The effects of psychosocial factors on healthy lifestyle choices: the moderating role of normative beliefs and health consciousness

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A research report submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Management in Strategic Marketing

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ABSTRACT

Noncommunicable diseases (NCDs) negatively impact people's lives worldwide, particularly in developing economies, and South Africa is no exception. Consumers' lifestyle decisions, which necessarily impact their well-being, play a significant role in NCDs. As a result, this study is predominantly driven by the health industry. This research supports the marketing fraternity in understanding the significant variables that influence consumer behaviour in relation to healthy lifestyles. The researcher has observed that health-oriented brands play a minimal role than brands that promote activities such as consuming fast foods, alcohol, and smoking.

The purpose of this study was to investigate how key psychosocial factors influence lifestyle choices. The focus is on healthy living choices amongst South Africans. The key factors of this study include identity-based motivations, self-efficacy, consumer attitude, and consumer knowledge. In addition, the susceptibility to normative influence and health consciousness serves as interaction factors and the link between consumers' healthy lifestyle attitudes and purchase intentions.

An online survey questionnaire was conducted, and the data was collected through social media platforms, with a total of 493 respondents. The study tested seven hypotheses using Structural Equation Modelling. The research results confirmed that five out of the seven hypotheses were significant. The study results indicate that self-efficacy, a favourable attitude, and identity-based motivation have a significant relationship with healthy lifestyle choices. Knowledge was found to be insignificant. Previous studies confirm that for knowledge to have a significant relationship, it needs to be paired with appropriate interventions. The study also indicated that normative beliefs positively influenced consumer lifestyle choices and purchase intentions, whereas health

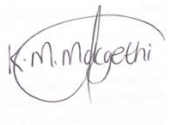
consciousness as a moderating factor was insignificant. The findings will significantly contribute to the literature and theoretical knowledge on healthy lifestyle choices within an emerging market.

Keywords: Purchase intent, lifestyle, social marketing, healthy brands, consumer behaviour

DECLARATION

I, Kgaiso Mokgethi, declare that this research report is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Management in Strategic Marketing at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other University.

Kgaiso Mokgethi



Signed at Craighall Park

On the 10th day of May 2021

DEDICATION

This report is dedicated to my family and my best friend, Stella Kotane. To my nieces, Palesa and Mandisa, and my nephews, Reabetswe and Vuyo, you will forever be my inspiration and first loves.

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Deepest appreciation to the following people, without whom this research report would not have been possible:

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CHAPTER 1 – INTRODUCTION

This chapter aims to give an overview of the study and outlines, the purpose of the study, context, problem statement, significance of the study, and delimitations before concluding with the definition of terms.

1.1 PURPOSE OF THE STUDY

The purpose of this study is to explore how key psychosocial factors influence lifestyle choices. Understanding psychosocial dynamics informs researchers on 'why people behave the way they do' (Teixeira *et al.,* 2012). Furthermore, it enhances their knowledge of behavioural choices because understanding psychosocial dynamics is complex and calls for an in-depth exploration of the effect of personal behaviour change and one's environment (Teixeira *et al.*, 2012). Specifically, the focus is on healthy living choices amongst South Africans. The key factors include identity-based motivations, self-efficacy, consumer attitude, and consumer knowledge. These are utilised as key factors to explain their impact on purchase intentions. The susceptibility to normative influence and health consciousness serves as interaction factors and the link between consumers' healthy lifestyle attitudes and purchase intentions.

According to a report, NCDs account for 12% of the disease burden in South Africa, with dietary intake playing a major role (Igumbor *et al.,* 2012). Companies such as Tiger Brands and Nestlé influence lifestyle trends that penetrate the market, allowing these leading brands to deliver accessible and affordable products in South Africa (Igumbor *et al.*, 2012). Divine and Lepisto (2005) reported a shift in consumer attitude in the early 2000s: more and more customers are

beginning to choose much healthy products. In recent times, brands such as Nestlé are encouraging consumers to choose healthy food choices, such as vegetables and fruits, rather than processed food and unhealthy snacks, and this is mainly because of increased demand and its impact on the environment (Teixeira, 2019). According to various scholarly evidence, healthy lifestyle choices, including a healthy diet and regular exercising, enables consumers to "maximise personal well-being" (Bloch and Bruce, 1984).

Historically, wellness and health-consciousness marketing focused on scaring and berating consumers (Bandura, 1998). As Bandura indicated, "We have shifted from trying to scare people into health, to rewarding them into health, to equipping them with self-regulatory skills to manage their health habits, to shoring up their habit changes with dependable social supports" (Bandura, 1998, p. 623). The findings of the study aim to understand consumer behaviour and their healthy lifestyle choices. The variables employed are identity-based motivation, attitude, knowledge, and self-efficacy to build a bridge between intention and maintaining the desired behaviour. This study employs the Theory of Planned Behaviour, as it considers the influence of those close to a person (subjective norms), consumer attitudes, and their perception of the ease or toughness of implementing their goal, which is important when setting behavioural intentions (Mkhize and Ellis, 2009). The researcher believes that these factors are important in healthy lifestyle interventions. Also, the health belief model supports this study because the researcher used some of its variables: healthy lifestyle and health consciousnesses.

1.2 CONTEXT OF THE STUDY

The occurrence and challenges of global health are well documented, with lifestyle-related diseases being the leading cause of death across the globe and responsible for 63% of annual deaths (World Health Organization, 2018). Sadly, an estimated 80% of all lifestyle-related deaths impact low- and middle-income countries, and 25% of those affected are younger than 60 years of age (Couser *et al.,* 2011). The impact of lifestyle diseases is complex and broad as it affects both the micro and macro environments (Nordqvist, 2011). According to research, there will be a global loss of US $47 trillion over the next two decades, representing a 75% global loss (Bloom *et al.,* 2011). A study conducted between 1990 and 2017 found that the total number of disabilities due to NCDs increased by 67% in the Sub-Saharan region (Gouda *et al.*, 2019). Equally, a South African study conducted between 1990 and 2017 found an estimated $1.8 billion loss to the bottom line from NCD-related cases (Hofman, 2014). South Africa's health challenges are widespread and include HIV, TB, and multiple NCD-related illnesses; further, in comparison to global trends, lifestyle choices play a meaningful role and one's culture, background, and general environment (Whiteside, 2014). Also, South Africa noticed a significant dietary shift over the last two decades, an increase in consumption within food categories, such as sugar-sweetened beverages and animal-source foods (Ronquest-Ross, Vink and Sigge, 2014). These findings emphasize the current study's contribution to the influence of the cost difference between "healthy versus "unhealthy" choices. 'Healthy diets' cost consumers an estimated 69% more, and this cost difference is often a barrier to accessing healthy foods (Ronques-Ross *et al*., 2014). The findings can be related to what South Africa is experiencing as the 'war' against balanced nutrition, obesity, and excessive alcohol consumption (Whiteside, 2014). According to a study conducted by the Medical Research Council and Wits University in South Africa, teenagers and youth in Gauteng are less motivated to live

healthy lifestyles (diet and physical activity). The study also found that their lifestyle choices were largely affected by their caregivers' affordability, which harmed their autonomy to choose a lifestyle that matched their preferences, needs, and desires (Wrottesley *et al.*, 2019).

On the contrary, a study conducted in KZN found that the majority of children from this province were more knowledgeable and committed to a healthy lifestyle; nevertheless, they found themselves in the same situation as Gauteng youth children in that they were equally dependent on their caregivers and the availability of the school's sport program (Morar, Coopoo and Shaw, 2014). The author observed that in South Africa, affluent consumer segments have positive attitudes about a healthy lifestyle. This observation is informed by brands such as Discovery, which rewards healthy living through the Vitality program attached to gym participation, and Old Mutual, which sensitises and enables healthy living through planned community activities, such as outdoor running. New fashion categories such as Athleisure, healthy food shop options such as Fit Chef, and the trend of wearable sports watches, are also observed. These observations support the sentiment that brands often find it more profitable to target the affluent segment, which is often environmentally conscious and follows global health trends such as low-calorie diets and zero sugar beverages (https://www.euromonitor.com/health-and-wellness-in-south-africa/report).

Finally, researchers agree that a key factor in overcoming health problems is the desire of health consumers to change their behaviour (Daniel, Bernhardt and Eroglu, 2009). “Barriers to behaviour change, whether known or unidentified,” elevate these health challenges (Daniel, Bernhardt and Eroglu, 2009). This paper aims to examine consumer behaviour and purchase intentions from a social marketing perspective in relation to healthy lifestyle choices. The researcher believes that social marketing is an important factor for consumer behavioural modification. This choice is

based on the role of social marketing, which influences people's lifestyle choices by changing individual and societal behaviour (Carrete and Arroyo, 2014).

1.3 PROBLEM STATEMENT

There hasn’t been adequate research that focuses on healthy living and the role of consumer behaviour within emerging markets. Scholars confirm a research gap in studies that aim to understand consumer behaviour (Teixeira *et al.*, 2012).

1.3.1 Main problem

To investigate the relationship between psychosocial factors (identity-based motivation, self-efficacy, knowledge, and attitude) and their influence on consumers when choosing a healthy lifestyle.

This main problem stems from the research gap on healthy lifestyle patterns across multiple behaviours (Saint Onge and Krueger, 2016). Furthermore, Divine and Lepisto (2005) indicate a research gap in marketing literature regarding understanding consumers' need for healthy foods. “The key drivers for healthy lifestyle choices discussed in the text include the attitude, knowledge, and one’s belief in their ability to achieve goals. These attributes are key in enabling consumers to execute the required behavioural lifestyle change” (Newson *et al.*, 2012).

Behaviour maintenance is challenging and requires individuals to reach within and engage with activities that are usually out of the norm, such as setting personal goals and self-regulation (Krishnan and Zhou, 2019). Furthermore, a study focusing on the consumption of organic foods

found that there are different consumer needs, purchase intentions, and behavioural drivers between emerging markets and developed countries (Rana and Paul, 2017).

1.3.2 Sub problem

For this study, the researcher investigates the moderation effects of social factors through the lens of susceptibility to normative influence and health consciousness in order to understand how these factors impact the link between healthy lifestyle attitudes and purchase intentions. The premise of the study is that normative influence and health consciousness are fair indicators of consumer reference points, whereas health consciousness is a good indicator of the customers' willingness to implement a healthy lifestyle and take action. A research gap exists in the sphere of health consciousness. There are possible reasons for this gap: first, the subject matter often crosses over different disciplines, including psychology, sociology, social marketing, and consumer research, and secondly, it is often researched in isolation based on the particular field of study instead of a holistic view (Moorman and Matulich, 1993).

1.4 RESEARCH QUESTIONS

The research questions outlined are based on the subproblems mentioned above.

1.4.1 Subproblem one – research questions

- What is the relationship between identity-based motivation and healthy lifestyle choices?
- What is the relationship between self-efficacy and healthy lifestyle choices?
- Is there a significant relationship between knowledge and healthy lifestyle choices?
- What is the relationship between attitude and healthy lifestyle choices?

1.4.2 Subproblem two – research questions

- What is the impact of healthy lifestyle choices on consumer purchase intentions?
- What is the impact of normative beliefs on healthy lifestyle choices and consumer purchase intentions?
- What is the impact of health consciousness on healthy lifestyle choices and consumer purchase intentions?

1.5 RESEARCH OBJECTIVES

1.5.1 Theoretical Objectives

- To review the literature on identity-based motivation, self-efficacy, knowledge, attitude, healthy lifestyle choices, health consciousness, and normative beliefs.

1.5.2 Empirical Objectives

- To establish the influence of identity-based motivation on healthy lifestyle choices
- To investigate the influence of self-efficacy on healthy lifestyle choices
- To investigate the influence of knowledge on healthy lifestyle choices
- To investigate the influence of attitude on healthy lifestyle choices
- To investigate the impact of healthy lifestyle choices on consumer purchase intentions
- To establish the impact of normative influences on behavioural intentions and healthy lifestyle choices
- To establish the impact of health consciousness on behavioural intentions and healthy lifestyle choices

1.6 RESEARCH HYPOTHESIS

- *H1*: Identity-based motivation has a significant relationship with healthy lifestyle choices.
- *H2*: Self-efficacy has a significant relationship with healthy lifestyle choices.
- *H3*: Consumer knowledge has a significant relationship with healthy lifestyle choices.
- *H4*: Attitude has a significant relationship with healthy lifestyle choices.
- *H7*: Healthy lifestyle choices have a significant relationship with purchase intentions.
- *H5*: Health consciousness has a significant impact on purchase intentions.
- *H6*: Normative beliefs have a significant impact on purchase intentions.

1.7 GAPS AND JUSTIFICATION OF THE STUDY

Sinha and Sheth (2017) argue that to be successful in emerging markets, businesses must ensure that they can create awareness, deliver market-related and relevant offerings that are accessible, functional, and culturally acceptable (Sinha and Sheth, 2017). Unfortunately, the theories that have been applied are relevant to developed economies and not necessarily relevant within the African context, and market-specific research needs to be implemented (Burgess and Steenkamp, 2006). A study conducted in the USA highlights that previous studies have mostly been myopic, and there is a need for insights across behavioural patterns and demographics (Saint Onge and Krueger, 2016). Furthermore, the available emerging markets studies are primarily focused on countries such as Mexico, India, and the Asia Pacific region and are not especially relevant to the African context (Albarran *et al*., 2005; Chen, 2009; De Menezes, Roux and Lopes, 2018; Khare, 2013). Bringing it back home, the researcher observed that most South African studies tend to lean

towards health trends and are informed mainly by government statistics and policies (Chikweche and Fletcher, 2014; Chin *et al.*, 2019; Haggblade *et al.*, 2016).

