ASHESI UNIVERSITY COLLEGE

A behavioural economics approach to understanding the marketing behaviour of Ghanaian Telecommunication companies

UNDERGRADUATE THESIS

by

Henrika Muthoni Yaa Amoafo

Undergraduate Thesis Project Report submitted to the Department of Business Administration, Ashesi University College in partial fulfilment of the requirement for the award of Bachelor of Science degree in Business Administration

April 2019

Supervised by Dr. Stephen Armah

DECLARATION

I hereby declare that this dissertation is my original study and that none of its part has been presented for another degree in this university or elsewhere.

Candidate's signature:.........................

Candidate's name: Henrika Amoafo

Date: 23/04/2019

I hereby declare that the submitted dissertation and presentation of it were supervised in accordance with the guidelines on supervision of thesis laid down by Ashesi University College.

Supervisor's signature:.................................

Supervisor's name: Dr. Stephen Armah

Date: 23/04/2019

ACKNOWLEDGEMENTS

I would like to thank God first and foremost because he carried me through this project and without Him it would not have been done. Seriously. I would also like to thank Dr. Armah for always providing clarity, quieting my fears and reassuring me throughout the process of writing this thesis. I thank my parents for the constant support and belief, and my friends Christine Buckle, Adeline Quaye-Foli, Kalyssa Owusu, Delasi Dafeamekpor, Adeline Teye-Botchway, Albert Ato Cole and everyone else for being my cheerleaders and unwavering support system throughout this trying process.

ABSTRACT

Although studies have been done within marketing that discuss the behaviour of consumers that are both rational and irrational, application of behavioral economics biases to consumer behavior in developing countries may be rare but more common in the context of the developed world (Guhl et al, 2017). Ho, Lim and Camerer (2006) found that despite the fact that economics and psychology have historically been essential in the study of human behaviour, there has been no study that documents empirical findings specifically for this field (Guhl et al, 2017).

Few studies, at least in the Ghanaian context have investigated the interrelationships and differences between the principles of marketing and behavioral economics biases in terms of how they explain consumer behavior. Additionally, standard economics and behavioural economics are often pitted against each other in discussions as opposed to being studied comparatively. Marketers and Economists could both benefit from infusing more behavioral economics concepts into their fields.

This study sought to identify the key factors that affect marketing strategies of Ghanaian Telecommunication companies and identify whether they are more in line with the statutes of standard economics or behavioural economics. The study also provides more theory of behavioural economics for marketers to incorporate while showing that economists can also benefit from following developments in marketing.

Findings from previous studies were used in this study. Guhl et al used Della Vigna's classification of behavioural biases and marketing concepts and this was the foundation of this study. relevant examples from market research and marketing lab experiments to arrive at conclusions of human behaviour and how consumers and firms interact.

The findings are significant because they provide more theory for marketers to use, as well as showing that the biases identified in marketing are the same as the ones in economics and addressing the issues together can help both parties to enrich their fields.

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION

1.1 Overview and Background

Understanding the way that consumers think and what it is that they need is the core of marketing. Marketing deals with how to communicate the value a firm delivers to the consumer and how it meets the consumers' needs. In comparison, Behavioural Economics attempts to understand the way that human beings actually think and make decisions, what influences these decisions, and how to better structure organizations, communities and how people can make better daily decisions based on the factors that influence them.

A possible difference between economics and marketing as independent theories is the fact that while marketers consider the consumer as an individual and try to deliver value to them based on their idiosyncratic characteristics, economists tend to dehumanize the individual. Marketers hone in on what motivates the individual from his own perspective: background, psychology, general philosophy and beliefs. In comparison, in the world of the economist, the individual does not matter: if marginal benefit exceeds marginal cost then the agent will produce one more or consume one more irrespective of the name or the specific identity of the consumer; the minimum criterion being that the said consumer is rational. Economic theory therefore side-steps psychological analysis of the individual in predicting the action the agent will take (Nagel, 1963).

Behavioral economics has emerged as a branch of economics that in a similar manner to marketing focuses on the individual to predict action. Behavioral Economics attempts to understand the way that individualistic, identifiable, human beings actually think and make decisions, what influences these decisions, and how to better structure organizations and communities to deliver value. It focuses and on how to make better daily decisions based on the factors that influence them. Nathan Novemsky of the Center for Customer Insights states that one of the most important insights in understanding consumer choice is to know that consumers make choices intuitively rather than deliberately (Novemsky, 2014). Understanding this and viewing issues such as this through behavioural economics helps marketers understand why their strategies are effective or not and how they can be improved.

Standard Economic Theory or neoclassical economics operates under several assumptions. One assumption is that human behaviour is rational and that humans seek to maximize outcomes for themselves based on their preferences, while acting within their resource constraints (Nagel, 1963). A main assumption that Economic Theory is based on is that there are limited resources for an unlimited amount of wants. Due to the unbalanced nature of preferences and resource constraints, economists are forced to make tradeoffs. This means that humans must choose what is most valuable to them based on the rational choices of maximizing their outcomes.

Economic Theory assumes that individuals make choices independently of one another; but may come to the same or different conclusions based on a judgement of benefits over costs. In contrast, the psychology behind marketing and behavioural economics identifies that this is not the case and seeks to identify the factors that govern human choice making more realistically. Economics does recognize that there are different types of markets and in markets where there is limited power on the side of the seller or where there is significant market power on the side of the buyer, the consumer has the freedom and the power to influence the content that companies put out that is targeted at them. In the presence of market asymmetries such as in a developing country like Ghana, this may not be the case.

The standard economic assumptions have been challenged in recent years by the theories of behavioural economics that have foundations in psychology. Studying the different ways in which the assumptions of standard economics and the biases in behavioural economics explain phenomena is the purpose of this paper. The assumptions and theories will be studied within the context of consumer behaviour and marketing strategies of telecommunication companies in Accra, the capital of Ghana.

1.2 Problem Statement

The study of consumer behaviour has long been part of marketing philosophy. Studies have been done within marketing that discuss the behaviour of consumers that is not rational, although the language of behavioural economics biases may not have been used but the principles were described (Guhl et al, 2017). However, there are few studies that have been done that look at marketing and behavioural biases and how they coincide or diverge. Additionally, standard economics and behavioural economics are often pitted against each other in discussions as opposed to being studied comparatively. The heuristics, biases and arguments put forth by behavioural economics have not been used as an alternative way of determining what influences the way that companies' market, the way this marketing is received, and whether consumers have a say in this marketing.

The Telecommunications industry in Ghana is one that is service-centric and yet their consumers are not as influential as they should be when it comes to the content that is put out. This study seeks to investigate how the behavioral economics biases explain consumer behaviour compared to standard economic assumptions, or if other factors play a bigger role. It is a comparative study of how the different forms of Economics would describe the same situations to identify if there are big discrepancies within the theories or if there is a lot of overlap in how phenomena are explained. The overarching goal is to provide ways that behavioural economics theories can be used to strengthen the way that companies carry out market research. Additionally, the telecommunications industry is a large part of Ghana's wealth, and this makes understanding how the industry can grow through more of a connection with their consumers important for the overall development of the field and of the country.

The problems that this paper seeks to explore and understand can be summarized in these questions:

1.3 Research Questions

1. What behavioural economics biases/heuristics can be used to better marketing research in the Telecommunications industry in Ghana?

2. How do behavioural economics and standard economics both explain the marketing strategies and consumer behaviour of Telecommunication companies? How do the explanations compare?

1.4 Research Objectives

1. To identify the behavioral economics biases that can be used to better market research within the Ghanaian Telecommunications industry.

2. To compare how the strategies used by Ghanaian Telecommunication companies are explained by both behavioral economics biases and standard economics.

1.5 Theoretical Framework – Marketing and Behavioural Economics

The overarching theory that this study employs is behavioral economics. The biases in behavioural economics are looked at through the Marketing lens in this study, as a means to understand the strategies used in Marketing. Richard Thaler defines Behavioural Economics as a study that challenges the neoclassical paradigm by providing ample evidence that individual decisions are often systematically biased and do not confirm the forecasts of the standard theory. Behavioural biases provide the foundation as well as the link between standard economics ideas and marketing principles. Studies done to test these biases and the implications they have for human behaviour are examined through experiments and form the basis for this study.

Della Vigna's (2009) conceptual framework of behavioural biases is used as a main foundation for this study. The framework classifies the biases based on the different deviations from the neoclassical model (Rabin, 2002). The three main classifications are non-standard preferences, non-standard beliefs, and non-standard decision-making (shown in Figure 1).

