose of marketing efforts is to facilitate in achieving maximum profitability and consumer satisfaction. However, marketing should not exploit fast food consumption decisions and rather create, develop and implement new strategies to encourage healthy eating whilst still concentrating of students' fast food preferences and the immanent factors affecting choice.

It is also recommended that the fast food industry exercise responsibility by availing health information surrounding fast food consumption to consumers. This will aid in fulfilling the information gap and will assist consumers in making informed and healthy dietary choices.

It is also pivotal for student consumers to be aware of the consequences of increased consumption of fast food. This is due to the reality of unhealthy eating without proper exercise leading to higher levels of overweight and obesity. Consumers need to be more conscious of the healthy options offered by fast food outlets and start to base their consumption decisions accordingly. In doing so, this can further assist to reduce the perceived risk of health implications in excessive consumption of fast food.

6.4 LIMITATIONS

Limitations pertaining to this research have been experienced by the researcher. At the foremost, this research whilst comprised with a sample size of 373, it was collected solely on respondents from the UKZN Westville Campus. This led to an exclusion of four campuses of UKZN namely; Edgewood, Howard, Medical School and Pietermaritzburg. However, the sample was well selected to accommodate respondents over differing qualifications, levels of study, gender, race, age and other biographical elements.

A further limitation experienced was the exclusion of certain level one or first year entry students at the university's Westville Campus. This was to adhere to ethical considerations based on some of these students' not having reached the age of 18 years at the timing of data collection. This

research ensured that these students' considered as children in South Africa were not contributors for the purpose of this study.

Based on the feedback provided from the pilot study, the research instrument was re-addressed to a relevantly short questionnaire in order to encourage response rates and accuracy in administration. Whilst the questionnaire addressed the objectives of the study and pertinent literature, limitations to additional questions were experienced.

However, the analysis sought from the locations, types of students' and information provided this research with the perspectives necessary for satisfying the objectives and research questions required for this study.

6.5 OPPORTUNITIES FOR FURTHER RESEARCH

The growing concern and significance of young consumers creates the need for continuous research. The current study primarily dealt with UKZN Westville students' fast food consumption behaviour. Further research could entail household influence on fast food preferences exhibited by students. Whilst this study revealed that students do prefer home cooked meals but consumption decisions are due to the convenience and availability of fast food, greater insight should be explored into such variables.

A more detailed research could entail disposal income and spending behaviour of students at all UKZN campuses and other institutions in the KwaZulu-Natal province and across South Africa. It is possible that the acquisition of the income could reveal a differing expenditure factor in relation to fast food purchasing and consumption thereof.

The study explored the awareness of fast food information gathered by students in relation to fast food. However, it would be more prudent to analyse the influence of such information sought and the availability of the types of information for consumption decision purposes.

The findings of this study resulted in awareness of the possibility of health risk implications surrounding excessive fast food consumption. Whilst there exists literature surrounding fast food consumption, further research could explore the fast food industries and governmental strategies to facilitate healthier eating.

6.6 CONCLUSION TO THE STUDY

This research has explored multiple forms and factors relating to student awareness on fast food consumption. The current study contributes to the growing body of literature regarding the awareness of and regular consumption behaviour by showing that decision making processes and food perceptions can be associated with fast food consumption.

This chapter has emphasised on the objectives and research questions which were adequately covered pertaining for this study. It has demonstrated the outcomes which can be expanded on for future intent. This will allow marketers with a greater understanding of student consumers' consumption behaviour in respect of fast food.

The major theme identified that ties in line with the literature is related to UKZN Westville students' consumption behaviour of fast food according to convenience, hunger and taste factors. It also provided the reactions from University students to the fast food outlets and that marketers should identify new methods to communicate and educate these individuals on healthier eating.

Ultimately, this research represents a comprehensive step forward toward a better understanding of fast food consumption and the importance of concentrating on exercising practicing healthier eating habits. A more thorough understanding of fast food consumption and its associated behaviours can be used to develop public health messages and even interventions that aim to reduce any weight gain associated with the excessive or regular intake of fast food.

As this was a small scale study the findings should not be generalized to other similar institutions as there is not a strong degree of statistical confidence. Other institutions adopting the recommendations therefore need to carefully monitor the implementation to avoid any problems and if the desired outcomes are not being achieved interventions will be necessary.

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APPENDIX 1: INFORMED CONSENT

UNIVERSITY OF KWAZULU-NATAL
School of Management, IT & Governance

Dear Respondent,

M Com Research Project

Researcher: Miss R Govender (031 260 8333)

Supervisor: Mr A Bozas (082 334 4477)

Research Office: Ms P Ximba (031 260 3587)

I, Ruvania Govender am an M. Com student in the School of Management, I.T. & Governance, at the University of KwaZulu-Natal. You are invited to participate in a research project entitled: UKZN students' awareness of the health implications of regular fast food consumption.