The proposed area of study is relevant because, to the researchers' best knowledge, the majority of previous research papers on healthy lifestyle choices focus on developed economies such as the United States (Bui, Kemp and Howlet, 2011; Parkinson, David and Rundle-Thiele, 2015; Previte, Russell-Bennett and Parkisons, 2015).

1.8 SIGNIFICANCE OF THE STUDY

This study attempts to add to the industry knowledge, particularly from a social marketing lens. Kotler and Zaltman (1971) state that social marketers often misunderstand social advertising for social marketing: they overlook that, in this instance, the "message is the product" (Donavan and Henley, 2004). Wymer (2011) suggests that one of the key fundamentals for succeeding in social marketing is understanding the causality of the social issues and the inclusion of environmental factors. For such conversations and memorability, which ultimately leads to action, a promotional approach only is not sufficient (Kotler *et al.*, 1971). Furthermore, the researcher intends to explore the application of social marketing concepts as well as behavioural factors that facilitate behavioural change. This study highlights the significant lifestyle changes amongst the emerging market in South Africa. It will concentrate on the South African perspective since various theories used in developed economies are not fully applicable to the South African context. In addition, it is key to test if the implemented market-specific research validates tested theories in a culturally dissimilar context (Burgees and Steenkamp, 2006). This study also creates an awareness of the corrective measures of lifestyle choices, including providing an Africanised perspective on this phenomenon. In practice, this paper creates an awareness of the current healthy lifestyle transition

taking place. The study also has the potential to support the meaningful execution of the already established policies in South Africa, helping governments, health sectors, and social marketers deliver information and awareness that impacts and changes lives. It also aims to contribute to health and marketing literature by exploring how health preventative behaviours, such as exercise and choosing healthy foods, can reduce the damaging effects of lifestyle diseases.

1.9 DELIMITATIONS OF THE STUDY

- The data collected for the study was from two social media platforms: Facebook and Instagram. Therefore, the channel specificity has the potential of not being fully representative demographically.
- The study targeted all South Africans and did not focus on any specific market, for instance: middle-income earners or bottom-of-the-pyramid earners.
- The study cannot be generalized across Southern Africa, as the researcher focused on South Africa only.

1.10 DEFINITIONS OF KEY TERMS

1.10.1 Consumer behaviour

Mothersbough and Hawkins (2016) asserts the "field of consumer behaviour as the study of individuals, groups or organizations and the process they use to select, secure, use and dispose of

products, services, experiences, or ideas to satisfy needs and the impacts that these processes have on the consumer and society". (Mothersbough and Hawkins, 2016, p. 6). Although it includes the abovementioned influencing factors, consumer behaviour is complicated, and marketing practitioners also need to be aware of other psychosocial factors, such as lifestyle, culture, and demographics (Mothersbough *et al*., 2016).

1.10.2 Lifestyle

A lifestyle reflects a person's personality, culture, family background, social groups, etc. It is a learnt behaviour that creates a framework from which a person can work. It is often expressed through how individuals spend their time and money (Engel, Blackwell and Kollat,1978).

1.10.3 Healthy lifestyle

Healthy living is when individuals are involved in activities that support a quality healthy life (World Health Organization [WHO], 1999).

1.10.4 Non-communicable diseases (NCDs)

NCDs are non-transferable illnesses that often occur because of lifestyle choices. They include illnesses such as heart disease, cancer, and diabetes (WHO, 2018).

In summary, this study intends to address the psychosocial factors influencing lifestyle choices. Specifically, the focus is on healthy living choices amongst South Africans. The next chapter gives a comprehensive literature review of these psychosocial factors: identity-based motivations, self-efficacy, consumer attitude, consumer knowledge, and the two moderating factors. Finally, the

research exploration supports the research hypothesis by supporting or disproving the given assumptions.

1.11 Report structure

This research report is divided into six chapters. Chapter one gives an overview of the area of study. Chapter two is the literature review and investigates relevant theoretical approaches. Chapter 3 outlines the proposed research methodology, whereas chapter four is a presentation of the research findings; And in chapter five the researcher discusses the research findings in relation to the literature review. To conclude in chapter 6, the researcher summarises important insights from the research paper, including managerial and theoretical implications.

CHAPTER 2: BACKGROUND OF LITERATURE REVIEW AND THEORY

The purpose of this chapter is to discuss the literature that supports the psychosocial factors and moderating factors that influence healthy lifestyle choices. Although these factors are not exhaustive, they give a sound indication of the literature that needs to be considered. First, the

chapter outlines the study's theoretical foundation: social marketing and the Theory of Planned Behaviour (TPB). Next, the chapter studies - in detail - identity-based motivations, self-efficacy, consumer attitude, consumer knowledge, lifestyle choice as the dependent variables, and the two moderating factors: normative influence and health consciousness. Finally, the chapter ends with discussing behavioural intentions, using the theory of reasoned action as a framework to determine what consumers plan to do.

2.1 Theoretical Foundation: Social marketing and behavioural intentions

The literature review is anchored on social marketing principles and TBP and is influenced by the Health Belief Model (HBM). Social marketing indicates how to apply commercial marketing appropriately when influencing consumer behaviour in relation to healthy living. The TBP indicates how intention can influence a consumer's lifestyle choices (i.e., what consumers intend to do). It has been very useful in predicting consumer intent and behaviour (Mathieson, 1991), as well as explaining health-related behaviours such as smoking, mammography screening, exercise, and food choices (Chung and Fong, 2015).

Lastly, the HBM influences this study because it establishes a framework in which consumers tend to feel vulnerable towards certain diseases and their consequences, with self-efficacy as one of its variables. Furthermore, it creates a context in which consumers reflect on the implications and benefits of their health behaviour, which often leads to a health-conscious lifestyle (Livi, Zeri and Baroni, 2016). This model calls to attention the consumers "perceived severity (one's belief about how serious a condition and its sequelae); perceived benefits (one's belief in the efficacy of the advised action to reduce the risk or seriousness of impact); perceived barriers (one's belief about the tangible and psychological costs of the advised action) and self-efficacy" (Köhler *et al*, 2017).

Similar to the TPB, this model can be utilised to support behavioural change. The HBM variables include healthy lifestyle behaviours, such as healthy eating and exercising, as well as sociodemographic variables, such as age, ethnicity, education, earnings, and marital status (Woodson, 2019). Identity-based motivation, self-efficacy, knowledge, and attitude and their impact on healthy lifestyle choices are the variables discussed for the study. The moderating factors are health consciousness and normative beliefs, as well as their influence on purchase intentions. The preceding sections focus on appropriate theories used in this study.

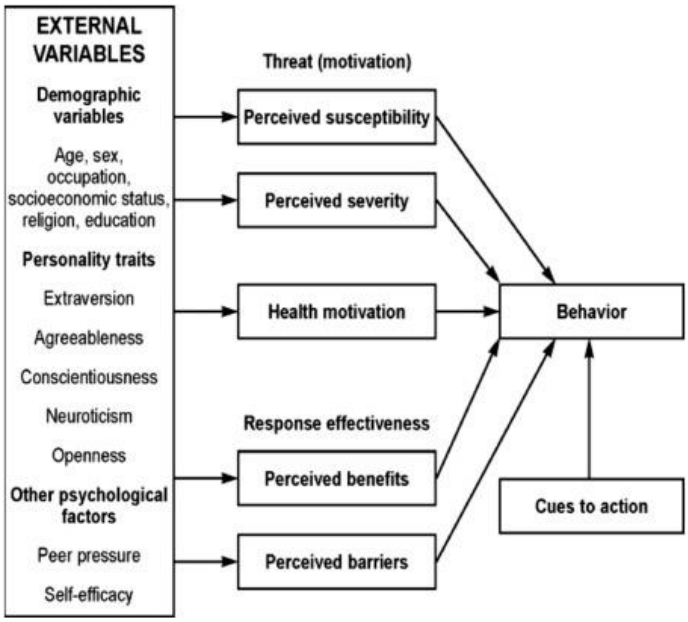

Figure 2.1. Health belief model. Source: Laranjo (2016).

2.1.1 Marketing: commercial and social

Andreason (1994) stipulates that social marketing is the modification of commercial marketing with a different purpose. Social marketing aims to influence behaviour that is beneficial for both the consumer and society at large (Andreason, 1994). Social marketing is anchored in consumer behaviour insights that influence beneficial behaviour, such as helping people quit smoking

(Hastings and Saren, 2003). On the other hand, commercial marketing drives profitability and is also concerned with human behaviour and market understanding (Hastings *et al*., 2003).

Commercial marketing is built on an exchange economy between two individuals or more, with the primary objective being profitability (Kotler and Keller, 2016). In this exchange, the core of what the marketing discipline delivers is for the economy to meet needs, wants, and demands (Kotler *et al*., 2016). The marketing mix is a conceptual framework that helps assist marketers in making decisions that meet consumer needs. It originates from P (price), a microeconomic theory (Goi, 2009). "McCarthy (1964) offered the 'marketing mix', often referred to as the '4Ps', as a means of translating marketing planning into practice, (Goi, 2009, p. 2)". These scholars, Festa, Cuomo, Metallo, Festa (2016), confirm that the '4Ps' - price, product, place and promotion - are "robust and versatile" and at the core of the marketing mix theoretical framework (Kotler *et al*., 2016). However, modern commercial marketing adds additional 'Ps': people, processes, programs, and performance (Wickham, 2009). Marketing is built on an exchange economy between two individuals or more, with the primary objective being profitability (Kotler and Keller, 2016). For commercial marketing to be a success, key pillars, such as customer segmentation, positioning, and a solid marketing concept, are required (Constantinides, 2006).

Social marketing does not focus on driving consumerism as such but rather on social change and influencing behaviours that positively impact the individual and their broader community (Saunders, Barrington and Sridharan, 2015). When Kotler and Zaltman (1971) first used the term "social marketing", they stated that the approach could be instrumental in solving health problems. Daniel, Bernhardt and Eroglu (2009) state that social marketing is similar to commercial marketing as they both encourage voluntary exchange. Peattie and Peattie (2003) argue that interaction

instead of exchange encapsulates the concept of social marketing. The same scholars indicate that "social campaigns aim to alert, inform, educate, incentivise [and] influence" as people adapt behaviours that benefit them (Peattie and Peattie, 2003). Hastings and Saren (2003) agree with Peattie and Peattie (2003) and further highlighted that the exchange theory is a challenge in the marketing field because of the ambiguity, intangibleness, psychological, and psychosocial, as well as possible benefits that the consumer might never see.

There is a dearth of research in relation to macro and upstream influences within social marketing (Andreason,1997). The majority of social marketing research focuses on the individual, with less attention paid to external stakeholders (Saunders, Barrington and Sridharan, 2015). For the desired structural social impact to be reached, researchers and the marketplace need to focus on a broader mandate that encompasses both the micro and macro environments (Carrete & Arroyo, 2011). At a macro level, social marketing is supported by commercial marketing tools in the plight to influence the target markets' voluntary behaviour. The return on marketing investment is an improved society at both the micro and macro levels (Stead, Hastings and McDermott, 2006). Even though there's a scarcity of theory on this matter, the researcher has observed that in the South African market, some organizations, such as Woolworths, have started implementing initiatives that positively influence society at large (Ajam, 2015). In 2015, Woolworths removed confectionary at their check-out points, intending to reduce impulsive buying of unhealthy foods by payers (adults) and users (children and adults) (Ajam, 2015). At a macro level, we observed a shift in the policy level, and this shift is seen in the SA government sin tax. A sin tax is a tool used to mitigate the negative impacts of sugar confectionery products, such as alcohol and cigarettes, on the health sector and government budgets (Sanews.gov.za, 2020). A study conducted in the public health industry found that challenges in the health sector are often connected to behaviour.

This study confirms that people's behaviours are influenced by their context (micro and macro) (Daniel, Bernhardt and Eroglu, 2009). It also confirms that social marketing is a social theory that positively influences consumer behaviour (Daniel et al., 2009). The researchers also highlight the importance of following a layered approach when influencing consumer behaviour: education, structural social support, customer segmentation, and understanding your consumers' contextual environment.

Dann (2010) postulates that behaviour is a measurable indicator that can support researchers in learning and measuring consumer beliefs and attitudes. Behavioural change is achieved through multiple avenues, such as communication and compelling offers that encourage 'voluntary change'. Consumers do not exist in isolation but rather in a social context and are influenced by cultural, social, personal, and psychological factors (Brosekha, Velayutham and Phil, 2013). Consumer behaviour is understood as a consumer decision process and the considerations they deliberate upon when making purchase choices. Furthermore, consumer behaviour considers the factors that influence consumer choices, namely, fulfilling their basic human need as well as their surrounding environment (Engel, Blackwell and Kollot, 1978). Other scholars add purchase situations to the abovementioned influential factors in decision making (Lamb *et al.*, 2004). Over the years, there have been multiple theories reviewing behavioural influences. These theories are primarily separated into two paradigms: the positivist and the non-positivist (Pachauri, 2001). The positivist includes the most familiar theories that are mostly used to understand human behaviour and decision-making processes in the social and human sciences, including rational choice theory, psychodynamic theory, economic, behavioural, and environmental theories (Jeff Bray, 2009). Cognitive behaviour is one of the most widely used theories, and its premise is that consumers can process and access information by following specific steps - problem recognition, information

search, alternative evaluation, choice, and outcome evaluation - though not always in a linear pattern (Peter, Olson and Grunert, 1999). The humanistic approach explores the consumers' journey between purchase intention and actual behaviour (Jeff Bray, 2009).