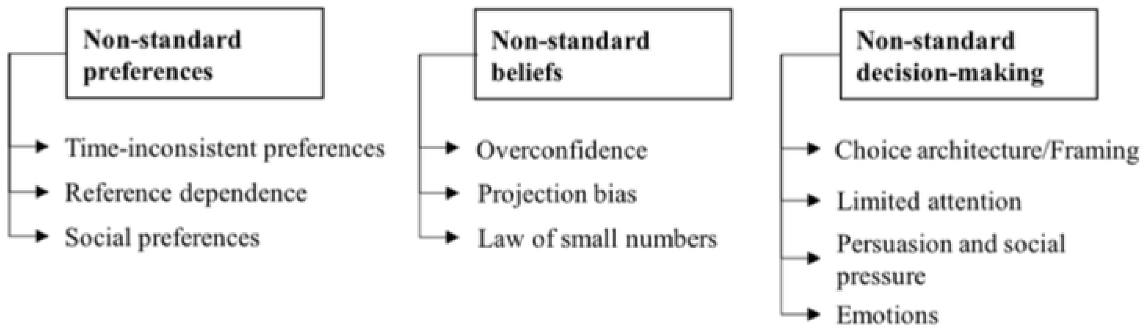

Figure 1: Three classes of behavioural biases

Non-standard preferences refer to deviations regarding the utility function of standard economic assumptions (Della Vigna 2009; Rabin 2002). Kahneman and Tversky (1979) provided evidence showing that the utility function is defined relative to a reference point that determines what gains and losses are. Non-standard beliefs, the second class, is built upon empirical evidence that suggests that consumers form incorrect belief systems and do not behave as rational information processors (Della Vigna 2009; Rabin 2002). These biases are usually based on overconfidence. The third deviation is non-standard decision making and this stems from the assumption of utility maximization. Rationality theories suggest that decisions are not impacted by the environment or the way in which options are presented to consumers, however, research in choice architecture states that these factors do affect choices (Thaler, Sunstein, and Balz 2013). There have been several studies conducted that show the strength of framing effects.

Guhl et al (2017) make clear that while they largely follow the Della Vigna (2009) model, it is important to note that the three classes are often interrelated. For example, emotions may affect other biases such as social preferences or non-standard decision making may be induced by persuasion (Della Vigna, 2009).

1.6 Purpose of the Research Study

The purpose of this research is to understand and further explain how marketing can benefit from incorporating behavioural economics. It also seeks to find out whether Ghanaian consumers have a significant influence on how companies' market. This study also seeks to understand the key factors that influence the marketing strategies of Ghanaian companies, particularly telecommunication companies and to see of behavioural economics can explain these strategies. This study will identify the ways in which market research can be enriched by behavioral economics and shows how behavioural economics concepts strengthen standard economics. This study will also satisfy my curiosity in seeing how behavioural economics can be applied to different real-life situations beyond the lab experiments done by economics and psychology professors.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter reviews existing literature that is relevant to the research objectives. It is divided into sections. The first talks about the telecommunication industry in Ghana and the role of consumer sentiments play. The next section discusses marketing and behavioural economics. The main elements of behavioral economics and standard economics are juxtaposed and the intersection of the two concepts are identified.

2.2 Telecommunications Industry

Telecommunications is a user-centric industry in which customer satisfaction and customer loyalty are large competitive factors. While researchers have proposed that maintaining customer satisfaction is a way to ensure customer loyalty, service providers still struggle to find means by which to maintain customer loyalty (Schultz & Block, 2015). Due to the fact that the industry is very competitive, understanding what influences customer loyalty is important for mobile network operators. In her study on what factors influence mobile service satisfaction and customer loyalty, Harriet Mate-Kole found that companies tend to compete based on pricing strategies such as lower call rates and bonuses (Mate-Kole, 2018). This need to further understand customer sentiments and loyalty can be aided by incorporating behavioural economics biases such as the default bias which refers to the fact that people tend to choose the simplest option to avoid complex decision making, or the use of gamification which states that people enjoy games and will go great lengths to participate even if all they win is points (Ariely, 2008). These are but a few of the concepts that if marketers understood could help with more means of retaining customer loyalty.

Ghana has been a pioneer when it comes to Telecommunication in Africa. Ghana was the first to launch the first cellular mobile network in sub-Saharan Africa in 1992, it was among the first countries on the continent to be connected to the Internet and to introduce ADSL broadband services, and it led the way in market liberalization and deregulation when it privatized Ghana Telecom (GT) as early as 1996 (Ghana National Commission for UNESCO). The Ministry of Communication runs this sector in Ghana and The National Communications Authority (NCA) is in charge of regulating all communications done within the country as well as being Ghana's main communications agency internationally (GNC for UNESCO).

Since then, Information and Communication Technology (ICT) has grown immensely. The services that telecommunication companies in Ghana offer has expanded from simply connecting people to catering for payment solutions through partnerships with financial institutions and retailers to offering data storage and communication solutions to businesses (Ghana Web). There are about nine telecommunication companies operating in Ghana, however, only four of them have a majority of the market share. These four are MTN Ghana, Airtel Ghana, Vodafone Ghana, Tigo Ghana and Gateway Communications. Airtel and Tigo recently merged to form AirtelTigo.

Mobile Telephone Network (MTN) which is a multicultural company has its headquarters in South Africa and currently controls a majority of the market currently with 59.74% of the market share (NCA). Vodafone entered the Ghanaian market after the government sold Ghana Telecommunication (Armah, 2014). After the acquisition of Zain in 2011, Airtel joined the Ghanaian market. After the merge of Airtel and Tigo, they are now the second largest in the country with 23.21%, and Vodafone which was previously second is now third with 16.09% (NCA, 2018). According to the National Communications Authority (NCA), the total subscriptions of 2G/3G data was approximately 26 million with a penetration rate of 88.84% at the end of December 2018. The total number of voice subscriptions was approximately 41 million across all the networks, and the penetration for that month was 138.88%. More evidence of the growing ICT sector is seen through its growing use outside of pure communication use.

According to Dr. Stephen Armah, Information technology is also helping to enhance market access in Ghana, with the prime example being the "mobile money" concept. Stories of how "mobile money" is boosting commerce abound and are encouraging (Armah, 2014). This is beyond evident as seen through the fact that mobile money (GHc 233 billion) overtook cheques (GHc 203 billion) as Ghana's largest payment system in 2018 at an average exchange rate of 5.07. The Telecommunication industry is one of the fastest growing sectors in Ghana (GDP Newsletter).

2.3 Marketing

The definition of marketing has evolved over the years and has come to mean different things within different contexts. In 2004, the American Marketing Association's definition of marketing was:

"Marketing is an organizational function and a set of processes for creating, communicating, and delivering value to customers and for managing customer relationships in ways that benefit the organization and its stakeholders" (AMA, 2004).

This definition garnered much attention from marketing practitioners and scholars, both positive and negative. Some of its criticisms were that calling it "an organizational tool" made it too narrow and left out many of its uses and users. Due to this and other factors, the AMA redefined the term in 2007 as such:

"Marketing is the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large." Christian Grönroos of the school of Economics, Helsinki writes about the marketing mix and how it was defined in North America based on the conditions in North America. He argues that although the Marketing Mix has been used in Europe, there has been no theory or model developed for European conditions (Grönroos, 1990). He also adds that the marketing concept has been used for other purposes and products for which it was not intended based on its current definition.

2.3.1 History of Marketing

Prior to the development of marketing in the 1900s, the issues that are now under marketing were classified as being under economics or were not pursued due to the lack of vocabulary to speak about them. This is especially true for areas such as customer purchase behavior. Marketing developed as the need to understand the relationship between buyers and sellers grew.

During the 1900s, technological and scientific innovation led to the separation of production and consumption activities. The development of transport infrastructure and the growing mass media meant that producers could better manage the distribution of goods. There were three main eras of marketing, which are the production orientation, sales orientation and the marketing orientation eras (Araujo, 2007). We briefly identify them below:

Production orientation era: 1860s-1920s

Producers sold whatever they produced and could distribute at the lowest cost and that consumers could afford to purchase.

Sales Orientation era: 1950s and 1960s

During this phase, competition increased, and the focus shifted to selling. Due to the fact that the market was more saturated with competition. This also meant that communications, advertising and branding became more important to the selling process.

Marketing Orientation era: 1960s

This period is from the 1960s onwards. Competition was at an all-time high and marketers play a more key role in the companies at a strategic level than they previously did and is similar to what marketing looks like today. They inform production, selling and distribution in an organization. Marketers try to understand consumer needs, present and future, and help the organization to best meet them. Marketers turned to the customers to find more ways to progress and arrived at the knowledge that understanding the customer and their needs was the best way to succeed. This came to be known as the Marketing Concept and is widely used today.