The purpose of this study is to determine the level of UKZN Westville students' awareness of the health implications surrounding fast food consumption and the views relating to fast food. The results of this survey are intended to contribute to the level of students' awareness relating to excessive fast food intake.

Your participation in this project is voluntary. You may refuse to participate or withdraw from the project at any time with no negative consequence. There will be no monetary gain from participating in this research project. Confidentiality and anonymity of records identifying you as a participant will be maintained by the School of Management, I.T. & Governance, UKZN.

If you have any questions or concerns about participating in this study, please contact me or my supervisor at the numbers listed above.

It should take you about 10-15 minutes to complete the questionnaire. Please take the time to complete the questionnaire.

Yours faithfully,

Investigator's signature_____ Date_____

This page is to be retained by participant

UNIVERSITY OF KWAZULU-NATAL
School of Management, I.T. & Governance

M Com Research Project

Researcher: Miss R Govender (031 260 8333)

Supervisor: Mr A Bozas (082 334 4477)

Research Office: Ms P Ximba (031 260 3587)

CONSENT

I_____ (full names of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project. I understand that I am at liberty to withdraw from the project at any time, should I so desire.

_____ _____

Signature of Participant Date

This page is to be retained by researcher

APPENDIX 2: QUESTIONNAIRE

Section A: Demographics - Please cross (x) the appropriate box

Note: Questions 1 to 5 below are for statistical purposes only.

1. Gender:

Female	Male

2. Age:

18 – 20	21 - 23	24 – 26	Above 26

3. Race:

Black	Coloured	Indian	White	Other (Please specify)

4. School:

Acc, Econ and Finance	Chemistry and Physics	GSB&L	Health Sciences	Life Sciences	Maths, Stats and Comp	Man, IT and Gov	Other (please specify)

5. Level of study

1st year	2nd year	3rd year	4th year	Honours/PG Diploma	Masters/MBA	PhD/Doctoral

Section B:

1. I consume fast food during campus - please cross (x) the applicable answer/s in each row

a.	More than once a day	4 – 5 days a week	2 – 3 days a week	At least once a day	Not at all
b.	Before 10:00	10:00 – 11:59	12:00 – 13:59	14:00 – 15:59	After 16:00
c.	Because I get hungry	Because it is quick/fast	As it is convenient	Because I forget my lunch at home	Because I want to socialise

Please consider the rating scale before crossing off (x) your answer in the table that follows:

The Rating Scale				
1 = Strongly Disagree	**2** = Disagree	**3** = Neutral	**4** = Agree	**5** = Strongly Agree

Statement (Preferences)	**Ratings**				
	1	**2**	**3**	**4**	**5**
1. I prefer fast food to home cooked meals	1	2	3	4	5
2. I prefer fast food as it is readily available	1	2	3	4	5
3. I prefer to add extra items to the fast food I consume	1	2	3	4	5
4. I consume fast food as it is a family preference	1	2	3	4	5
5. I prefer fast food as it satisfies my hunger	1	2	3	4	5

The Rating Scale				
1 = Strongly Disagree	**2** = Disagree	**3** = Neutral	**4** = Agree	**5** = Strongly Agree

Statement (Factors affecting choice)	**Ratings**				
	1	**2**	**3**	**4**	**5**
6. I consume fast food based on its price	1	2	3	4	5
7. Fast food is consumed by me because I like the variety of options	1	2	3	4	5
8. I like fast food because of the availability from the outlets e.g. drive through	1	2	3	4	5
9. I consume fast food as it is convenient for me	1	2	3	4	5
10. I eat fast food because I like the taste	1	2	3	4	5
Statement (Information)	**Ratings**				
	1	**2**	**3**	**4**	**5**
11. I am aware of fast food special offers from advertisements	1	2	3	4	5
12. I am prompted into consuming fast food because of my friends	1	2	3	4	5
13. I am prompted into consuming fast food because of my family	1	2	3	4	5
14. I am aware of the nutritional content of the fast food I consume	1	2	3	4	5
15. I am aware of the calorie content of the fast food I consume	1	2	3	4	5
Statement (Trends and Patterns)	**Ratings**				
	1	**2**	**3**	**4**	**5**
16. I often bring prepared food from home for lunch	1	2	3	4	5
17. Fast food is consumed as a status element	1	2	3	4	5
18. I think fast food is easier to consume	1	2	3	4	5
19. I eat fast food out of habit	1	2	3	4	5
20. I like to eat fast food with my family and friends	1	2	3	4	5
Statement (Risk)	**Ratings**				
	1	**2**	**3**	**4**	**5**
21. I am self-conscious of the healthier fast food options	1	2	3	4	5
22. I believe that excessive amounts of fast food leads to overweight and obesity	1	2	3	4	5
23. I will choose the healthier fast food options for consumption	1	2	3	4	5
24. I think that frequent fast food consumption leads to unhealthy lifestyles	1	2	3	4	5
25. A combination of both healthy eating and exercising leads to healthy lifestyles	1	2	3	4	5

Section C: General

1. Please state any further comments/suggestions_____
_____
_____
_____
_____
_____
_____
_____
_____

Note: Should you require the results on completion of this study, kindly provide your email address:

Email Address: _____

The End

Thank you for your time and co-operation in this participation.