In summary, marketing professionals aim is to influence consumer behaviour (Hastings and Saren, 2003). Studies confirm that most health and lifestyle challenges are influenced by human behaviour, so social marketing aims to utilise certain commercial marketing principles to solve behaviours that impact consumers and their welfare (Hastings and Saren, 2003).

2.1.2 Theory of Planned Behaviour (TPB)

The Theory of Planned Behaviour is a social psychology model used to understand consumer behaviour (Conner and Norman, 2005). Essentially, it is an extension of the Theory of Reasoned Action (Bray, 2009). While the Theory of Reasoned Action focuses on intention driven by two factors (attitudinal and nominal components), the TPB addition to the model is Perceived Behavioural Control (Terry, Hogg and White, 1999). The premise of the TPB is that an individual's behaviour indicates their intention to perform a particular behaviour, with a view that attitude is the 'immediate antecedent of behaviour' (Pakpour *et al.*, 2014). The TPB is anchored on intention and perceived ability as indicators of goal attainment and is often used to assist researchers in understanding an individual's context in relation to their environment (Parkinson *et al.*, 2016).

Attitude is defined as a person's negative or positive view of a particular task or behaviour (Previte et al., 2015). It must be noted that subjective norms originate from an individual's situational context, including their exposure and personal experiences (Cheng *et al.*, 2019). Subjective norms

are the consumers' perceived social influences, either supportive or unsupportive of a particular behaviour. They hinge on accepting people that are deemed important in an individual's life (Mkhize and Ellis, 2019). The last factor of TPB is Perceived Behavioural Control (PBC), which contextualises an individual's internalised belief in their abilities (Bandura, 2010). The PBC is an individual's perception of how easy or difficult it is to modify a behaviour in the presence or absence of necessary resources and opportunities that support the end goal (Ajzen, 1991). "People having a higher degree of control over these are more likely to have a strong intention to perform a particular behaviour. Behavioural intention is defined as an individual's readiness to perform a certain behaviour and it is assumed as an immediate antecedent of the actual behaviour" (Ajzen, 1991). Attitudes, normative beliefs, and perceived behavioural control are the most influential factors for changing consumer behaviour (Chung *et al.*, 2015).

Studies on the relationship between a healthy lifestyle and the TPB indicate varying results. A study focusing on health screening behaviours shows that the TPB is best for goals that can be completed quickly rather than goals that require consistency or correcting relapse behaviour (Sheeran, Norman and Conner, 2001). Another research on recycling behaviours found that the extended TPB clarified nearly half of the behavioural influences, mainly attitude, perceived behavioural control, and intention. Other key variables that were significant but not included in the model are moral obligation, self-identity, action planning, and recycling behaviour (Pakpour *et al*., 2014). In summary, the TPB is a good indicator of intention within the lifestyle and wellness segment; it has certain limitations. Some scholars find that the TPB can be too simplistic and minimises behavioural factors that influence consumer behaviour, whilst the other school of thought argue that TPB allows researchers to expand the model based on their respective fields of study (Cheng *et al.*, 2019).

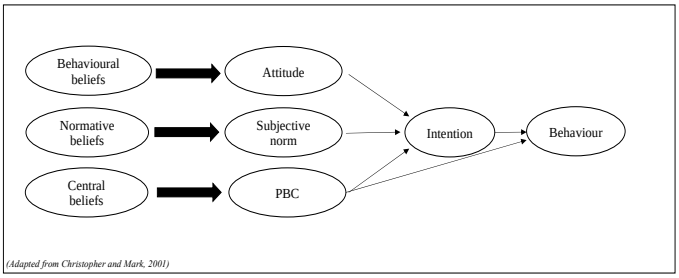

Figure 2.3. The TPB

2.2 Psychosocial and moderating factors: theoretical discussion

The conceptual model below outlines the psychosocial and moderating factors that the research discusses while referencing academic literature.

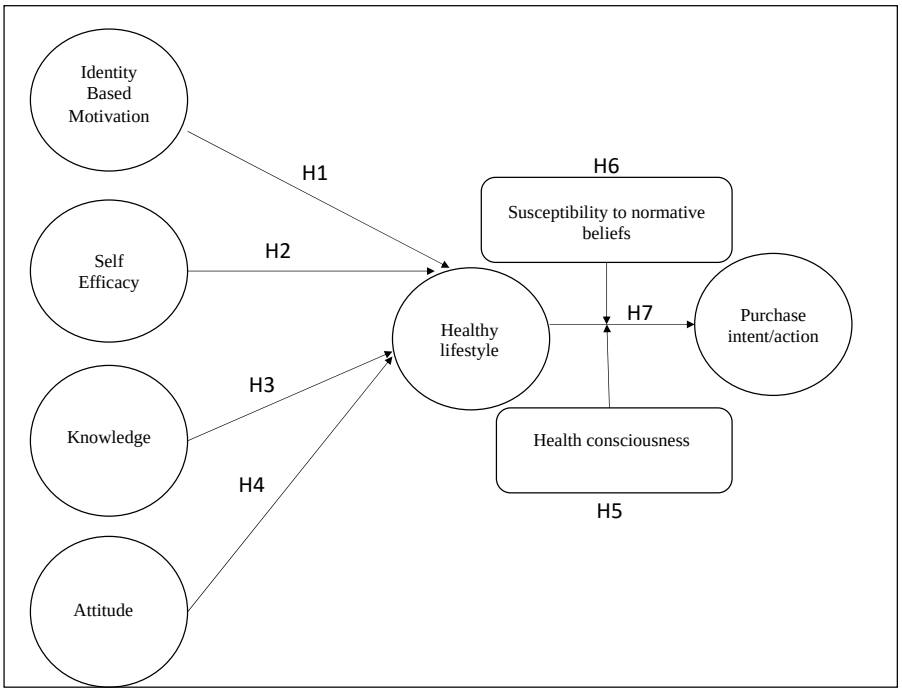

Figure 2.2. The Conceptual Model

2.2.1 The influence of identity-based motivation on healthy lifestyle choices

In social psychology, Stets and Burke (2000) stress the importance of developing a general theory of self, which involves identity and is divided into two parts: individual and social identities (Black and Veloutsou, 2017). Individual identity is what people believe, and defines who they are, such as their gender (Pegu, 2013). Identities are defined as self-created labels by individuals. The labels can be by choice, for instance, 'I am a health-conscious person'. They are either objective or subjective. An objective identity is more permanent, such as, 'I am a father', whereas subjective identities are more malleable and easily influenced by situational cues (Reed *et al.*, 2012). Personal labelling gives a voice to one's identity, and the person has a visual representation (Reed et al.,2012). One's identity is made up of personal elements that are often unique to them, as it is also rooted in a social construct, such as being part of a group or within a community. In this literature review, the researcher focuses on identity-based motivation, a social psychological theory explaining how identities influence individuals to achieve and pursue their goals (Nurra and Oyserman, 2018). People are often attracted to and motivated to be involved in activities and actions that are aligned with their identity (Oyserman, 2009). The IBM recognises the three elements of identity: social, group, and self. It (IBM) recognises that people prefer to make sense of their environments and situations in relation to who they are because when an activity or goal is aligned with who they are, it is easier to achieve what they intend to achieve (Oyserman and Destin, 2010).

Identity-based motivation is anchored on the idea that one's self-concept is heterogeneous and fluid within different contexts (Oyserman et al., 2010). Group membership is one of the key

elements of this theory; it highlights the significance and value of being a part of a particular group. Salient identities within group settings are confirmed, and individuals feel authentic to their identity within that particular context. Social feedback within a community also encourages individuals to pursue their goals, which often leads to acceptance within communities (Oyserman 2009). IBM evaluates the influence of a community on identity salience and how that is reflected in attitudes and behaviours (Bradford, Grier and Henderson, 2017). Kruger, Myburgh and Saayman (2015) completed a study on the motives behind cyclists entering races, and these included being a part of a community, exercising, managing one's weight, as well mental and emotional health.

Two factors are often used to describe IBM: identity-congruency and identity incongruency. Identity congruency claims that an individual's motivational pull is strengthened by activities aligned with their identity, and the opposite occurs for identity-incongruent choices (Oyserman, 2009). The level of difficulty is a neutral moderator of identity congruency and non-congruency. This is because when individuals believe that their involvement in a particular activity is congruent with who they are, the difficulty is viewed as a worthwhile challenge. However, when the opposite occurs in identity incongruent situations, they decide that a particular activity or goal is not meant for them. This type of behaviour is often expressed in healthy living and within the academic space (Bradford, Grier and Henderson, 2017). When it comes to influencing healthy lifestyle behaviour, IBM emphasises the importance of identity congruency.

To conclude, a study investigating virtual support communities for individuals trying to lose weight found that IBM "leads to public commitment" and affords them accountability partners (Bradford, Grier and Henderson, 2017). Virtual support communities allow individuals to enhance

their identity through the shareability of progress, challenges, and successes. These online communities create a platform where unattainable identities are celebrated and new social identities are formed (Bradford *et al*., 2017). Based on this theory, it is plausible to have a link between identity-based motivation and choosing a healthy lifestyle. Consumers need to place and see themselves in the picture and connect with the required behaviour in line with their personal image.

Thus, it is hypothesised that:

H1o: identity-based motivation has a significant relationship with healthy lifestyle choices.

H1a: identity-based motivation negatively influences consumers' purchase intentions when choosing a healthy lifestyle.

H1b: there is no relationship between identity-based motivation and purchase intentions when choosing a healthy lifestyle.

2.2.2 The influence of self-efficacy on a healthy lifestyle

Self-efficacy originates from the theory of self-regulation, which is an individual's attempt to reach a particular goal through behavioural self-control (Bandura, 1997; Dark-Freudeman and West, 2016). It is one's belief in their ability to achieve or perform a particular task. The internal construct of self-efficacy refers to a person's belief in themselves and their ability to achieve what they desire because they are self-motivated and have resources such as discipline, talent, ability, skill, and knowledge (Ben-Ami *et al.*, 2014). "Self-efficacy maintains that all process of psychological and behavioural change operates through the alteration of the individual's sense of personal mastery or efficacy" (Maddux, 2016, p. 58). Mai and Hoffman (2012) further state that self-

efficacy influences how individuals engage with their physical wellness. Self-efficacy serves as the strongest predictor of physical activity levels (Bui, Kemp and Howlett, 2011; Parkinson, David and Rundle-Thiele, 2016). A separate study found that positive self-efficacy leads to positive physical activity behaviour, although negative self-efficacy also has repercussions (Dark - Freudeman *et al*., 2016). "At the core of self-efficacy is both motivation and performance that drive the results, and because of this, the model is critical in health promotion" (Freudeman *et al*., 2016, p.142). Numerous studies reviewed self-efficacy in relation to chronic illnesses. An Australian study showed the influence of motivation and performance on individuals with chronic heart failure (CHF) and their probability to comply with exercise regimens. This study confirmed that SE is a key determinant of improved CHF outcomes and self-care behaviours such as exercise adherence (Francis *et al.*, 2018). A similar study conducted by Schwarzer and Renner (2000, p. 487) states that "self-efficacy operates best in concert with general health changes in lifestyle including physical exercise". It has also been found that once an individual has self-belief in their abilities, such as cooking skills, they are more likely to consume and purchase healthy foods; Behavioural change is linked to a high self-efficacy (Menezes, Roux and Lopes, 2018). A study conducted amongst vulnerable and low socio-economic individuals in Brazil confirms that self-efficacy acts as an enabler in overcoming contemporary barriers such as access to healthy foods, affordability, and social structures (Strachan and Brawley, 2009).

While self-efficacy is widely accepted as an internal process, some scholars have added external self-efficacy as a factor. External self-efficacy focuses on the product or services of tangible properties. It places emphasis on the products' abilities and not on what the consumer can achieve and their abilities (Ben-Ami *et al.*, 2013). Marketers often elevate external efficacy, which might

discourage consumers, as their abilities might seem unattainable when matched with desired goals or facilities (Parkinson, David, Rudle-Thiele, 2015)·

In conclusion, Bandura (1998) states that SE is critical in achieving action and that a strong sense of self-efficacy often results in and facilitates resilience and persistency through difficult situations. Based on these findings, one can expect that individuals with a high level of self-efficacy would engage in healthy lifestyles as they strongly believe in themselves and their abilities. Therefore, these consumers will make choices that lead to positive outcomes because they believe in their ability to achieve their goals, immaterial of the demands placed on them.

It is therefore hypothesised that:

H2o: self-efficacy has a significant relationship with healthy lifestyle choices.