In his work *Defining Marketing: A Market-Oriented Approach* Grönroos states that according to the marketing concept, firms should base their strategies on the needs and wants of customers within their target market while also taking into account the restrictions of the environment within which they operate (2006). The marketing concept is in line with the market-oriented view more than that of the production orientation view, which is centered more around the production process.

At the heart of marketing is the Marketing Mix. Kotler and Armstrong (2010) state that the "marketing mix is the set of controllable tactical marketing tools – product, price, place, and promotion – that the firm blends to produce the response it wants in the target market."

Grönroos states that this marketing model that is widely accepted and used throughout the Western world was developed in North America. While this marketing model covers a variety of situations, there does not exist a European marketing theory that is specific to European conditions, when there should be. The argument put forth is that the definition of Marketing as “the process of planning and executing the conception, pricing, promotion and distribution of ideas, goods and services to create exchange and satisfy individual and organizational objectives” does not consider what the customer wants. While this is why market research is carried out, the research is largely within the existing definition (Grönroos, 1989). This paper does not seek to debate the definition of marketing, but simply to point out that marketing as it currently stands could benefit from behavioural economics to better understand and incorporate the view of the consumer. Doing so would support Grönroos' idea that “at the core of marketing is customer relations and ensuring that individual and firm objectives are met.” (Grönroos, 1989).

Marketing is usually spoken about in the Western context. Darley and Blankson in their work titled *African culture and business markets: implications for marketing practices* discuss the ways that African culture and its nuances affect business marketing practices. Their findings are important for international marketers who would seek to operate in African markets as well as responding to previous research that suggested that further study should be done on the effect culture has on marketing and the implications that arise in the world's markets that are increasingly globalized (Darley & Blankson, 2008). They found that the implications of African culture had largely been left out of market research. Beyond finding things such as Africans valuing reciprocity and that respect for elders is used as a guiding principle, Darley and Blankson use the cultural theories of Kluckhohn and Strodtbeck (1961) and Hofstede (1980) to provide a summary of African culture. While Kluckhohn and Strodtbeck theory breaks down five cultural orientations that are common to all human groups, Hofstede's cultural dimensions examine African culture specifically (Darley &

Blankson, 2008). Hofstede's cultural dimensions are more relevant to this study as they contain elements of the biases in behavioural economics.

The dimensions Hofstede conceptualized are power distance, individualism-collectivism, uncertainty avoidance and masculinity. Power distance refers to the way that power is dealt with within a society and how inequality among individuals is navigated. Where authority is an essential part of holding a position in a hierarchy, the culture is said to be a high-power distance culture. Hofstede (1996) found that most sub-Saharan African societies value power greatly which is seen from the fact that "East Africa and West Africa scored 64 and 77, respectively, compared with 40 for the USA (Hofstede, 1980, 1983)." Individualism-collectivism is about the needs of the individual and the needs of the group and how they are ranked in importance. Collectivistic societies place higher value on the needs of the group and Hofstede found that this was the case for most sub-Saharan societies due to the central role the extended family plays in many African cultures (Munene, 1996). In Hofstede's test, East Africa scored 27, West Africa 20 and the United States 91 (Hofstede, 1980).

Uncertainty avoidance, as the name indicates, is the measure of how much a society dislikes ambiguity in situations. Cultures with high uncertainty avoidance prefer routine and set structures while those with low uncertainty avoidance exhibit positive responses to change (Darley & Blankson, 2008). Hofstede's 1980 and 1983 survey found that East Africa scored 52, West Africa scored 54 and the United States 46, indicating that most African countries have high uncertainty avoidance. This particular theory is the same as Kahneman and Tversky's theory of loss aversion within Behavioural Economics. Loss aversion is the concept that states that losses loom larger than gains for human beings. The final dimension of Masculinity-femininity is about traditional values attributed to female and male orientations. Ambition and achievement are attributed to men and "interpersonal harmony and nurturance" are attributed to women and are emphasized in some societies (Darley & Blankson, 2008). This particular dimension holds less relevance to the study and as such will not be discussed.

Hofstede's dimensions are useful for business marketing in that they affect the areas of organizational behaviour, buyer-seller interactions, collaborative partnerships and negotiations, all of which can be made better by incorporating behavioural economics. Culture determines the way that people interact and what they prioritize in an organization. African cultures promote Ubuntu, which states that one should help others in order to help oneself, and the principle of reciprocity. These principles can be seen in Management policies that utilize the authority of positions in hierarchies, acknowledge religiosity and social thought and that recognize the importance of routine and structure (Darley & Blankson, 2008).

A central part of business marketing is the relationship between buyers and sellers and the ability to make these relationships last long-term (Kalafatis, 2000). Interactions on the global scale are influenced by culture and as such it is important for international marketers to understand African ideals in order to function within African business markets. Areas such as non-verbal communication need to be given more attention for more successful interactions. The study concluded that companies seeking to do business in Africa should pay closer attention to the cultural nuances and to how Africans make sense of social contexts (Darley & Blankson, 2008). These are lessons that marketers in the Telecommunication industry in Ghana can incorporate into their operations to better understand consumer behaviour.

2.4 Behavioural Economics

Behavioural Economics is defined as "the study of the emotional and psychological influences on decision making (Behavioural Economics, 2016)." It examines the theories behind why supposedly rational beings make economic decisions, paying special attention to decisions that may be contrary to their best interest. According to Dan Ariely, a professor of psychology and behavioural economics and is an authority in the field, the underlying theory of behavioural economics is that many of the drivers behind human behaviour are universal and are not rational as standard economic theory presumes (Ariely, 2008).

2.4.1 A Brief History of Behavioral Economics

In the 1960s, Daniel Kahneman and Amos Tversky began to assess how human beings behave differently than "Homo Economicus" the typical selfish, utility-maximizing individual, identified in economic theory would in a broad array of situations. They did this through choosing a variety of situations, studying how economists say humans will behave, and proving it wrong. They found that humans are not Bayesian agents and instead, humans do not evaluate situations as independent occurrences, they have random reference points, and desire to maintain the status quo. Later on, economists like Richard Thaler and Ernst Fehr began to question the fundamentals of some of the theorems in economics. Thaler found faults with the Endowment Effect while Fehr did a lot of research and found that humans are more social beings and care more about other humans than Homo Economicus does (Lowenfeld, 2017).

At the time of behavioral economics inception, the discoveries were very new and groundbreaking. In today's context, the findings of Kahneman and Fehr would be considered as things one's mother would know, but economists did not (Lowenfeld, 2017).

Standard economists, such as Milton Friedman, were opposed to what they perceived to be an attack on neoclassical economics, but this did not dissuade these researchers. They then began to search for patterns in the diversions from Economic Theory in order to formulate an alternative to Homo Economicus. While Kahneman and Tversky brought forth many new theories, the most notable is Prospect Theory which highlights the most distinct features of human decision-making. It would be the Carlil v. Carbolic case of Behavioral Economics as it covers most of the basic concepts. It states that humans evaluate a possible scenario with respect to some reference point rather than evaluating its desirability on a stand-alone basis, that humans are loss averse (Lowenfeld, 2017).

Other theories to note are that people have self-control issues and that human beings are more socially-minded than selfish, which is in contradiction to what Homo Economicus would say, and this behavior is in line with the Fehr-Schmidt model of inequity aversion. In modern day, Behavioral Economics is no longer uncharted territory or a field that only outsiders dabble in. Richard Thaler and Daniel Kahneman have received Nobel prizes for their work and Richard Thaler served as the president of the American Economic Review in 2015 where previously he struggled to get permission to publish his work in economics journals.

Behavioral Sciences have become so mainstream that the British government set up a Behavioural Insights Team (BIT) in 2010. This serves as evidence to the fact that behavioural Sciences can be used to create more effective human centric policies (Lowenfeld, 2017).

In line with informing policy around the world, Behavioral Economics provides insights into how individuals make decisions. The theories that outline issues around self-control can be used to understand by governments to understand why people struggle to save for their pensions. The Fehr-Schmidt theory on inequality aversion can provide insights into social interactions (Fehr-Schmidt, 1999), while Prospect Theory covers a vast array of issues from the endowment effect to biases around finance and wins and losses (Kahneman, 1979).

Despite all the positive additions Behavioral Economics has made to the field, it falls short in a few areas. It has not been able to successfully come up with an alternative to Homo Economicus, which is one of the goals that Richard Thaler and his contemporaries undertook. Lowenfeld (2017) notes that a criticism that is often voiced is that Behavioral Economics is still a disjointed collection of models that explain different facets of economics but are not synthesized (Lowenfeld, 2017).