APPENDIX 3: GATEKEEPERS' LETTER

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

8 May 2014

Ms Ruvania Govender
School of Management, IT and Governance
College of Law and Management Studies
Westville Campus
UKZN
Email: 207505127@stu.ukzn.ac.za

Dear Ms Govender

RE: PERMISSION TO CONDUCT RESEARCH

Gatekeeper's permission is hereby granted for you to conduct research at the University of KwaZulu-Natal (UKZN) towards your postgraduate studies, provided Ethical clearance has been obtained. We note the title of your research project is:

"UKZN students' awareness of the health implications of regular fast food consumption".

It is noted that you will be constituting your sample by randomly handing out questionnaires to students on the Westville Campus.

Data collected must be treated with due confidentiality and anonymity.

Yours sincerely

MR MC BALOYI
REGISTRAR

APPENDIX 4: ETHICAL CLEARANCE PRIOR CHANGE

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

05 June 2014

Ms Ruvanie Govender (207505127)
School of Management, IT & Governance
Westville Campus

Protocol reference number: HSS/0417/014M
Project title: UKZN students' awareness of the health implications of regular fast food consumption

Dear Ms Govender,

Full Approval – Expedited Application

In response to your application dated 09 May 2014, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol have been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

.....
Dr Shenuka Singh (Chair)

/ms

Cc Supervisor: Mr Alec Boxas
cc Academic Leader Research: Professor Brian McArthur
cc School Administrator: Ms Angela Pearce

Humanities & Social Sciences Research Ethics Committee
Dr Shenuka Singh (Chair)
Westville Campus, Govan Mbeki Building
Postal Address: Private Bag X54001, Durban 4000
Telephone: +27 (0) 31 260 3587/8350/4557 **Facsimile:** +27 (0) 31 260 4609 **Email:** ximbap@ukzn.ac.za / snymanm@ukzn.ac.za / mohunp@ukzn.ac.za
Website: www.ukzn.ac.za

APPENDIX 5: CHANGE OF DISSERTATION TITLE FORM

COLLEGE OF LAW & MANAGEMENT STUDIES

Change of Dissertation Title Form to Research Office

Student Name	Ruvania Govender	No	207505127
Name of School	Management, IT& Governance	Degree	MCOM
Supervisor	Mr A Bozas		
Old Title	UKZN Students' Awareness of the Health Implications of Regular Fast Food Consumption		
New Title	Fast Foods: UKZN Westville Students' Awareness of the Health Risks and Their Consumption Patterns		
Reason for Change	The revised title is more appropriate and is more specific to the research.		

NB: The change of title has not altered the subject matter or content of the dissertation in any way

Signature of Student..... Date 25 April 2017

Signature of Supervisor..... Date 25th April 2017

Signature of Academic Leader: ..... Date 25/4/2017

Signature of Academic Leader: Research..... Date 3-5-2017

College of Law & Management Studies

APPENDIX 6: FINAL ETHICAL CLEARANCE

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

23 May 2017

Ms Ruvania Govender (207505127)
School of Management, IT & Governance
Westville Campus

Dear Ms Govender,

Protocol reference number: HSS/0417/014M
New project title: Fast Foods: UKZN Westville students' awareness of the Health Risks and their consumption patterns

Approval Notification – Amendment Application

This letter serves to notify you that your application and request for an amendment received on 03 May 2017 has now been approved as follows:

- Change in Title

Any alterations to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form; Title of the Project, Location of the Study must be reviewed and approved through an amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for period of 3 years from the date of original issue. Thereafter Recertification must be applied for on an annual basis.

Best wishes for the successful completion of your research protocol.

Yours faithfully

.....
Dr Shenuka Singh (Chair)

/ms

Cc Supervisor: Mr Alec Bozas
cc Academic Leader Research: Professor Brian McArthur
cc School Administrator: Ms Angela Pearce

Humanities & Social Sciences Research Ethics Committee
Dr Shenuka Singh (Chair)
Westville Campus, Govan Mbeki Building
Postal Address: Private Bag X54001, Durban 4000
Telephone: +27 (0) 31 260 3587/8350/4557 **Facsimile:** +27 (0) 31 260 4609 **Email:** ximbap@ukzn.ac.za / snymanm@ukzn.ac.za / mohunp@ukzn.ac.za
Website: www.ukzn.ac.za

APPENDIX 7: TURN IT IN REPORT

Turnitin Originality Report

Dissertation Final Draft by Ruvania Govender

From Masters Thesis (Masters)

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