H2a: self-efficacy negatively influences consumers' purchase intention when choosing a healthy lifestyle.

H2b: there is no relationship between self-efficacy and healthy lifestyle choices.

2.2.3 The influence of consumer knowledge on healthy lifestyle choices

According to Bandura (1998), knowledge is one of the precursors to behaviour change. The researcher states that people need to be aware of the impact of their lifestyle, which might give them a reason to change detrimental lifestyle behaviours. Consumer knowledge, information, and awareness are often used interchangeably and are closely linked (Ackoff, 1989). A study defined knowledge as "a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information" (Safari *et al.*, 2016, p. 84). Other scholars expand on the concept of knowledge and say it is when

consumers process insights from past experiences and gain information, leading to behavioural changes (Dibb *et al.,* 2019). Knowledge is made of "familiarity with the product and expertise". Based on the acquired knowledge, this influences a consumer's decision-making process as well as their knowledge sources (Dibb *et al.,* 2019).

While awareness is a choice that an individual makes for absorbing or paying attention, the source of awareness comes from knowledge and learning (Safari, Panahi and Abolghasemion, 2016). Literature describes two types of knowledge: subjective and objective knowledge. According to Brucks (1985), subjective knowledge is what an individual thinks they know and often gives a better understanding of their decision. A study looking at flu shot vaccinations confirmed that the more individuals believe they know, the more confident they are in holding a view and making decisions. Subjective knowledge is often a good indicator of predicted behaviour (Berger, Ratchford and Haines, 1994). Objective knowledge is cognitive and refers to what the individual actually knows, rather than focusing on their abilities and expertise.

Research has inverted the knowledge model and highlights the significance of social networks as a key influence on decision making (Hemsley and Mason, 2013). Within this context, we then have individual and social knowledge. Social knowledge is created by the collective, which leads us to look at the era of digital platforms (Hemsley *et al.,* 2013). Online social networks (OSNs) have been recognised as collective knowledge platforms. This offers consumers information-gathering platforms. OSNs have also popularised the concept of knowledge-sharing (Bilgihan *et al.*, 2016). The rewards are both intrinsic (personal fulfilment) and extrinsic (external fulfilment and include factors such as feedback and promotion) (Yan *et al.,* 2016). Scholars recognise that OSNs have opened a platform where individuals can engage in knowledge-sharing. "Knowledge-

sharing is a kind of exchange behaviour" (Yan *et al.*, 2016, p. 644). Some studies confirm that when individuals engage in knowledge-sharing about their nutritional choices and exercise regimens, this often reinforces their self-efficacy and gives them a platform to gain external recognition and validation (Krishnan and Zhou, 2019, p. 2). An OSN study was conducted among college students using Twitter and Gamification. The study used wearable devices as enablers of a healthy lifestyle and found that daily engagements, feedback platforms, peer support, and self-monitoring using social media deliver positive results for lifestyle behaviour (Chung *et al.*, 2017). OSNs have also become an alternative source of knowledge for healthcare professionals and a bridge between objective and subjective knowledge. Unfortunately, lifestyle medicine interventions by healthcare professionals (HCPs) have had a relatively low impact because of lack of training, inadequate knowledge, time limitations, and a lack of patient compliance. The same study also highlights key misalignments between HCPs and patients, such as empathy, understanding a patient's context and limitations, and delivering appropriate counselling based on an individual's needs (Dacey *et al.*, 2013). Research also indicates that the evolution of access to knowledge between HCPs and consumers has increased, as more and more healthcare consumers can access knowledge from both HCPs and OSNs (Hwang and Cranage, 2010). Therefore, consumers have different methods to attain the desired knowledge based on the type of knowledge and their familiarity levels with the presented knowledge, which influences the decision-making process. Research also indicates that online platforms have made knowledge accessible both intellectually and in real-life moments that are apportionable. Both subjective and objective knowledge are now shareable, making knowledge accessible through multiple channels, both online and offline.

<u>It is therefore hypothesised that:</u>

H3o: Knowledge has a significant relationship with healthy lifestyle choices.

H3a: There is no relationship between knowledge and healthy lifestyle choices.

H3b: There is no relationship between accessing knowledge through online networks and healthy lifestyle choices.

2.2.4 The influence of attitude on healthy lifestyle choices

In line with TPB, scholars indicate that attitude has a correlational relation with intention. A study conducted focusing on purchasing organic foods also confirmed that "health consciousness had been found to predict attitude" (Michaelidou and Hassan, 2008). Engel, Blackwell and Kollat (1978) refer to attitude as a 'mental and neutral state of readiness to respond'. This neutral state of mind is influenced by experiences and ultimately influences consumer behaviour. Attitude is an individual's view of a particular situation or required behaviour. Their views can be favourable (enjoyed, loved, pleasant) or unfavourable (disliked, hated, unpleasant) (Engel *et al*.,1978). Research has identified three key attributes to attitude: first, a link between attitude and behaviour; secondly, focusing on attitude towards an action and not the object or activity; lastly, general attitudes give a better sense of a consumers' holistic view (Bagozzi, 1981). A study looking at green consumer behaviour found that intention is positively influenced by attitude. A positive attitude subsequently influences how consumers behave in relation to purchasing and lifestyle choices, such as preferring green products like green wines, green electricity, and bookings at green hotels (Arli *et al.*, 2018). A positive attitude has multiple benefits when consumers are making decisions. A study looked at consumer behaviour and genetically modified products and found that their attitudes change positively with people who are aware of their intentions (Arli *et al.*, 2018). However, Bentler and Speckark (1979) and Bagozzi (1981) believe that intention-

attitude behaviour relations were not strong enough as a causal link of behavioural change. Other important motivational factors that influence a person's attitude are personal consequences and the will to conform to subjective norms (Fredricks, Dennis and Doset, 1983). People are more likely to absorb positive self-consequences if it means achieving the desired behaviour (Cook, Kerr and Moore, 2002).

Attitude is conceptualised as having three underlying components: cognitive, affective, and behavioural (conative). Affective attitude focuses on feelings towards a brand or an activity. Positive attitudes make it easier for consumers to act or behave in a favourable manner, and this often leads to brand commitment. "Emotional valence reflects customers' affective attitude toward a brand, and a positive affective brand attitude is evoked by the evaluative/cognitive procedure of considering brand benefits" (Ahn and Back, 2017, p. 453). The two strands - cognitive and affective - are complementary because they often are what an individual feels is influenced by the cognitive. A favourable attitude towards a brand or behaviour will drive conative attitudes. Conative attitude is essentially where intention meets behaviour. Conative attitude is behavioural and takes past behaviour into significant consideration. Bentler and Speckart's study (1979) confirms that attitudes and past behaviours are significant, and their approach acknowledges intentions, though this does not deem it as the most important

<u>It is therefore hypothesised that:</u>

H4o: attitude has a significant relationship with healthy lifestyle choices.

H4a: there is no relationship between attitude and consumer purchase intentions when choosing a healthy lifestyle.

H4b: an unfavourable attitude negatively influences consumer purchase intentions when choosing a healthy lifestyle.

2.2.5 The impact of healthy lifestyle choices on consumer purchase intentions

In recent years, consumers have become more responsible for their health (Kraft and Goodell, 1993). The shift is driven by research findings stating that chronic diseases are often incurable and promoted by unhealthy lifestyle practices (Cockerham, Snead and Dewaal, 2000). According to the WHO, a healthy lifestyle is when people prevent health challenges and live a life that enhances their personal well-being, such as eating more fruits and vegetables, eating less sugar and salt, and using digital technologies to enable a healthy lifestyle (WHO, 2020). "A healthy lifestyle is an orientation toward the prevention of health problems and the maximization of personal well-being". While this could legitimately encompass a wide variety of behaviours, from flossing after meals to applying sunscreen, most healthy lifestyle research has focused on diet and exercise (Divine and Lepisto, 2005, p. 275). A healthy lifestyle comprises behavioural patterns and choices derived from knowledge and choices available to individuals (Saint Onge and Kruger, 2017; Cockerham, 2005). Cockerham further elaborates on this concept stating that certain aspects of healthy practices are by choice and others by chance, chance being linked to an individual's social class. A study found that although customers claim to be living a healthy lifestyle (Divine *et al.*, 2005), about 70% of South African women are overweight or obese (Green, 2017). Another study conducted in Gauteng, South Africa, focusing on the relationship of food label reading and its relationship with a healthy lifestyle, found that people living in Gauteng lead a sedentary lifestyle with low levels of exercise (Kempen *et al.*, 2012)**.** Based on the above evidence, it seems that most Gauteng residents are not as healthy, and individuals seem to be selecting healthy and unhealthy

practices that they are incorporating into their lifestyles. The market is therefore heterogeneous (Divine *et al*., 2005).

To further enhance understanding social contexts, the researcher used the 4A framework outlook to unpack healthy lifestyles within the emerging markets and focused on accessibility and affordability. The other two elements of the model include acceptability and awareness (Sheth and Sisodia, 2012). Accessibility speaks to the ease and convenience in purchasing or using a service (Sinha and Sheth, 2017). Ultimately, consumers make particular behavioural lifestyle choices based on their available resources (Cockerham, Snead and De Waal, 2000; Dawson *et al.*, 2008). These proactive choices are influenced by variables such as age, gender and ethnicity (Cockerham et al., 2000). There is evidence linking healthy practices and access. For example, a study conducted in Scotland found that access to nutritious foods was a challenge. This contributed to undesirable dietary choices and obesity rates because consumers over-ate as the foods lacked nutrients. The same study found a variety of barriers when it comes to accessing nutritious food: financial limitations, physical abilities, and minimum marketing initiatives that promote healthy foods and healthy living (Dawson *et al.*, 2008).

Research outcomes from previous papers found that lifestyle choices can often be aggregated by class and socio-economic status, as customers' willingness to spend is influenced by affordability (Sheth and Sisodia, 2012, p. 14). People in lower socio-economic conditions tend not to focus as much on a healthy lifestyle when compared to individuals in the upper and middle classes (Cockerham, 2005). There is a connection between socio-economic lifestyle behaviours such as smoking and exercising (Wardle and Steptoe, 2003). Socio-economic factors such as education, health attributes, and immediate social circumstances tend to influence pro-health behaviours (Pill,

Peters and Robling, 1995). A UK study found that people's socio-economic status influences their conscious awareness towards a healthy lifestyle and their futuristic views. The findings from this study found that affluent individuals thought more actively about the future and were keener to invest in their health and in prolonging the longevity of their lives (Wardle and Steptoe, 2003). The healthy lifestyle segment is 'a form of consumption supported by goods and services such as cycling gear, golfing kits, cycling shoes and attires, supplements, diet plans, and so on (Cockerham, 2005). Brands such as Weight Watchers generated over $1.5 billion in revenue and have recently partnered with Oprah Winfrey on a global campaign for their rebrand and repositioning (Yang *et al.*, 2012). "Helping people make healthy choices can be very profitable", from supporting consumers with their health journey through selling them products, offering online and offline support groups, wellness programs, recipes, and so on (Weight Watchers, 2020). The Nintendo Wii Fit, a family-fun gaming console, is an example of another product that promotes a healthy lifestyle product. This console was sold to over 40 million households worldwide (Yang *et al.*, 2012). In summary, consumer choices are not made in isolation but rather within a social context, culture, and economic circumstances. Lifestyle choices give scholars and marketers alike an opportunity to understand how the broader social context influences consumers' behavioural patterns (Saint Onge *et al.*, 2017).

2.2.5.1 Healthy lifestyle and behavioural intentions

This study also focuses on behaviour, especially behaviour that is important for living a healthy lifestyle. The theoretical framework of the Theory of Reasoned Action (TRA) has been successfully used in previous research reports for similar studies, and it illustrates what people plan to do or not to do (Chitamun and Finchilescu, 2003). It can give a sense of an individual's internal dialogue, which ultimately informs behaviour (Bellman, Teich and Clark, 2009). The

theory also states that consumer attitudes, beliefs, and subjective norms determine the intended consumer behaviour (Finlay, Trafimow and Moroi, 1999). Scholars further elaborate on the sequence of this framework and state that individuals perform behaviours because of their own attitude, and these are carried forward because of acceptance by their community (subjective social norms) and their belief in the community's approval (Bellman, Teich and Clark, 2009). Intentions are what a person decides to execute and subsequently supports it with a tangible plan and effort to perform that particular behaviour (Conner *et al.*, 2001). They are planned (intended) acts that increase one's probability of executing a particular behaviour immediately or in the future (Sheppard, Hartwick and Warshaw, 1988). A previous research report analysing students found that one's preference for a particular behaviour is often an indication of whether they will do it or not (Cameron and Campo, 2009).