A difference between standard economics and behavioral economics is in how the models can be applied. The concepts in standard economics can and have been applied to a wide range of issues and situations, while those in Behavioral Economics cannot, as human behavior is very specific and thus the theories are also very specific. While specificity can be a strength, this criticism is right in drawing attention to the fact that Behavioral Economics has not yet been broadened from an individual to the world economy (Lowenfeld, 2017).

On a macro-scale, behavioural economics looks at how market decisions are structured and what forces drive public choice. While Amos Tversky explored and researched a wide array of phenomena, his most significant additions to current knowledge were about heuristics and biases and Prospect Theory (Laibson & Zeckhauser, 1998). Heuristics are cognitive shortcuts or rules of thumb that people choose because they simplify decisions and they demonstrate how people substitute difficult questions with simpler ones (Kahneman, 2003). A few major heuristics that apply to many different situations are availability, representativeness and anchoring. Prospect Theory questions Expected Utility Theory in classical economics.

According to Dan Ariely, a professor of psychology and behavioral economics who is an authority in this field states that the underlying theory of behavioral economics is that many of the drivers behind human behavior are universal and are not rational as standard economic theory presumes (Ariely, 2008). Other scholars such as Richard Thaler joined the conversation and questioned theorems that formed the foundation of economics. Standard economics makes the assumptions that people are wholly rational beings who always work in their self-interest, and these conclusions form the base for how institutions should be built and how people should behave. Behavioural economics puts people in different situations and observes how they actually behave without assumptions (Ariely, 2008). Richard Thaler juxtaposes actual human behaviour with that of the ‘Homo Economicus’ that economists have based their frameworks on. Referring to them as the ‘Econs,’ he says that they are highly intelligent beings that are capable of putting together very complex equations but are completely lacking in emotions (Thaler, 2015).

Behavioural Economics relies heavily on testing the proposed theories. Kahneman and Tversky spent a lot of research time conducting trials and experiments to see what the classical economic theory prediction was, and proving them wrong (Loewenfeld, 2017). Dan Ariely’s book *Predictably Irrational* includes experiments that he carried out in the process of his research with some of the world’s most brilliant minds at MIT and other Ivy League institutions. Despite their perceived brilliance, they all displayed the same irrational thinking (Ariely, 2008).

Richard Thaler, an American economist and the author of *Nudge* and *Misbehaving*, books that explain different aspects of behavioural economics states that “Behavioral Economics challenges the neoclassical paradigm by providing ample evidence that individual decisions are often systematically biased and do not confirm the forecasts of the standard theory. The “behavioral biases” discussed refer to deviations from the standard, neoclassical model that assumes that people are rational and have stable preferences, maximize expected utility, exponentially discount future utility, process information rationally, and are purely self-interested (Thaler, 2011).

Dan Ariely explaining Behavioral economics in his book Predictably Irrational stated that behavioral economics is an empirical and non-idealistic way to start looking at human behavior. Because it is found that people behave irrationally it often leads to different conclusions about how companies should be created, what the government should do, and how people should behave (Ariely, 2008).

2.4.2 Use of Behavioural biases in marketing

Guhl et al., discuss several studies that have been done that point out the non-rational behaviour that consumers display even though they may not always be labelled as behavioural biases (2017). They broke down their findings into three categories of deviations from rational decision-making, and the categories are non-standard preferences, non-standard beliefs, and non-standard decision- making. They analyzed specific biases in the context of each of the components of the marketing mix -product, price, place and promotion.

The first behavioural bias is non-standard preferences which deals with deviations of the utility function. This mainly states that the outcomes of events that are closer in the future are discounted more steeply than those that are farther away. This is known as "hyperbolic discounting" (Urminsky and Zauberman 2016). Kahneman and Tversky (1979) proved that the standard economics assumption of rational agents maximizing global utility is wrong, and instead showed that the utility function is actually defined by a reference point that determines what is a gain and what is a loss for the individual.

Guhl et al (2017) combined the marketing instruments and the biases within each classification of deviations and showed the marketing topics that are covered under each area. Table 1 below shows this breakdown.

			Marketing Topic
Product	Non-standard preferences	Time-inconsistent preferences	Utilitarian vs. hedonic product choice Durable product adoption
		Reference dependence	Extended warranties Product insurance Endowment effect Return policy
		Social preferences	Fair trade labeling
	Non-standard beliefs	Overconfidence	New product adoption
		Projection Bias	Remote purchases Durable goods purchases
		Law of small numbers	Investment decisions
	Non-standard decision making	Choice architecture/Framing	Package labeling Delivery option Local choice context Preference for “all average” Product line design
		Limited attention	Information overload Consideration/choice set construction Inattention to attributes Left-digit bias
		Persuasion and social pressure	Peer effects
		Emotions	Branding

Price	Non-standard preferences	Time-inconsistent preferences	Quantity discounts Consumption impulses
		Reference dependence	Reference prices Price sensitivity Price-quality heuristic
		Social preferences	Pay What You Want Charitable giving Price fairness
	Non-standard beliefs	Overconfidence	Tariff choice
		Projection Bias	Usage prediction Habit formation
		Law of small numbers	Store image
	Non-standard decision making	Choice architecture/Framing	Price presentation Price promotion Partitioned prices
		Limited attention	Price knowledge
		Persuasion and social pressure	-
		Emotions	Bidding behavior
Place	Non-standard preferences	Time-inconsistent preferences	Impulse buying
		Reference dependence	Endowment effect Need for touch
		Social preferences	-

	Non-standard beliefs	Overconfidence	Online search
		Projection Bias	-
		Law of small numbers	-
	Non-standard decision making	Choice architecture/Framing	In-store marketing Store layout Recommendations Search cost Ranking effects Channel effects
		Limited attention	-
		Persuasion and social pressure	Social influence
		Emotions	-
Promotion	Non-standard preferences	Time-inconsistent preferences	Sweepstakes and lotteries Hedonic consumption
		Reference dependence	Probabilistic rewards Frequency (loyalty) programs Reward structure of sweepstakes
		Social preferences	Charitable giving Direct marketing Sales force incentives
	Non-standard beliefs	Overconfidence	Probabilistic promotion Delayed promotion Redemption slippage
		Projection Bias	-
		Law of small numbers	Casino gambling

Non-standard decision-making	Choice architecture/Framing	Redemption rates Comparative advertising
	Limited attention	Feature advertisement
	Persuasion and social pressure	Exaggerated claims Anecdotal claims
	Emotions	-

Table 1: Overview of Behavioral Biases and Marketing Keywords

2.5 Standard Economics assumptions

Ernest Nagel defines an economic theory as a set of statements, organized in a characteristic way, and designed to serve as partial premises for explaining as well as predicting an indeterminately large (and usually varied) class of economic phenomena (Nagel, 1963).

Assumptions are one of the sub-categories of statements that fall under this definition of a theory. Assumptions are defined as the basic hypotheses upon which a theory is built (Nagel, 1963). These assumptions enable economists to break down complex processes to arrive at a theory that they can then apply to other complex situations. The first assumption is that humans have rational behaviour and that humans seek to maximize outcomes for themselves based on their preferences, while acting within their resource constraints. One of the main assumptions that Economic Theory is based on is that there are limited resources for an unlimited amount of wants. Due to the unbalanced nature of preferences and resource constraints, economists are forced to make tradeoffs. This means that humans must choose what is most valuable to them based on the rational choices of maximizing their outcomes (Nagel, 1963).

Economic Theory assumes that individuals make choices independently of one another whereas Behavioural Economists states that humans make decisions within a social context. This means that humans are influenced by social preferences, identities and norms which would negate the independent agent choice stated within Standard Economic Theory.

2.5.1 Intersection of Behavioural Economics and Standard Economics

In *The Theory of Moral Sentiments,* Adam Smith argues that despite the fact that selfish desires would play a large role in the way humans behaved, the “moral sentiments” would keep people in line. He emphasized that people would act out of self-interest, but for the good of larger society and community and for public interest (Smith, 1759). This aligned more with the behavioural economics view of humans being heavily influenced by their social context leading to heuristics and biases such as Herding and Social Proofing. This concept is echoed further in the Fehr-Schmidt theory on social interaction that shows people are averse to inequality (Lowenfeld, 2017).

Ashraf, Camerer and Loewenstein show that Adam Smith discussed behavioral economics concepts in *The Theory of Moral Sentiment* long before Daniel Kahneman and his contemporaries (Ashraf et al, 2005). Smith argued that human behaviour was governed by the battle between what he termed “passions” and “the impartial spectator.” The Passions included drives such as hunger or anger. He also believed that humans could overcome these drives through the “impartial spectator who sort of looked over the shoulder of the economic man.” In their work *Adam Smith, Behavioral Scientist,* Ashraf et. al find that Adam Smith’s perspectives were very similar to modern day behavioral economics theories based on studies of brain functions (Loewenstein and O’Donoghue, 2004).