The purpose of the TRA is to explain behaviours that people have a choice in. To understand the consumer's behaviour holistically, scholars and the marketplace need to understand the relationships between attitude, beliefs, subjective norms, intentions, and behaviour (Chitamun and Finchilescu, 2003). As mentioned earlier in the paper, the theory of planned behaviour (TPB) is an extension of the theory of reasoned action. The TPB is differentiated by perceived behavioural control, which focuses on consumers' perception of the ease or difficulty of the task at hand, and the TRA focuses on intention. Some scholars have used both TRA and TPB in their studies, and as such, the present study uses the same approach, thus focusing on intention and perceived behavioural control as determinants of behavioural intentions. "The Theory of Reasoned Action and the Theory of Planned Behaviour both suggest that behaviour is guided by attitudes, norms, and, in the case of the TPB, perceptions of control" (Honkanen, Olsen and Verplanken, 2005, p. 161). Perceived behavioural control fulfils two roles: it influences behaviour and perceived control

(Conner *et al.*, 2000). The researcher finds the proposed approach suitable because both models focus on the intention to execute a particular behaviour (Cooke and French, 2007). Cooke and French (2007) performed a screening study and found that both models (TPB and TRA) supported their study adequately. Ajzen and Madden (1985) analysed two experiments using both the TPB and TRA and found two contradictory results. In the first experiment, they found that PBC can influence an individuals' behaviour positively, and once the individual believes that their choice behaviour is under control, this has a positive impact on intention. On the contrary, in the latter experiment, they found minimal impact between intention and PBC when examining weight loss.

It is therefore hypothesised that:

H7o: Healthy lifestyle choices have a significant impact on consumer purchase intentions.

H7a: Healthy lifestyle practices negatively influence consumer purchase intentions.

H7b: There is no relationship between healthy lifestyle choices and consumer purchase intentions.

2.2.6. The impact of normative influences on behavioural intentions and healthy lifestyle choices.

Normative influences are defined as the tendency to live according to the expectations of others (Shukla, 2011). Consumers' social environment influences their behaviour, purchase intentions, and actions. Normative beliefs consider the consumer's social context, which often influences their decision-making (Shukla, 2011). Consumers have a need to be accepted and validated by those around them, and this is sometimes achieved through purchasing certain brands, product lines and their "willingness to conform to the expectations of others by learning from them or observing

their tendencies" (Bearden, Netemeyer and Teel, 1989). Research has shown that consumers' decision-making is influenced by their social context, which intimates that consumers would be inclined to make different decisions if they were on their own, but due to social influences and pressures, they make different choices in order to gain social approval from others (Shukla, 2011). The researcher has selected normative influence as a moderating factor because healthy lifestyle choices are considered social behaviours that people often engage in with others: their shared life experience (Yun and Silk, 2011). Normative influences have also been recognised as "important factors influencing healthy lifestyle beliefs as well as behaviour" (Love and Thurman, 1991). A study conducted by Park and Smith (2007) supports these views and says that perceived normative influences play a role in health practices, such as choosing to exercise, eating healthy, consuming alcohol, or donating blood, as individuals often partake in activities that align with those around them.

This research paper discusses three types of normative beliefs: value expressiveness, utilitarian influences, and informational influence (Bearden, Netemeyer and Teel, 1989). Value expressiveness is concerned with maintaining one's self-concept (Martin, Wentzel and Tomczak, 2008) as well as perceived societal pressures and expectations. It is doing what you think others think you must do (Smith *et al.*, 2008), and this can be expressed through membership or group association that enhances the desired self-concept (Martin *et al.,* 2008). A previous research report found that individuals who enhanced their self-concept often associate with people who complement their self-concept. For instance, overweight people tend to spend time with other overweight people, which implies that they might share similar behaviours, such as leading a sedentary lifestyle (Valente *et al.*, 2009). This often results in individuals finding more of their own kind and creating suitable social behaviour and norms (Yun and Silk, 2011). Utilitarian values

are concerned with doing what is expected, being compliant and avoiding any possible punishment, and ultimately being rewarded (Park and Smith, 2007). An Indian study on green purchase behaviour found that individuals who self-monitor are often influenced by what others think they should do, whereas those who do not self-monitor regularly are influenced by typical norms (Khare, 2014). According to a study that looked at environmental consciousness and demographic segmentation in different markets, interpersonal influences differed by market. For instance, in the Hong Kong market, Green purchasing was influenced mainly by peers and social affluence, whereas in the Iranian market, demographics and the legal frameworks were the influencing factors (Khare, 2014). Thus, the Hong Kong market is more inclined towards value expressiveness, and the Iranian market is more utilitarian.

Informational influences are when consumers take in the opinions of others as a reflection of reality. This can occur in two ways: first, by observing the behaviour of influential and significant others, and secondly, by receiving information from knowledgeable others. These influences tend to impact consumer decision-making in brand selection (Park and Lessig, 1977). A social network study focussing on Diabetes patients found that 74% of the messages focused on gaining information around symptoms, lifestyle choices, and specifically food choices and exercise regimes amongst peers (Zhang, He and Sang, 2013). Normative influences are multi-dimensional, and varying factors influence consumers. To fully understand consumer behaviour, the impact of interpersonal influences needs to be analysed: attitudes, norms, values, aspirations, and purchase behaviour (Stafford and Cocanougher, 1977). In summary, consumers often comply and enhance the image they display to others and seek information through various sources (Bearden, Netemeyer and Teel, 1989).

Thus, it is hypothesised that:

H6o: there is a significant relationship between healthy lifestyle choices and normative beliefs.

H6a: normative beliefs have a significant impact on purchase intentions.

H6b: normative beliefs have a significant impact on healthy lifestyle choices.

2.2.7 The impact of health consciousness on behavioural intentions and healthy lifestyle choices

Wellness and healthy living are becoming increasingly popular as more people become self-aware, as evidenced by behaviours such as weight monitoring, working conditions, food consumption, and increased government spending on health (Hayakawa, 2016). At the forefront of Health consciousness is the intention to implement healthy behaviour that will ultimately afford consumers better well-being and reduce health challenges (Michaelidou and Hassan, 2008). Customers are becoming more and more proactive in their health and displaying behaviours, such as getting second opinions from other HCPs, reading scientific information, and choosing suitable care options for themselves (Gould, 1988). Health consciousness refers to individuals who have integrated their health awareness into their everyday lives. This could be expressed through regular exercising or reading nutritional labels when purchasing food (Jayanti and Burns, 1998). Health-conscious consumers often "adopt a wellness-oriented lifestyle", which encourages a beneficial quality lifestyle (Jayanti and Burns, 1998). Michaelidou and Hassan (2008) build on the definition and highlight that Health consciousness is conscious "readiness to undertake health actions", such as making healthy food choices and exercising. It speaks to a consumer's mindset to take care of their health and general well-being and prevent future health challenges. A health-conscious consumer is consistent with their health choices across different product categories and often

chooses a healthy option over taste, price, and brand preference (Prasad, Strijnev and Zhang, 2008). Furthermore, Jayanti and Burns (1998) highlight other factors that influence health consciousness, including self-efficacy, motivation, and knowledge. As mentioned in the above text, self-efficacy focuses on one's belief in their abilities. According to Bandura (1998), individuals' self-efficacy is needed in various circumstances, while motivation and knowledge aid in achieving the desired behaviour as well as self-regulation. Attitude is highlighted by Mai and Hoffmann (2012) as another key indicator towards purchase intentions. Consumer attitudes aligned to health consciousness often lead to consumers purchasing and focusing on healthy choices (Gould, 1988). A study on identifying a health-conscious consumer states that individuals who lead a wellness-oriented lifestyle are concerned with nutrition, fitness, stress, and their environment. They accept the responsibility for their health and are excellent customers for health-related products and services. Therefore, it is imperative for health-oriented marketers to have a "psychographics-oriented approach" (Kraft and Goodell 1993). A different study looked at gender, fast food restaurant frequency, and exercise in relation to health consciousness and found that female consumers tend to be more knowledgeable, and this is an indicator of health consciousness. The same survey found that more health-conscious people seem to dine out less frequently, exercise more, and go to fast food restaurants less often when they do go out (Hwang and Cranage, 2010). Consumers who are not health-conscious will often not partake in activities that support the concept of being health-conscious, such as reading nutritional labels or exercising (Jayanti and Burns, 1998).

The health-conscious consumer provides an opportunity for brands to create new product lines, augment existing products and target a new market. More and more brands are launching healthy alternatives as consumers purchase products that support health-conscious lifestyles (Dawson *et*

al., 2008). In response to the health-conscious consumer, brands such as PepsiCo launched Tropicana, Lay's launched Smart Snack - a low-fat and calorie snack - and lastly, Coke launched a drink that contains green tree extracts (Prasad, Strijnev and Zhang, 2008). A survey conducted in the United States found that 87% of the respondents considered nutrition when doing grocery shopping, 64% were willing to pay more for healthy food choices, and a significant amount claimed to have changed their lifestyle for health reasons (Prasad, Strijnev and Zhang, 2008). With this being said, there is limited research focusing on the motivating patterns behind consumer behaviour in relation to the drivers of consuming healthy brands (Kemp and Bui, 2011). "Findings suggest that brand image, price, health consciousness, and quality of a particular brand are the most important factors influencing decision-making for purchases, and thus the marketer's value proposition and positioning should build around health and value for money" (Kumar, 2014, p. 25). In summary, the global consumer wellness trend is pushing brands towards health-oriented products. While there are conflicting views on the effects of health consciousness, a study focusing on organic produce found that health can be a major motivator, although some individuals do not seem to recognise the health benefits of living a health-conscious lifestyle (Michaelidou and Hassan, 2008).

Thus, it is hypothesised that:

H5o: there is a significant relationship between health-conscious consumers and their behavioural intentions.

H5a: health-consciousness has a significant impact on purchase intentions.

H5b: health-consciousness has a positive influence on healthy lifestyle choices.

H5c: there is no relationship between health consciousness and behavioural intentions.

2.3 Conclusion of the Literature Review

In conclusion, the literature review discusses the psychosocial factors that influence living a healthy life. These are not examined in isolation but rather within the customer's context using social psychological theories. The objective of the literature review is to hypothesise the strongest relationships that will influence consumer purchase intentions as well as behavioural intentions with respect to healthy lifestyles.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 INTRODUCTION

Chapter two discussed theories supporting the applied conceptual framework and looked at key motivating factors influencing consumer behaviour when choosing a healthy lifestyle. The researcher is clear about the hypothesised relationships and has an explicit understanding of variables, such as knowledge and attitude towards consumers' decision-making when choosing a healthy lifestyle. Chapter three summarises the research approach undertaken by the author to answer the research questions and hypothesis raised in this study. Further, the research confirms

or disproves some of the hypotheses and assumed relationship correlations. Quantitative research was used for this study because it is rooted in the philosophy of rationalism. It also follows a rigid, structured, and predetermined set of procedures to explore, and a substantial sample size often supports it. This methodology allowed the researcher to provide an analytical and conclusive view of the study (Kumar, 2019). On the other hand, qualitative study is more explorative and gives researchers a perspective on their inner views and experiences. Qualitative research is not driven by numerical findings but rather by an in-depth understanding that is descriptive and often not scalable, and cannot be generalised (Corbin and Strauss, 2008).

This chapter includes the research methodology, research design, population and sample, research instrument, data collection, data analysis, limitations of the study, and validity and reliability.

3.2 Research methodology

The research approach is a "plan or proposal" used to conduct a research project. The researcher focused on the four components of the research approach: philosophical views (post-positivist), research designs (experimental), research approach (quantitative), and research methods (cross-sectional) (Creswell and Creswell, 2018, p. 4). The overarching purpose of this research paper was to investigate how key psychosocial factors influence lifestyle choices, specifically focusing on healthy living choices amongst middle-income consumers in South Africa. The quantitative analysis methodology used in this study is numeric and structured, and it influences the research method, approach, and design used. Within the research design framework, experimental is the proposed method for collecting data because it allows the researcher to assign different tests to the various research groups. Experimental research allows researchers to test the provided hypotheses amongst different groups and identify the independent and dependent variables and their causal

relation to each other (Kirk, 2012). Welman and Kruger (2009) highlight the importance of intervention in experimental research. Intervention has the opportunity to expose different research groups to different interventions, with the ultimate aim being to see the impact of the independent variable on the dependent variable. The groups can be randomly assigned, however, not randomly selected. Sunders, Lewis and Thornhill (2016) unpack the purpose of experimental research, which is to study the probability of a change in an independent variable causing a change in another.

This study is anchored in a post-positivist knowledge approach because its lenses are based on the idea that the world is objective and can be measured. Secondly, it focuses on the numeric measurement of human behaviour. To support its measurement view, this philosophical stance often reduces the size of the world by creating small test groups that can be representative (Creswell, 2003).

3.3 Research Design

Research design is the roadmap for the research journey. It gives the reader a good sense of the study and communicates how information that aims to answer the research question is attained from the research participants (Welman and Kruger, 2001). Kumar (2019, p. 155) mentioned two functions of research design: first, it is used to outline "how different methods and procedures are to be applied during the research process," and secondly, to mention the controls that ensure the study is reliable and meets the quality requirements methods that deliver on validity, objectivity, and accuracy of the study. Research design affords researchers a platform that allows them to gain answers to posed questions in a controlled environment. It enables the "researcher to answer research questions as validly, objectively, accurately, and economically as possible" (Kerlinger, 1986, p. 280).

For this study, the research data was collected using a cross-sectional survey. This survey method was employed for two reasons: it allows the inquirer to focus on a particular time frame, and it is best suited for social sciences focusing on attitudes (Kumar, 2013). This survey method also allows for generalisation, using a subset of the population (Olsen and George, 2004), and it is a good indicator used to "determine the prevalence of an outcome" (Omair, 2015).

Malhotra and Brink (2007) mention three research design methods: exploratory research, causal and descriptive research. This study adopted *descriptive research* because it is controlled, descriptive, and driven by data while using historically clearly defined constructs to describe "market characteristics or functions (Malhotra and Brink, 2007). Experimental research provides the framework for establishing a relationship between cause and effect. In experiments, the researcher is an active agent (Polit *et al*., 2001) who uses deductive reasoning to prove or falsify hypotheses (Proctor, 1998). This involves manipulating an independent variable (cause) and observing the outcome on a dependent variable (effect) while attempting to hold extraneous variables constant (Walker, 2005).

A descriptive study is often singular and supports quantitative research methodologies, the selected method for this study. Descriptive studies also describe the research outcomes and the attributes for the selected sample (Omair, 2015). This research method provides an account of the characteristics of individuals, groups, or situations (Jack and Clarke, 1998) that may form the first stage of more complex designs (Clifford, 1997; Carter, 2000). In summary, descriptive research aims to find what has not yet been discovered and describe what gives a numeric view of the research outcomes and creates workable patterns or groups (Walker, 2005).

3.4 Population and sample

3.4.1 Target Population

Malhotra and Birks (2007) defined population as "the aggregate of all the elements that share some common set of characteristics". A sample is part of the population and is selected from it; They are largely partitioned into probability sampling or non-probability sampling (Bryman, 2012). The selected population for this study was middle-income South Africans. The sample selection strived to be representative of the full spectrum of South Africa in terms of gender, race, and employment status.

3.4.2 Sampling frame and sampling size

Bryman (2012) postulates that a sampling frame is a list of people selected from a sample. According to Kerlinger (1986), sampling is a portion of the population with the hopes that it is representative of the population being studied. The targeted sample size for this study was 493 respondents, and social media platforms were used as the primary tool of communication to distribute the questionnaire. To test the hypotheses, the researcher used Qualtrics online questionnaire, which was distributed through social media platforms, particularly Facebook and Instagram; these platforms facilitated national distribution across the nine provinces. The researcher initiated a social media advertising campaign, selected the target market, and designed a display advert banner in order to communicate the opportunity to respond to an academic survey. The sampling frame for the study was informed by other similar research papers, with sampling frames ranging between 200 and 550, for instance, shaping safe drinking cultures (Previte, Russell-Bennett and Parkinson, 2016) with a 216-sample size and the influence of subjective and objective

knowledge on attitude, motivations, and consumptions of organic food with a sample size of 529 respondents (Aertsens *et al.,* 2010).

3.4.3. Sampling method

The nonprobability and purposive sampling methods were employed in this study. The benefit of purposive sampling is that it allowed the researcher to deliberate about selecting a representative sample by identifying relevant groups and areas (Kerlinger, 1986). Furthermore, sampling was done with the research questions in mind, ensuring that the participants could answer the questions (Bryman, 2012).

3.5 The research instrument

The research instrument, referred to as the questionnaire, is a data collection method that involves asking individuals predetermined questions (Saunders, Lewis and Thornhill, 2016). This study used a structured questionnaire, which means the questionnaire was standardised and predetermined (Malhotra *et al*., 2007). The researcher selected a structured questionnaire because it offered reduced error rate and accuracy (Bryman, 2012). Scaling is a marketing tool that allowed the researcher to place "respondents on a continuum with respect to their attitudes", ranging from positive to negative (Malhotra *et al.,* 2007). The researcher used a non-comparative scale, the Likert scale, to allow respondents to share their "opinions, attitudes or feelings" on the issues raised in the study (Nemoto and Beglar, 2014), and it was more manageable to administer (Malhotra *et al.*, 2007). The Likert scale is essentially a multiple-indicator or multiple-item measure of a set of attitudes relating to a particular area. The goal of the Likert scale was to measure the intensity of feelings about the area in question. Its most common format comprises a series of statements (known as items) that focus on a certain issue or theme. Each respondent was asked to indicate

their level of agreement with the statement (Bryman, 2012, p. 154). The 5-point scale was used as the main scale because literature suggests that the five-point scale appears to be less confusing and often leads to increased response rates as respondents are not overwhelmed by the number of options available to them (Chitiris and Paravantis, 2007).

The researcher followed a two-step approach for the path analysis, starting with confirmatory factor analysis and then structural equation modelling (SEM), using the full information maximum likelihood (FIML) approach. The benefit of employing these approaches was to validate the testing of elements such as pattern coefficients and theoretical models. The role of exploratory factor analysis (CFA) was to confirm the viability of the proposed conceptual framework as it has not been used in previous studies. This approach assisted in determining model fitness which informed us on how to improve and formulate a relevant model in the South African context. The researcher selected SEM because of its various strengths, such as suitability for theory testing and theory development (Anderson and Gerbing, 1988). SEM also has the advantage of accounting for mistakes and modelling them, as well as providing space for testing hypotheses and "guiding exploratory and confirmatory analysis in a manner combining self-insight and modelling skills with theory" (Bagozzi and Yi, 2011). The main disadvantage of SEM is that it infers causal conclusions and cannot indicate correlational data (Hox and Bechger, 1998).

3.6 Procedure for data collection

An online survey, which employed the Qualtrics research platform, was used for data collection for this report. The survey was accompanied by a request letter which gave the potential respondents the context about the author's request and the purpose of the study. The survey was published on online social media platforms, Facebook and Instagram. The online survey method

was used because of its efficiency, reach, and convenience. It also encouraged respondents to answer whenever they felt like (Evans and Marthur, 2005). Social media is becoming a significant part of academic research, and there has been a noticeable growth and usage of this platform (Sugimoto *et al.*, 2016). The internet and online social networks are relatively new technology communication mediums that offer a range of opportunities such as information exchange, human connection as well as social and academic research (Matoke and Otieno, 2014). The researcher used social networks as they are generally time and cost-efficient and allows targeting respondents in different geographical locations with minimum human cohesion (Matoke and Otieno, 2014). In terms of data management, online surveys expedite the process and make it easier to reach findings and identify patterns (Evan *et al*., 2005). Online survey platforms based on social media provided access to audiences that are typically difficult to reach (Wright, 2006). Although social networks are gaining traction in academia, one of their weaknesses is the ability of respondents to complete a questionnaire numerous times (Matoke and Otieno, 2014). To mitigate against this weakness, the researcher used Qualtrics research platform, which only allows for a single response from each IP address; therefore, respondents cannot complete the questionnaire multiple times.

3.7 Data analysis

The purpose of this research paper was to test the relationship between the dependent and independent variables, with the end goal being establishing the influence of purchase intentions when consumers choose a healthy lifestyle. Factor analysis was employed in this study to establish the variance between the four independent variables and the two antecedents to ultimately determine if there are any naturally formed clusters (Bryman, 2012). It is used for multiple-item measures like Likert scales to see how much of the vast number of items that make up those

measures has an underlying structure (Bryman, 2012). The data was analyzed using the IBM social statistical package for the social sciences (SPSS) software, which, according to Bryman (2012), is best suited for quantitative studies and is widely used.

3.8 Limitations of the study

The selected methodology for this study is a quantitative research that does not distinguish people and social institutions from "the world of nature". It can sometimes overlook cultural context as well as how people interpret the world around them. In addition, the capacity for self-reflection cannot be found among the objects of natural science (Bryman, 2012). The reliance on instruments and procedures hinders the connection between the research project and everyday life (Bryman, 2012). Lastly, the analysis of relationships between variables can create a static view of people's lives (Bryman, 2012).

3.9 Validity and reliability

The basic principles of validity and reliability are data integrity and research instrument replicability (Bryman, 2008). Bryman (2008) further elaborates and states that validity requires researchers to ensure that the research results reflect the study's objective, whereas reliability is fundamentally concerned with the results being consistent over time and replicability. Predictive validity was employed in the study to determine the ability of the instrument to predict the respondent's intention to choose a healthy lifestyle.

3.9.1 Internal validity

Internal validity is concerned with determining whether two variables have a causal relationship (Cook and Campbell, 1979). Welman and Kruger (1999) elaborate that there must be a causal relationship between the dependent and independent variables, which means that changes in the dependent variable must be attributed to the independent variable after the causal relationship has been established. Internal reliability was tested using Cronbach's Alpha, of which the recommended benchmark score is 0.80 (Bryman, 2008).

3.9.2 External validity

External validity aims to establish the replicability of a study across different research contexts, "different types of persons, settings and times" (Cook and Campbell, 1979). It is concerned with ensuring the ability to generalise a causal relationship across the different situations mentioned above (Cook and Campbell, 1979). This study's external validity was confirmed with the generalisation that healthy lifestyle choices are considered across the different economic groups.

3.9.3 Reliability

Malhotra defined reliability as "the extent to which a scale produces consistent results if repeated measurements are made" (Malhotra et al., 2012, p. 357). Consistency and reliability are at the core of reliability, and researchers need to be cognisant of the key elements when measuring consistency over time and participants' contexts, such as 'fatigue' (Bryman, 2012).

3.10 Ethical considerations

When conducting research, it is important to follow the required ethical protocols that will support the researcher and the study's validity. Resnik (2011, p .1) defines ethics as "a method, procedure, or perspective for deciding how to act and for analysing complex problems and issues." As Davis,

Francis and Jupp (2011) postulate, ethics are standards that must be applied to others when conducting research. The researcher complied with Wits Business School's ethical requirements, adhering to social moral codes, maintaining trust and collaboration between the researcher, the respondents, and the academic institution (Resnik, 2011). As part of the university's ethical requirements, the author applied for ethical clearance, which Wits Business School approved. To ensure trustworthiness, the data collected reported is accurate and has not been altered to suit the researchers' goals and objectives (Booth *et al.*, 2016).

The following core ethical concerns were considered to ensure the study's credibility:

- The researcher ensured the privacy and confidentiality of respondents' data by ensuring anonymity through online survey coding;
- Informed consent included the rights of respondents to accept or decline consent;
- The respondents had the right to withdraw from participating in the research study at any given time;
- The findings of the study are not be misused (Aaker, Kumar and Day, 2007);
- The respondents had the right to select questions that they felt comfortable answering (Aaker *et al*., 2007).

3.11 Summary

This chapter gives a framework of the research methodology that the researcher followed in order to prove or disprove the assumed hypothesis. The researcher ensured that ethical considerations are taken into account in accordance with the ethical requirements.

CHAPTER 4: DATA PRESENTATION AND FINDINGS

4.1 INTRODUCTION

The first three chapters discussed the problem statement, purpose of the study, literature conceptual framework, and research methodology. Furthermore, a detailed breakdown outlining the objectives, aim, and rationale of the study was explained. In chapter two, the subject matter of healthy lifestyle choices was discussed, looking at the existing theory in order to have a comprehensive understanding. The researcher ensured that ethical considerations were observed in accordance with policy. In addition, consent was sought, and the confidentiality of respondents was protected. This chapter provides the analysis of the data collected.

Chapter four summarises the analysed findings obtained from 493 research respondents through an online survey among South Africans, using the Qualtrics survey platform. After cleaning the

data file, a total of 493 responses were used for the analysis. The responses with missing data fields were handled with full information maximum likelihood estimation approach, which was implemented in subsequent structural equation modelling analysis. Excel was also used for data analytics. The following findings comprise the respondents' demographics, descriptive statistics measures, measurement model estimation, and hypothesis testing and results.

4.2 Respondents Demographics

4.2.1 Gender

The results reveal that the sample of this study was predominantly female. Females made up 89.25%, while 10.55 % were males.

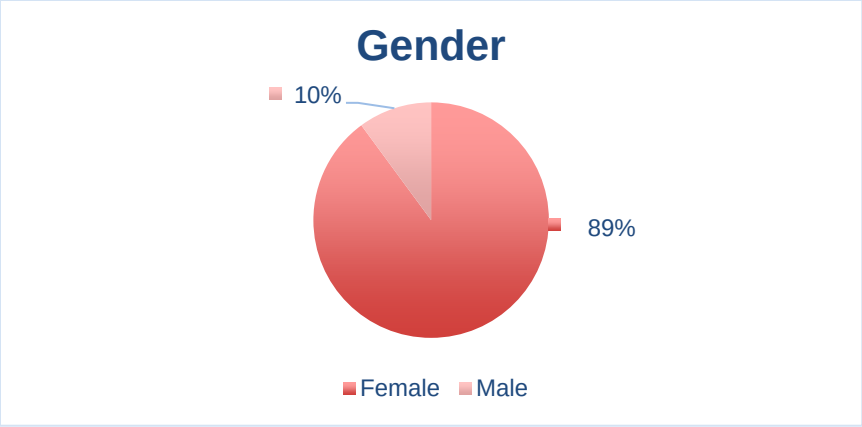

Figure 4.2.1. Gender analysis

4.2.2 Age

A significant percentage of the respondents are over 35 (74%) and predominantly female (89%), while 65% are under 54, with a positive response from the older population (55 and above) accounting for 35%. Figure 4.2.2 shows a breakdown of the different age groups.