Smith’s work also projected insights about biases such as loss aversion, willpower and fairness, which are focuses of behavioral economics today (Camerer and Loewenstein, 2004). Of loss aversion Smith said, “Pain . . . is, in almost all cases, a more pungent sensation than the opposite and correspondent pleasure." Modern research from brain imaging has shown that gains and losses are processed in different parts of the brain (Hornak and Andrews, 2001). There is a wide range of literature which shows that loss aversion has effects on asset returns (Benartzi and Thaler, 1997), labor supply (Loewenstein and Thaler, 1997), the reluctance to sell stocks and the discrepancy between selling and buying prices (Kahneman, Knetsch and Thaler, 1990).

Overconfidence is the phenomena where everyone thinks they are better than they are and that they are above average. Of this concept Adam Smith said that "the chance of gain is by every man more or less over-valued, and the chance of loss is by most men undervalued." What Smith termed as "overweening conceit which most men have of their own abilities," modern behavioural economics calls "hubris" and it is responsible for the loss of many business mergers (Camerer, 1999).

2.6 Gap in the Literature

Literature about how behavioural economics and marketing interact is scarce, particularly in the African context. Literature about how the biases can explain how consumers react to different aspects of marketing and advertising and whether they have influence on the content that is put out in Ghana is even more scarce. The studies that have been done were mostly quantitative while this research will be done through secondary analysis of qualitative data to provide context for what has previously been studied, the theories in existence to provide a foundation upon which more market research can be done in Ghana. This study is also comparative of the two fields of economics and assesses how they explain different phenomena occurring in the telecommunication industry with regards to consumer behaviour and marketing strategies. This has not been done within the Ghanaian context and this research would be filling that gap. Additionally, it displays the practical side of Behavioural biases within an African context which brings new knowledge to the field.

CHAPTER 3: METHODOLOGY

3.1 Introduction

The main objective of this research is to show that the study of behavioural economics can inform the study of marketing and can help marketers to better understand consumer behaviour and to plan for it. The Telecommunications industry in Ghana is used as a case study for the suggestions and findings from secondary research. We seek to find out how Ghanaian consumers can have a significant influence on how companies carry out their marketing. Within this were two main objectives. The first was to find out what behavioral economics concepts can be used to better marketing research in the telecommunications industry. The second one was whether the strategies used by Ghanaian Telecommunication companies are better explained by behavioural economics biases or standard economics. This chapter spells out the research methods used to collect this data and how the information found achieves the goal of the study.

3.2 Research Design

The purpose of a research design is to map out the way that the research questions will be answered. The methods, procedures and resources used are documented for this purpose.

This research was carried out using a Qualitative Secondary Analysis approach (hereafter referred to as QSA). The qualitative research seeks to deeply understand the phenomenon or a social issue by getting a rich in-depth understanding of the research topic (Vanderstoep & Johnson, 2009). This is an exploratory study as it seeks to understand the key factors that affect advertising and marketing by Ghanaian companies and how behavioural economics can enrich marketing, as well as how behavioural economics explains these methods compared to standard economics. The qualitative approach to this research will enable the researcher to get in-depth insights into the knowledge of the participants in the telecommunication marketing business. A study conducted by Luke Kachersky that sought to explore consumer perceptions of marketing and how malleable those perceptions were used a similar method of data collection. The first study was exploratory in nature, and the second study utilized a free-response method to get consumer feelings of what marketing is (Luke Kachersky, Dawn Lerman, 2013).

This study was a secondary analysis of qualitative data. “Secondary analysis of qualitative data is the use of existing data to find answers to research questions that differ from the questions asked in the original research” (Hinds et al., 1997). This method of research is often carried out when the subject matter is very sensitive, or the population of study is unreachable or elusive (Long-Sutehall et al, 2010). Researchers have used this method when the goal of the research was to bring a new focus or perspective to the original research issues (Heaton, 1998), or to “discuss the historical or contemporary attributes of human behaviour of organizations, societies, groups or individuals (Corti and Thompson, 1995).

When carrying out secondary analysis there must be an assessment of the fit between the primary dataset and the research questions of the secondary study (Heaton, 2004). This was done of *Behavioural Biases in Marketing* of Guhl et. al (2017) from which a majority of the data was taken.

3.3 Research Scope

3.3.1 Study Population

The study targeted marketers and advertisers at a selection of telecommunication companies in Accra, namely Vodafone and MTN, as they are the largest in Ghana. The study will focus on what influences the marketing methods they employ and classify their strategies as either being more in line with behavioral economics or with standard economics. This will allow the researcher to determine which strategies are more successful and to come up with recommendations for other companies within this industry as to what they should utilize.

3.3.2 Study Area

The study area is Accra, Ghana as this is where the telecommunication companies are based, and it hosts a large population of its consumers. Additionally, it is the largest city in Accra and as such provides a diverse population of consumers to get responses from. The original studies used in the QSA were carried out in Western contexts.

3.4 Sampling Strategy

3.4.1 Sampling techniques

This study utilizes the purposive sampling technique. This method allows the researcher to focus on specific features of the population under study and to choose the participants for the study that fall within the researcher's problem (Wisker, 2009).This method was chosen due to the fact that there are not many telecommunication companies in Ghana, and there are even fewer that dominate the market and as such, the participants were very intentionally chosen. Interviewing people outside of this field, or people who were not responsible for the marketing at these companies would only garner irrelevant information and would not help in answering the research question.

The previous research chosen to be studied was picked based on the match of their research questions and findings to the research objectives of this research. Studies done to determine the effect of culture on marketing, and on studying behavioural biases or human behaviour in different environments were primarily chosen. The papers were selected based on the quality of the journals and relevance as well as the citations as this provides a trustworthy basis on which to research (Guhl et al, 2017).

3.5 Data Collection

3.5.1 Data Collection Instrument

The data on whether the marketing strategies employed by telecommunication companies aligns more with behavioral economics or standard economics was collected through the use of assessing secondary data done in this field.

3.5.2 Data Collection Procedure

The studies found that were similar to the content being sought after by the researcher were analyzed and summarized. The behavioural biases spoken about were written out and the lessons for market research were documented. This data was collected from business journals, articles and other sources.

3.5.3 Data Preparation, Collation and Processing

The data collected from the secondary research was classified as aligning more with standard economics or with behavioral economics, and the framework and classifications put forth by Guhl et. al was used. The deviations from standard economic theory are explained through behavioural biases and the marketing mix tools. This provided a framework that further research can be founded on.

3.6 Data Analysis

The conceptual framework of behavioural biases put forth by Della Vigna in 2009 was used to analyze the data. The biases are classified under three main titles, namely Non-standard preferences, Non-standard beliefs and non-standard decision making. These classes are used to document deviations from the neoclassical model of economics (Della Vigna, 2009). The qualitative data was analyzed descriptively based on these classifications. The nature of this study was exploratory and as such main themes were identified in the data in alignment with the different biases.

The data was analyzed to show how behavioural biases and other dimensions can improve market research in Ghana in general and in the telecommunications industry specifically.

3.7 Validity and Reliability

Drost defines validity as the processes of making the procedures of a study more meaningful in nature (2011). Reliability ensures that the data is collected in a clear way, ensuring that the instructions in testing are clear and effective (Drost, 2011). Construct validity was used to ensure that the means of data collection matched the objectives of the study (Vanderstoep & Johnston, 2009).

The data collected was consistent and tamper free to make sure that there are no errors and that it fully represents the information that was given during the primary study.

3.8 Ethical Considerations

The question of ethical considerations arises in secondary analysis. Heaton (1998) states that the initial consent forms given for the primary data in use may not always be sufficient. Thorne and Heaton (1998) both find that the researcher would have to use professional judgement in determining whether the use of the data violates the intentions of the primary researcher and participants. This can be determined through matching the secondary research questions to the primary ones to determine if the focus has been shifted beyond the scope of the initial study (Long-Sutehall et al, 2010).

3.9 Limitations and Delimitations

The use of secondary qualitative analysis means that the scope of studies available is narrow, particularly for a study such as this. Due to the fact that there was not a lot of foundational information done on this topic in the Ghanaian context, this study took on the role of creating that foundation. As such, further qualitative study in terms of actually going to the companies in question could not be done. Further studies can use this foundational research to carry out primary research and collect further data.