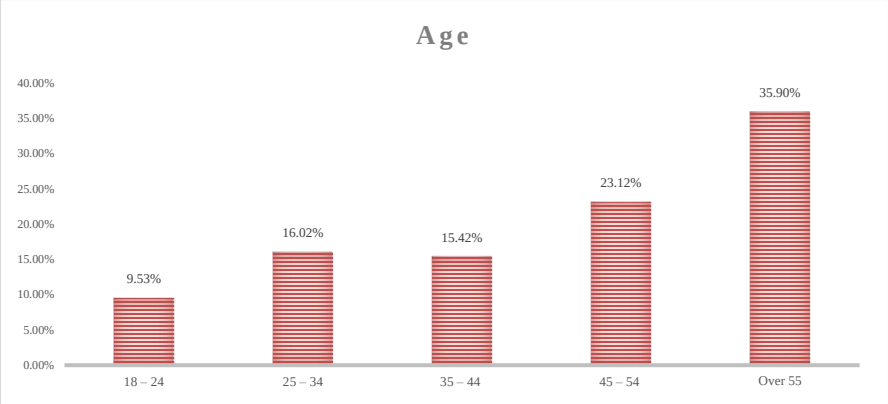

Figure 4.2.2. Age Group of the Respondents

4.2.3 Ethnicity and Province

The respondents' ethnic distribution also shows a predominantly high level of White South Africans (65.52%), followed by Africans (20.89%) and Coloured (8.72%). Of the respondents, 81% reside in the two economic hubs in South Africa: Gauteng (53%) and the Western Cape (28%); The other provinces – Eastern Cape, Free State, Kwazulu Natal, Limpopo, Mpumalanga, and the North West – accounted/contributed 19% towards the research insights.

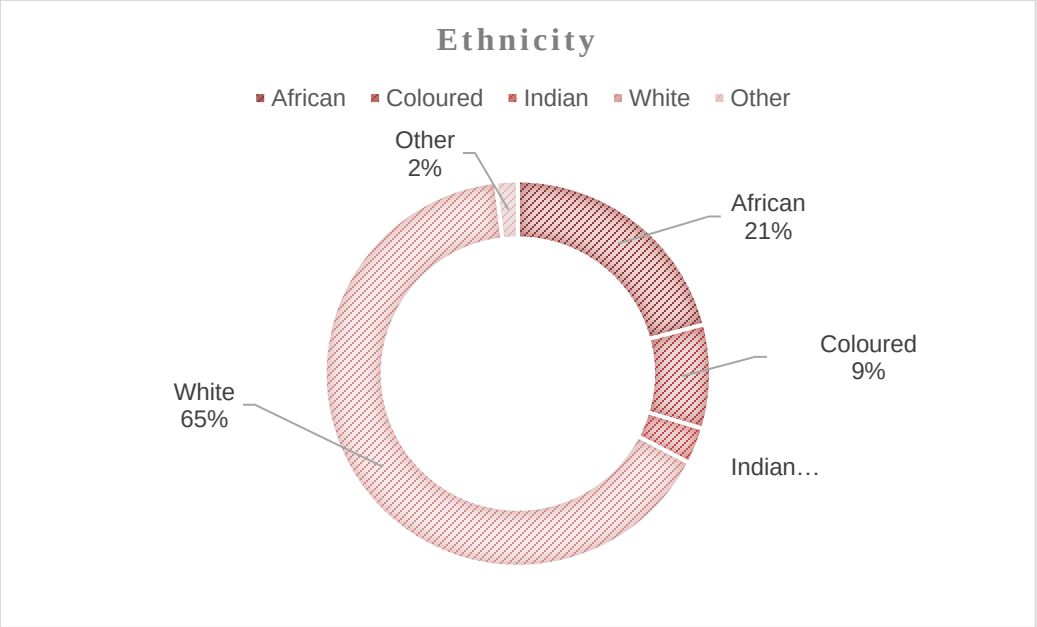

Figure 4.2.3. Ethnicity analysis

4.2.4 Employment status and income

A higher percentage of respondents earned more than R30,000 as their monthly income (26.98%), followed by those making between 0 – R4,999 (22.72%). This suggests that the sample has a good spread of participants across relatively low- and high-income brackets. Some respondents confirmed that they are employed (50.30%), while others indicated that they are either entrepreneurs or self-employed (18.86%) or students (8.11%), with few unemployed (9.94%). Also, the participants are diverse in their educational achievement (matric [22.72%], Diploma [28.20%], Bachelor's degree [22.31%], and Postgraduate degree [24.95]), highlighting that the majority of the respondents had a diploma certificate. Most of the respondents are based in Gauteng province (53.35%) and Western province (28.60%).

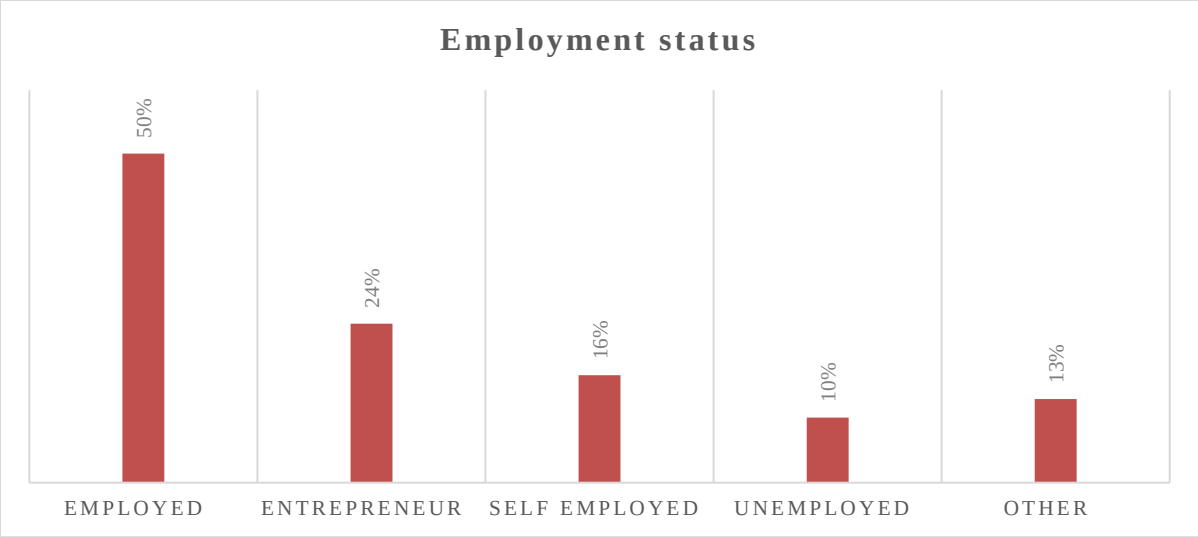

Figure 4.2.4. Employment status

Table summarizing the demographic profile of the respondents

Table 1. Profile of respondents (N = 439)

Factors	**Frequency**	**%**	**Frequency**	**Frequency**	**%**
Gender			**Province**		
Male	52	10.55	Eastern Cape	37	7.51
Female	440	89.25	Free State	19	3.85

Age			Gauteng	263	53.35
18 – 24	47	9.53	Kwazulu-Natal	4	0.81
25 – 34	79	16.02	Limpopo	5	1.01
35 – 44	76	15.42	Mpumalanga	15	3.04
45 – 54	114	23.12	North West	9	1.83
Over 55	177	35.90	Western Cape	141	28.60
Education					
Matric	119	24.14			
Diploma	139	28.20	**Ethnicity**		
Bachelor's degree	110	22.31	African	103	20.89
Post graduate degree	123	24.95	Asian	1	0.20
Income			Coloured	43	8.72
R0 - R4,999	112	22.72	Indian	15	3.04
R5000 - R9,999	48	9.74	Mixed race	4	0.81
R10,000 - R19, 999	104	21.10	White	323	65.52
R20,000 - R29,000	94	19.07	Other	4	0.81
Over R30,000	133	26.98			
Employment status					
Employed	248	50.30			
Entrepreneur	12	2.43			
Student	40	8.11			
Unemployed	49	9.94			
Self employed	81	16.43			
Other	63	12.78			

4.3 Descriptive statistics measures

In the following section, the researcher discussed the results of the constructs outlined in table 8.

Table 2. Descriptive statistics and correlation matrix

#	Constructs	Mean	SD	1	2	3	4	5	6	7	8
1	Self-identity motivation	2.96	0.73	**0.70**							
2	Self-efficacy	4.40	1.30	0.70	**0.72**						
3	Consumer knowledge	4.53	0.17	0.47	0.45	**0.73**					
4	Healthy lifestyle attitudes	8.09	5.46	0.32	0.31	0.170	**0.92**				
5	Healthy lifestyle	3.33	0.76	0.86	0.72	0.40	0.47	**0.66**			
6	Health consciousness	3.65	0.23	0.98	0.62	0.52	0.34	0.80	**0.69**		
7	Normative beliefs	2.91	1.21	0.20	0.19	0.06	-0.1	0.20	0.15	**0.76**	
8	Behavioural intentions	2.85	0.52	0.61	0.90	0.29	0.27	0.78	0.52	0.26	**0.59**

Note. N = 493; SD = standard deviation; values off the diagonal are square root of average variance extracted (AVE)

4.3.1 The influence of identity-based motivation on healthy lifestyle choices

Items used in this study were adapted from previously validated scales. The survey was comprised of the following scales (as well as the questions that measured demographic variables). First, the self-identity-based motivation was measured with a five-item scale (Brenner, Serpe and Stryker, 2018). These questions required a respondent's opinion about themselves and what is fundamental to their self-concept as far as healthy identity is concerned. For example, "In general, being a healthy eater is an important part of my self-image." Second, each item was anchored on a 5-point Likert scale from (1)" strongly disagree" to (5) "strongly agree". Identity-based motivation is a social psychological theory that considers three factors: social, group and self. As seen in figure

4.5, a significant number of the respondents (60%) is less likely to be a part of a running or cycling group, whereas 58% agreed that “being a healthy eater is a part of their self-image” and therefore view themselves as health-conscious individuals. This indicates that the research cohort has a high propensity to focus on self instead of group identity.

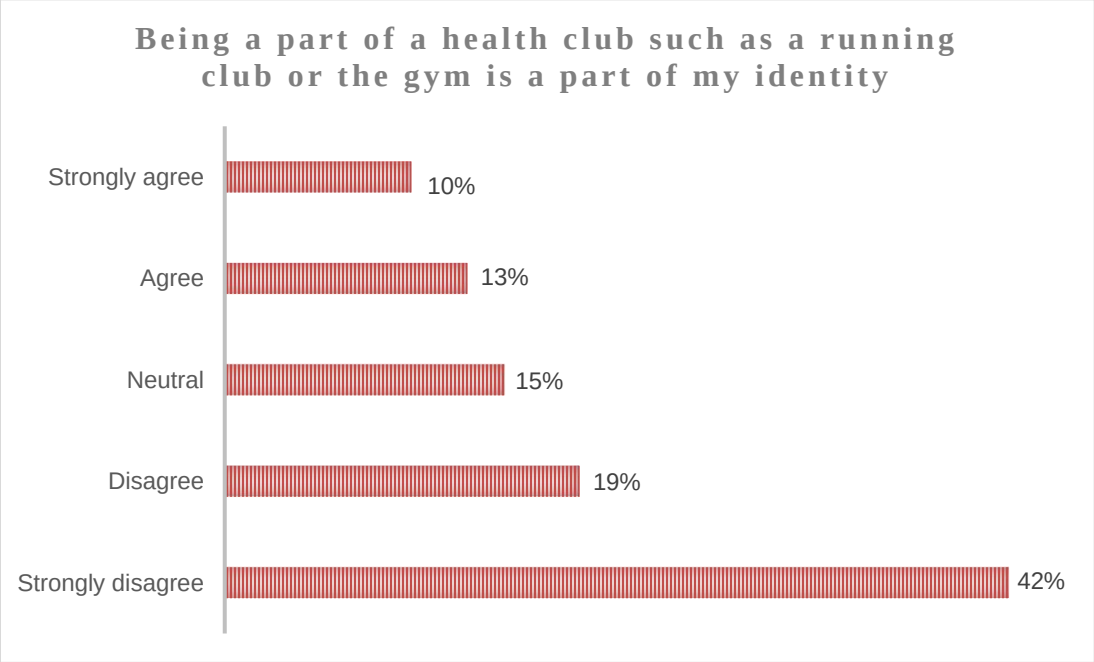

Figure 4.3.1. Identity-based motivation

4.3.2 The influence of self-efficacy on healthy lifestyle choices

Items used in this study were adopted from previously validated scales (Ben-Ami *et al.*, 2014). Self-efficacy is a fair predictor of healthy lifestyle behaviours (Mainvil *et al.*, 2007). The questions aim to learn about the respondent's personal belief in their ability to live a healthy lifestyle. The respondents were asked to agree or disagree with questions such as “I believe I can choose to lead a healthy lifestyle and I believe I can exercise non-stop for 30 minutes, 3-4 times a week”. Each item was anchored on a 5-point Likert scale from (1) strongly disagree to (5) strongly agree. The study confirms that the respondents have a very high sense of self-efficacy; a large majority (89%)

believe that they can choose a healthy lifestyle, and 68% believe that they can commit to exercise and eating routines (figure 4.3.2.). Of the respondents, 60% believe that their mood does not influence their decisions to exercise; however, we see that they believe in their abilities. This indicates that the cohort has a magnificent sense of self-efficacy.