CHAPTER 4: DATA FINDINGS

4.1 Overview/Introduction

This chapter primarily focuses on the presentation and appraisal of the findings of the study and analysis of the data gathered through research in relation to the literature review. The findings were gathered through interviews and through analysis of secondary research. The objectives this research sought to achieve are 1) to identify the behavioral economics biases that can be used to better market research within the Ghanaian Telecommunications industry and 2) to compare how the strategies used by Ghanaian Telecommunication companies are explained by both behavioral economics biases and standard economics.

As seen in the Literature Review, behavioural economics and the biases presented in it have been used in marketing to better understand consumers. In order to further explore if Telecommunication companies utilize consumer biases in development of their marketing strategies. Studies with similar research questions or studies that addressed the convergence of marketing and behavioural economics were used as case studies.

4.2 Data analysis and findings

The study sought to answer the questions of what behavioural economics biases/heuristics can be used to better marketing research in the Telecommunications industry in Ghana and How behavioural economics and standard economics both explain the marketing strategies and consumer behaviour of Telecommunication companies, and to see how the explanations compare as well as how behavioural economics can be used to buttress market research.

From the study that Guhl et al conducted, it was found that the biases can be classified in the ways that they affect different aspects of marketing. The marketing mix elements of Product, price, place and promotion all have different implications on different facets of the consumer experience and decision making under each of the three classifications of deviations (Gul et. al, 2017). While not all findings under each classification will be expounded, the main learnings and implications for marketers will be shown. Product, price and promotion are the most relevant aspects for telecommunication companies and as such those areas will be emphasized.

4.2.1 Product - excerpt of findings

Product and Non-standard Preferences

Guhl et al address two situations in which non-standard preferences play a role - 1) where there is a choice between utilitarian (“should”) and hedonic (“want”) products where there is time between ordering and consumption of the product and 2) product adoption which is determined by how much the consumer values future utility (Guhl et. al, 2017). Milkman, Rogers and Bazerman (2009; 2010) find that “should” products are preferred at the time of ordering while “want” products are preferred more in the consumption. This switch in priority can be attributed self-control issues, which returns to Adam Smith’s concept of the “impartial spectator” who watches all of one’s movement to control impulsivity (Thaler, Sunstein and Balz, 2012).

Wood (2001) conducted a study that identified that in “remote purchase environments” such as online retailing or mobile network services in telecommunication, when there is a more flexible return policy, the total time spent on deliberation reduces, while the perception of product quality increases. This counterintuitive finding can be explained by the endowment effect which makes it such that after purchasing the product and it being in the possession of the consumer, returning it would be processed as incurring a loss (Guhl et. al, 2017). The effect of warranties is also examined. It has been documented that consumers are willing to pay more to secure some kind of insurance. It is uncertain whether risk aversion, loss aversion or nonlinear probability weighting are responsible for this. Jindal (2015) finds that these three aspects are responsible for "roughly 16-20% lower prices" which in turn leads to lower profits for manufacturers (Guhl et al, 2017).

The last point that was found was that social preferences play a role in how consumers assess fair trade labels. While a fair trade label does not improve the quality of the product, it affects consumer perception. There is empirical evidence showing that consumers perceive higher utility from products that are more socially responsible. This has implications for telecommunication companies in terms of encouraging them to invest in their CSR programs as consumers rate them based on this as a means to better understand consumer behaviour and to garner consumer loyalty (Guhl et al, 2017).

4.2.12 Price - excerpt of findings

Wertenbroch (1998) studies self-control and consumption in the context of "vice" and "virtue" goods (Guhl et al, 2017). He shows that consumers ration their impulse purchases through strategically purchasing smaller quantities for a higher price per unit. An example of this is regular smokers buying cigarettes by the pack even though they could afford to buy more than that at a time. They are giving up quantity discounts and making smoking costlier for themselves. The standard economic model assumes time consistency of preferences but this behaviour is clearly inconsistent with this. This demonstrates that vice purchasers are less likely than virtue purchasers to buy larger quantities as a result of discounts (Guhl et al, 2017).

In marketing literature, the use of reference dependence has been largely covered in terms of pricing. This is often done through prospect theory (Kahneman and Tversky, 1979), particularly the concepts of loss aversion and reference dependence. Kalyanaram and Winer (1995) arrived at three generalizations about reference price theory through empirical evidence in market research. The three generalizations are 1) that reference prices have a significant effect on consumer demand, 2) about how reference price formation, states that past prices are used and 3) that consumers react more strongly to price increases than to price decreases (Kalyanaram and Winer, 1995).

Finally, reference dependence aids in the explanation of the “price-quality” heuristic, which states that consumers perceive a product’s value through its price (Gul et al, 2017). Gneezy and Lauga (2014) find that the price-quality heuristic increases expectations. Consumers use a high price as a reference point for their experience with the product. When the price is high and the quality is low, then the price-quality relationship holds, but when this is reversed, it does not hold. As such, consumers rate more negatively products that have low quality and a high price than products with a low price that are of high quality (Guhl et al, 2017).

4.2.13 Promotion - excerpt of learnings

Kivetz (2003) used prospect theory utility function to discuss rewards in loyalty programs, in relation to reference dependence. He did this by changing whether or not effort was required to win the reward and found that this changes the reference point for consumers. He also found that consumers require compensation and prefer small certain rewards (e.g. bonga points with Safaricom) than larger uncertain rewards (e.g. 1/100 chance of winning flight miles) (Kivetz, 2003).

4.2.2 Behavioural Biases in Marketing learnings

The study mapped behavioural biases onto marketing concepts in the Della Vigna structure (2009). Through analysis of the marketing mix instruments and the biases, it was found that the link to behavioural economics is clearer for product, price, and promotion, while the connection to place is harder to identify (Guhl et. al, 2017). With regards to the classifications of deviations from neoclassical economic thought, marketers are aware of and pay attention to consumer's decision making and preferences, but do not often go into their beliefs. The study also found, as expected, that many organizations already utilize behavioural economics concepts in their work, without explicit reference to the subject. More deliberate use of the biases can help firms to better target and understand consumer behaviour.

The emergence and use of more digital technologies change the way that consumer behaviour is assessed. More technology also indicates that the marketing mix should adapt accordingly. More digital sales mean that firms have more access to vast amounts of consumer data that can enrich their marketing (Guhl et. al, 2017). Telecommunications companies can especially learn from this finding as majority of their operations take place remotely and online.

4.3 Learnings from Experiments

Experiments and studies have been done to substantiate the behavioral biases and to gather data for market research. These studies have been done to test specific biases in order to discover how the effects on market research can be alleviated. The theories that particularly pertain to market research are Anchoring and Adjusting Effects, Framing and Context Effects, Loss Aversion and Sunk Cost Effects, to name a few. The studies that were carried out are outlined below with regards to the bias they pertain to and the implications on market research are shown.

Anchoring and Adjusting

An initial piece of information will bias the way a person makes decisions and judgements, and as such the Anchoring and Adjusting bias states that these decisions are anchored to the initial information.

This information is seen in a study where two groups were asked when Gandhi died. Each group was given different reference points. The first group was asked if they thought Gandhi lived past the age of 9 while the second one was asked if they thought Gandhi died before or after the age of 140. Later, when the groups were asked how old they thought Gandhi was when he died, the first group average was 50 and the second group average was 67. This showed the effect that the initial anchor had on their estimations as the group that had 9 as their anchor had a lower average than the other one.

Implication for Marketers

- The values and range of values put before consumers in surveys and such will affect their responses
- Marketers should take note of questions with ratings associated with them and their placement. Previous values may influence the respondents answers to later

Framing and Context Effects

This effect shows that the context within which situations are presented affects the opinions of the choices. This is why people tend to phrase things in a positive light. Doctors, for example, would say you are 70% healed as opposed to saying that 30% of the disease still lingers. Although they mean the same thing, patients respond more positively to the positively framed statement (C+R Research).

Implication for Marketers

- This shows Marketers that how they word their questions and the context they put them in affects the way consumers respond. It is important to ensure that questions are correctly framed.

Loss Aversion

Kahneman and Tversky (1979) famously said that losses loom larger than gains and that people try to prevent losses more than they try to make gains. The pain of giving something up is makes people put more value on the item than when they acquired it. This concept is most vividly seen in gambling where gains and losses can be simultaneously considered (Kahneman, 1991). In scenarios where penalties are offered in terms of losses and gains, the situation where loss is the consequence is given more attention.

A study was done where a group of PhD students were told that there was a penalty for late registration and another group was told that there was a discount for early registration. 93% of those who were given the penalty registered early and 67% of those given the discount option registered early. This shows how people tend to react more strongly to the possibility of losses than to strengths (C + R Research).

Implications for Marketers

- Loss aversion is linked to framing. The way that benefits and costs are framed in scenarios can affect responses.

Sunk Costs

People become more invested in costs that they already incurred, regardless of what the future benefits and costs may be. Standard economics argues that rational homo economicus considers future gains and costs into account, but this is not the case as we have found consumers are not rational.

This was seen in the case of a race track where the people who had already placed their bets and paid their money were more confident that their horse would win than those who had not yet placed their bets (C + R Research).

Implications for Marketers

- Marketers should be aware that sunk costs affect consumer perceptions of price and how they evaluate the costs of products and services in the future.

These studies show a few examples of the way that the biases can be applied to market research to enhance the field in ways that following only standard economics does not.

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of Research Study

This chapter summarizes the research conducted in this study. The main purpose of this study was to assess how the explanations of Behavioral economics and Standard economics with regards to marketing strategies compare. Objectives were devised and secondary research was assessed in order to achieve this purpose. The companies whose marketing strategies were studied were MTN and Vodafone. The study was qualitative and was based on the theories of Behavioral Economics.

This chapter links the research objectives to the findings and to the literature review. The chapter concludes with recommendations and limitations.

The data and findings yielded the following conclusions:

5.2 Conclusion

Behavioural Economics and Standard Economics are more similar than they are different. The cognitive biases that Behavioral Economics outlines and speaks about can be used by marketers to better provide value for their customers. Through studies done by researchers the effect the biases have on consumer choices and therefore market research was evident. Overall, the study found that marketing strategies should be more aligned with seeking to offset the biases presented by behavioral economics.

5.3 Recommendations to marketers

Besides including the implications mentioned in the above section. Marketers and policy makers should incorporate choice architecture in their strategies. Marketers act as Choice Architects to decision makers as they create the environment within which these choices are made. Choice architecture is used to nudge people in the direction of better choices without forcing them to choose certain outcomes, which is called libertarian paternalism (Thaler, 2014). Choice architects have the responsibility to organize the context within which decisions are presented to people. Choice architecture is built on several tools, such as defaults, understanding mappings, structuring complex choices and incentives. Institutions signing their employees onto a pension scheme automatically and making opting out the option instead of opting in is an instance of choice architecture at work and is in line with the default bias. Bars being put on benches at subway stations to prevent people from sleeping on them is another instance of this.

Choice architecture transcends marketing and can apply to every area of life. “Doctors describing the available treatments to patients, human-resource administrators creating and managing health-care plan enrollment, marketers devising sales strategies, ballot designers deciding where to put candidate names on a page, parents explaining the educational options available to a teenager; these are just a few examples of choice architects” (Thaler, Sunstein and Balz, 2014).

5.4 Limitations of study

Due to the fact that this kind of research has not been carried out in Ghanaian companies previously, foundational information had to be gathered initially. This meant that the study mostly set the groundwork and did not extend into primary data collection through qualitative methods. The study was purely a qualitative secondary analysis, which can yield limited findings. Without the quantitative elements from gathered consumer data, the findings cannot be generalized to larger populations as it now stands. While this study provides more theory for market researchers and expands the knowledge on the intersection of marketing and behavioural economics, it leaves room for more primary data collection to further test these theories.

5.5 Suggestions for further studies

Any further study in this area should include a quantitative approach to expand the findings from this data and make it more generalizable. Additionally, experimental economics should be utilized to further engage the consumer base and test the biases for primary data. The groundwork having been laid by this and other papers enables further study to be carried out within companies in Ghana.

Additionally, marketers should utilize the Della Vigna’s classification of the biases mapped onto marketing concepts and broken down into the 4Ps as seen in Chapter 2. In the study conducted by Guhl et al, they found that the digital advancements and use of more mobile channels always researchers to carry out more field experiments. They also suggest that the marketing mix element of place should be further pursued as it is less explored than the others. As the research showed that belief-based studies of the behavioural biases is scarce, this is an avenue for further research (Guhl et. al, 2017).

BIBLIOGRAPHY

Behavioral Economics and Standard Economic Model. (n.d.). Retrieved April 1, 2019, from https://www.ukessays.com/essays/psychology/comparison-of-behavioral-economics-and-standard-economic-model-psychology-essay.php

Behavioral Economics vs. Traditional Economics: What is the Difference? (2019, February 14). Retrieved April 1, 2019, from https://www.hartfordfunds.com/investor-insight/behavioral-economics-vs-traditional-economics.html

Corti L and Thompson P (1995) Archiving qualitative research data. Social Research Update (10), Department of Sociology, University of Surrey. Online journal available at: http:// www.soc.surrey.ac.uk/sru/SRU2SRU102.html

Della Vigna, Stefano (2009), "Psychology and Economics: Evidence from the Field," *Journal of Economic Literature*, 47 (2), 315–72.

Drost, E. A. (2011, January). Validity and Reliability in Social Science Research. *International Perspectives on Higher Education Research, 38*, 105-124. Retrieved November 23, 2018, from https://www.researchgate. ne t/publication/261473819_Validity and Reliability in Social Science Research

Gneezy, Ayelet, Uri Gneezy, and Dominique O. Lauga (2014), "A Reference-Dependent Model of the Price–Quality Heuristic," *Journal of Marketing Research*, 51 (2), 153–64.

Harford, T. (2014). Behavioural economics and public policy | Financial Times. Retrieved from https://www.ft.com/content/9d7d31a4-aea8-11e3-aaa6-00144feab7de

Heaton J (1998) Secondary analysis of qualitative data. Social Research Update (22), Department of Sociology, University of Surrey, Online journal available at: http://www.soc.surrey. ac.uk/sru/SRU22.html

Heuristic | Behavioraleconomics.com | The BE Hub. (2018). Retrieved from https://www.behavioraleconomics.com/resources/mini-encyclopedia-of-be/heuristic/

Historical context of behavioral economics. (2017, March 11). Retrieved April 1, 2019, from https://reader.elsevier.com/reader/sd/pii/S1822801116300297?token=2C6431A3E48A4628867628ACFA223170F66BCE674A1A667C6CC5EA511D96D49CAA54EEFB8C643EF92EB0107107552195

Ho, Teck H., Noah Lim, and Colin F. Camerer (2006), "Modeling the Psychology of Consumer and Firm Behavior with Behavioral Economics," *Journal of Marketing Research*, 43 (3), 307–31.

Hofstede, G. (1980), Culture's Consequences: International Differences in Work Related Values, Sage Publications, Beverly Hills, CA.

Hofstede, G. (1983), “Dimensions of national cultures in 50 countries and three regions”, in Deregowski, J.B., Dziurawiec, S. and Annis, R.C. (Eds), Explications in Cross-cultural Psychology, Swets & Zeitlinger B.V., Aberdeen, pp. 335-55.

Kahneman, D. (2003). Maps of bounded rationality: Psychology for behavioral economics. *The American Economic Review, 93,* 1449-1475.

Kachersky, L., Lerman, D. (2013) "Bridging marketing's intentions and consumer perceptions", Journal of Consumer Marketing, Vol. 30 Issue: 7, pp.544-552, https://doi.org/10.1108/JCM-06-2013-0624

Kalafatis, S.P. (2000), “Buyer-seller relationships along channels of distribution”, Industrial Marketing Management, Vol. 31, pp. 215-28.

Kluckhohn, F.R. and Strodtbeck, F.L. (1961), Variations in Value Orientation, Greenwood Press, Westport, CT.

Loewenfeld, M. (2017). A short history of Behavioural Economics. Retrieved from https://tseconomist.com/2017/09/20/a-short-history-of-behavioural-economics

Loewenstein, G. and O’Donoghue, T. (2004). “Animal Spirits: Affective and Deliberative Influences on Economic Behavior.” Working paper, Department of Social and Decision Sciences, Carnegie Mellon University; Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract _id539843.

Long-Sutehall et. al, (2010). “Secondary analysis of qualitative data: a valuable method for exploring sensitive issues with an elusive population?” Journal of Research in Nursing, 16(4) 335–344. DOI: 10.1177/1744987110381553

Kalyanaram, Gurumurthy and Russell S. Winer (1995), "Empirical Generalizations from Reference Price Research," *Marketing Science*, 14 (3), G161-G169.

Knetsch, Jack L. (1989), "The Endowment Effect and Evidence of Nonreversible Indifference Curves," *American Economic Review*, 79 (5), 1277–84.

Kivetz, Ran (2003). "The Effects of Effort and Intrinsic Motivation on Risky Choice," *Marketing Science*, 22 (4), 477–502.

Kivetz, Ran and Itamar Simonson (2002), "Self-Control for the Righteous: Toward a Theory of Precommitment to Indulgence," *Journal of Consumer Research*, 29 (2), 199–217.

Milkman, Katherine L., Todd Rogers, and Max H. Bazerman (2009), "Highbrow Films Gather Dust: Time-Inconsistent Preferences and Online DVD Rentals," *Management Science*, 55 (6), 1047–59.

Mobile operator shares Ghana 2017 | Statistic. (2018). Retrieved from https://www.statista.com/statistics/779838/ghana-telecommunication-market-share-mobile-operator/

Mobile Telecommunications Network (MTN) Ghana Launches 20th Anniversary Celebrations - Government of Ghana. (2018). Retrieved from http://www.ghana.gov.gh/index.php/media-center/news/2733-mobile-telecommunications-network-mtn-ghana-launches-20th-anniversary-celebrations

Munene, J.C., Schwartz, S.H. and Smith, P.B. (2000), "Development in sub-Saharan Africa: Cultural influences and managers' decision behavior", Public Administration and Development, Vol. 20 No. 4, pp. 339-51.

MTN Ghana Leads Market With 46.43% Share - NCA. (2018). Retrieved from http://telecomspace.com.gh/index.php/86-all-category/business/178-mtn-ghana-leads-market-with-46-43-share-nca

NCA. (n.d.). Telecom Voice Subscriptions. Retrieved April 1, 2019, from https://www.nca.org.gh/industry-data-2/market-share-statistics-2/voice-2/

NCA. (n.d.). Telecom Data Subscription. Retrieved April 1, 2019, from https://www.nca.org.gh/industry-data-2/market-share-statistics-2/data-3/

Novemsky, N. (2019). Better Marketing with Behavioral Economics. Retrieved from https://som.yale.edu/faculty-research/our-centers-initiatives/center-customer-insights/insights-review/blog/2014/12/better-marketing-behavioral-economics

Novemsky, Nathan and Daniel Kahneman (2005), "The Boundaries of Loss Aversion," *Journal of Marketing Research*, 42 (2), 119–28.

Osei-Owusu, A. (2015). The Analysis of the Ghana Telecom Industry. Department of Electronic Systems, Aalborg University-Denmark. Retrieved from https://pdfs.semanticscholar.org/1428/00bf8022fd419c1cfd749bdcbf55b5953d9d.pdf

Rabin, Matthew (1998), "Psychology and Economics," *Journal of Economic Literature*, 36 (1), 11–46.

Rabin, M (2002), "A Perspective on Psychology and Economics," *European Economic Review*, 46 (4), 657- 85.

Sankaran et al., (2011). Telecommunications Industry in Ghana: A study tour analysis. *University of Washington.*

Shaun Hargreaves Heap (2016) Behavioral Economics: A History, History of Economics Review, 63:1, 62-65, DOI: 10.1080/10370196.2016.1177896

Schultz, D. E., & Block, M. P. (2015). Beyond brand loyalty: Brand sustainability. *Journal of Marketing Communications, 21*(5), 340-355. doi:10.1080/13527266.2013.821227

Simon, Herbert A. (1955), "A Behavioral Model of Rational Choice," *Quarterly Journal of Economics*, 69 (1), 99–118.

Stone, M. (2015, April 09). The evolution of the telecommunications industry - What can we learn from it? Retrieved April 1, 2019, from https://link.springer.com/article/10.1057/dddmp.2014.80

Thaler, R. (2015). "Unless You Are Spock, Irrelevant Things Matter in Economic Behavior." Retrieved from https://www.nytimes.com/2015/05/10/upshot/unless-you-are-spock-irrelevant-things-matter-in-economic-behavior.html

Thaler, Richard H. (1981), "Some Empirical Evidence on Dynamic Inconsistency," *Economic Letters*, 8, 201–07.

Thaler, Richard H. (2016), "Behavioral Economics: Past, Present and Future," *Behavioral Economics*.

Thaler Richard H., Cass R. Sunstein, and John P. Balz (2013), "Choice Architecture," in *The Behavioral Foundations of Public Policy*, Eldar Shafir, ed. Princeton: Princeton University Press, 428–40.

Thorne S (1994) Secondary analysis in qualitative research: Issues and implications. In: Morse J (ed.) Critical issues in Qualitative Research Methods. London: Sage Publication, 263–279.

Thorne S (1998) Ethical and representational issues in qualitative secondary analysis. Qualitative Health Research 8(4): 547–555.

Telecom subscription and market share. (n.d.). Retrieved April 1, 2019, from https://www.nca.org.gh/industry-data-2/market-share-statistics-2/data-3/

The Implications of Behavioral Economics on Market Research. (n.d.). Retrieved April 1, 2019, from https://www.crresearch.com/blog/The-Implications-of-Behavioral-Economics-on-Market-Research

There Is More to Behavioral Economics Than Biases and Fallacies. (2018, July 24). Retrieved March 31, 2019, from http://behavioralscientist.org/there-is-more-to-behavioral-science-than-biases-and-fallacies/

Urminsky, Oleg and Gal Zauberman (2016), "Consumer Intertemporal Preferences," *Current Opinion in Psychology*, 10, 136–41.

Vanderstoep, S., & Johnson, D. (2009). *Research Methods for Everyday life.* San Francisco: Jossey-Bass. Retrieved November 27, 2018

Wertenbroch, Klaus (1998), "Consumption Self-Control by Rationing Purchase Quantities of Virtue and Vice," *Marketing Science*, 17 (4), 317–37.

William K. Darley, Charles Blankson, (2008) "African culture and business markets: implications for marketing practices", Journal of Business & Industrial Marketing, Vol. 23 Issue: 6, pp.374-383, https://doi.org/10.1108/08858620810894427

Wisker, G. (2009). *The Undergraduate Research Handbook.* London: Palgrave Macmillan. Retrieved November 23, 2018

World, R. (2014, October 29). How to apply behavioural economics in market research: Advice from Dan Ariely. Retrieved March 31, 2019, from https://www.researchworld.com/how-to-apply-behavioural-economics-in-market-research-advice-from-dan-ariely/

Wood, Stacy L. (2001), "Remote Purchase Environments: The Influence of Return Policy Leniency on Two-Stage Decision Processes," *Journal of Marketing Research*, 38 (2), 157–69.

APPENDIX

			Marketing Topic
Product	Non-standard preferences	Time-inconsistent preferences	Utilitarian vs. hedonic product choice Durable product adoption
		Reference dependence	Extended warranties Product insurance Endowment effect Return policy
		Social preferences	Fair trade labeling
	Non-standard beliefs	Overconfidence	New product adoption
		Projection Bias	Remote purchases Durable goods purchases
		Law of small numbers	Investment decisions
	Non-standard decision making	Choice architecture/Framing	Package labeling Delivery option Local choice context Preference for “all average” Product line design
		Limited attention	Information overload Consideration/choice set construction Inattention to attributes Left-digit bias
		Persuasion and social pressure	Peer effects
		Emotions	Branding
Price	Non-standard preferences	Time-inconsistent preferences	Quantity discounts Consumption impulses

		Reference dependence	Reference prices Price sensitivity Price-quality heuristic
		Social preferences	Pay What You Want Charitable giving Price fairness
	Non-standard beliefs	Overconfidence	Tariff choice
		Projection Bias	Usage prediction Habit formation
		Law of small numbers	Store image
	Non-standard decision making	Choice architecture/Framing	Price presentation Price promotion
			Partitioned prices
		Limited attention	Price knowledge
		Persuasion and social pressure	-
		Emotions	Bidding behavior
Place	Non-standard preferences	Time-inconsistent preferences	Impulse buying
		Reference dependence	Endowment effect Need for touch
		Social preferences	-
	Non-standard beliefs	Overconfidence	Online search
		Projection Bias	-
		Law of small numbers	-

	Non-standard decision making	Choice architecture/Framing	In-store marketing Store layout Recommendations Search cost Ranking effects Channel effects
		Limited attention	-
		Persuasion and social pressure	Social influence
		Emotions	-
Promotio n	Non-standard preferences	Time-inconsistent preferences	Sweepstakes and lotteries Hedonic consumption
		Reference dependence	Probabilistic rewards Frequency (loyalty) programs Reward structure of sweepstakes
		Social preferences	Charitable giving Direct marketing Sales force incentives
	Non-standard beliefs	Overconfidence	Probabilistic promotion Delayed promotion Redemption slippage
		Projection Bias	-
		Law of small numbers	Casino gambling
	Non-standard decision-making	Choice architecture/Framing	Redemption rates Comparative advertising
		Limited attention	Feature advertisement
		Persuasion and social pressure	Exaggerated claims Anecdotal claims

		Emotions	-

Table 1: Overview of Behavioral Biases and Marketing Keywords