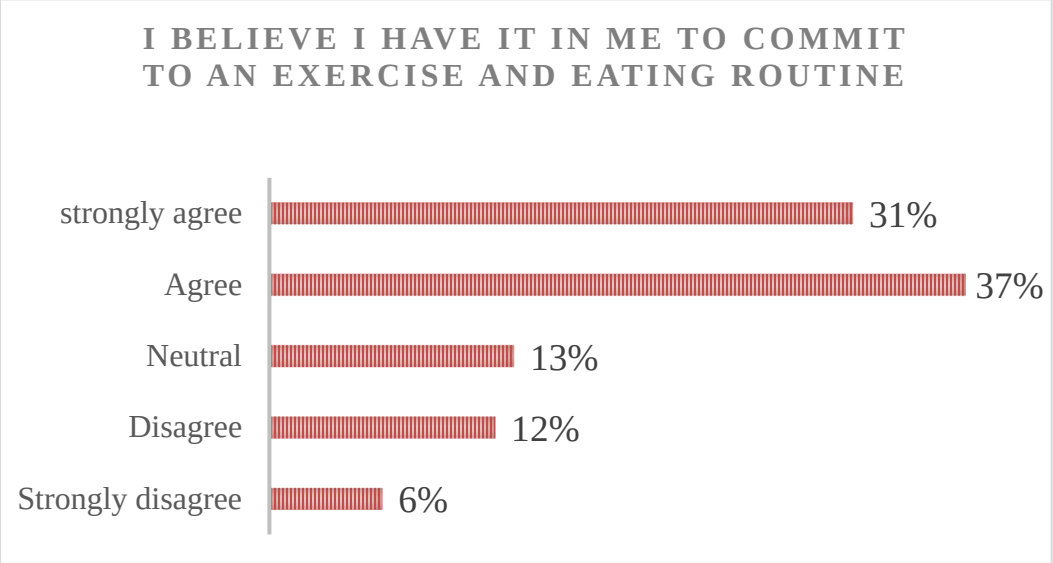

Figure 4.3.2. Self-efficacy

4.3.3 The influence of knowledge on healthy lifestyle choices

Items used in this study were adopted from previously validated scales (Berger, Ratchford and Haines Jr., 1994) and (Yan *et al.*, 2016). These questions seek the respondents' opinions about what they believe they know (subjective knowledge) about healthy living. As presented in figure

4.7, the respondents believe that they have a very high level of knowledge concerning healthy living. The high knowledge levels, however, do not lead to a change in behaviour. Nevertheless, these findings confirm that the respondents possess knowledge about leading a healthy lifestyle.

Questions asked	Agree	Strongly agree	Total positive responses
I know what healthy living is	34%	63%	**97%**
I know the benefits of being healthy	72%		**72%**
I know how to live a healthy lifestyle	35%	59%	**94%**
I know a great deal about what developing a healthy lifestyle means	39%	49%	**88%**

Table 3. Consumer knowledge

4.3.4 The influence of attitude on healthy lifestyle choices

Items used in this study were adopted from previously validated scales (Wardle and Steptoe, 2003) and (Divine and Lepisto, 2005). The questions seek respondents' opinions about their attitude towards leading a healthy lifestyle. Each item was anchored on a 7-point bipolar Likert scale, aiming to establish their attitude towards a healthy lifestyle (Engel *et al.*,1978). In addition, a net promoter score (NPS) scale measuring from 1-10 was used, and its objective was for respondents to share their overall attitude towards leading a healthy lifestyle (figure 4.3.4), which is a summary of the NPS scale). Furthermore, most of the respondents' attitudes towards a healthy lifestyle are favourable; 86% of the respondents have a positive attitude towards leading a healthy lifestyle. Also, 87% of the respondents have a favourable attitude towards healthy living, and 85% view

healthy living as pleasant. These findings confirm that the respondents have a favourable attitude towards healthy living.

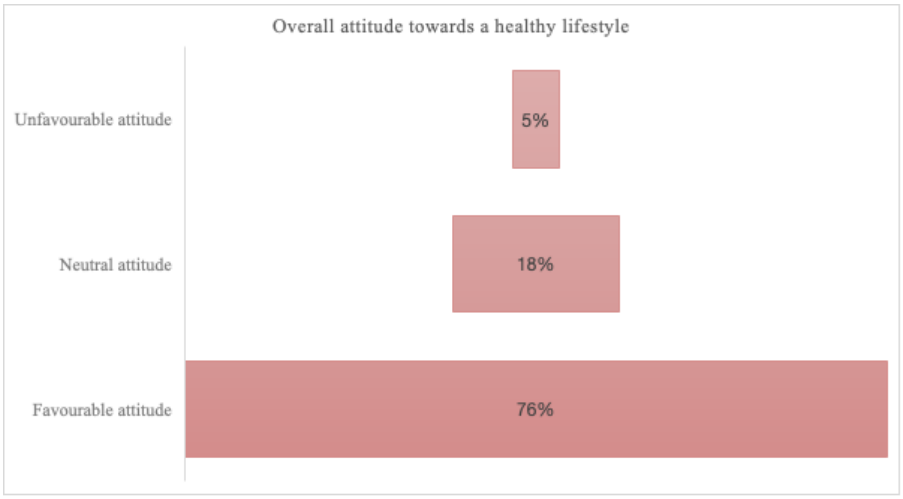

Figure 4.3.4. Attitudes

4.3.5 The impact of healthy lifestyle choices on consumer purchase intentions

Items used in this study were adopted from previously validated scales (Hearty *et al.*, 2007), (Mathwick, Charla and Rigdon, 2004) and (Venkatesh *et al.*, 2003). These questions seek respondents' opinions about themselves and their decisions to enhance their personal well-being, for instance, by eating less sugar and salt to prevent health problems and saying, "I've made a conscious decision to live a healthy lifestyle". The results confirm that the respondents are inclined to live a healthy lifestyle. Over 75% of them eat fruits and vegetables, and 74% have engaged in physical activities such as swimming, walking or running. Twenty-five per cent of respondents' smoke, which is higher than the 17.6% of South Africans who smoke on average – according to a 2015 survey (http://www.hsrc.ac.za/en/research-outputs/view/7539). In terms of brand

consumption, 58% of the respondents do not enjoy health-oriented brands such as Body Shop and Sportsman's Warehouse. Also, 69% have made a conscious decision to live a healthy lifestyle. This confirms that a significant majority of the respondents do not associate leading a healthy lifestyle with purchasing health lifestyle-oriented brands; however, they believe in leading a healthy lifestyle.

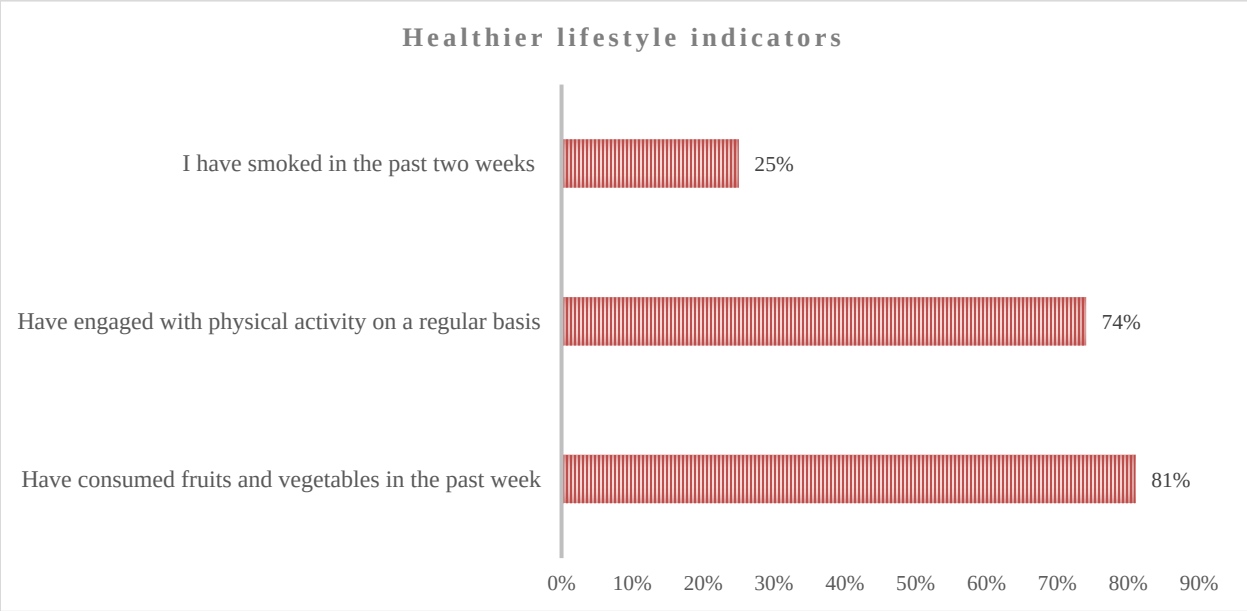

Figure 4.3.5. Healthier lifestyle indicators

4.3.6. The impact of normative influences on behavioural intentions and healthy lifestyle choices

Items used in this study were adopted from previously validated scales (Khare, 2015). The theory of normative belief is anchored in the idea that people are influenced by those close to them. The questions seek respondents' opinions about their likelihood of conforming to the expectations of

people who are important to them (Shukla, 2011). The types of questions asked provided certain insights: “getting approval from people that are important to me influences my buying choices” and “to make sure I buy the right brand, I sometimes observe what other people are buying.” Of the respondents, 40% totally disagree that people who are important to them influence their buying decisions, and 58% totally disagree that they purchase brands they think others will approve of. However, 48% of the respondents are more inclined to receive advice when they are not familiar with the brands or products they want to purchase. There is an equal split in terms of agreeing to gather information from family and friends in terms of brand choices. These findings confirm that the respondents do not believe they have a high propensity to be influenced by others.

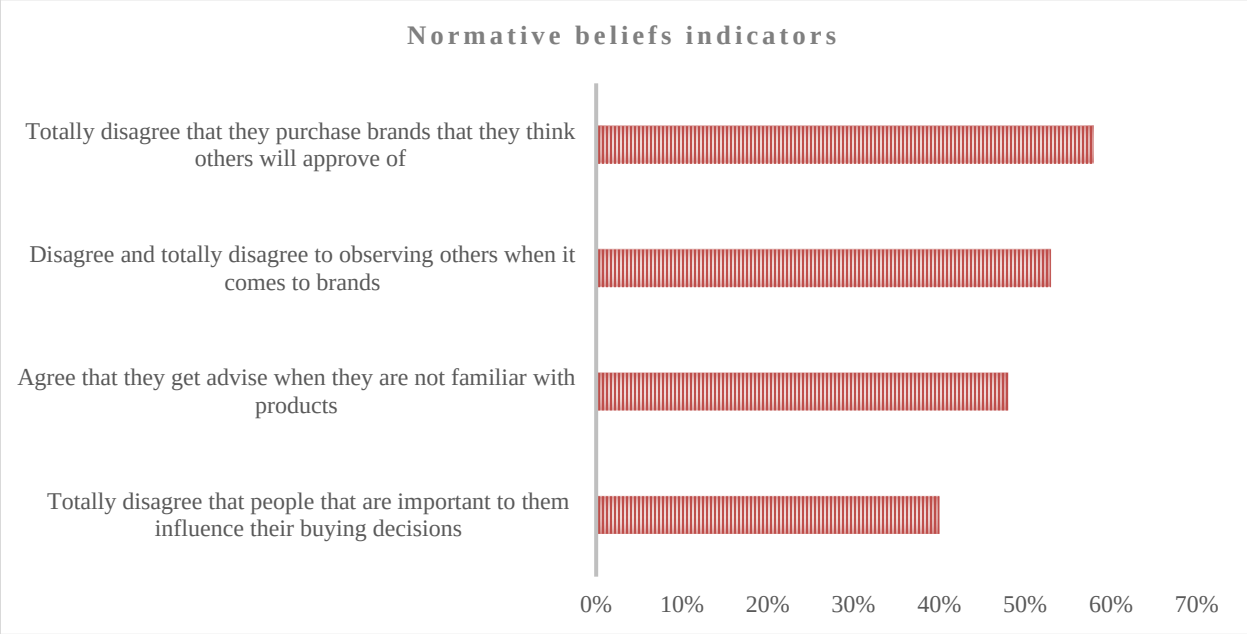

Figure 4.3.6. Normative beliefs indicators

4.3.7. The impact of health consciousness on behavioural intentions and healthy lifestyle choices

Items used in this study were adopted from previously validated scales (Wardle and Steptoe, 2003), (Baumgartner, Hans, and Steenkamp, 2001) and (Engupta, Jaideep and Zhou, 2007). The questions were asked to seek the respondents’ opinions about their mindset and their intentions to lead a

healthy lifestyle. The respondents were asked questions such as “when I think of my future, I often think of my health and how to prevent illnesses”. As presented in figure 4.9, most of the respondents (86%) are mindful of health consciousness, and 71% consider themselves health conscious. Across the various age groups and demographics, when individuals think of their future, their health is at the forefront, and 61% are careful about what they eat and drink. However, behavioural indicators of HC are significantly lower than mindfulness, when it comes to respondents sacrificing and selecting their foods intentionally. This is because only 35% of them said that they sacrifice a lot to stay healthy. These findings confirm that the respondents are health-conscious and mindful of their health.

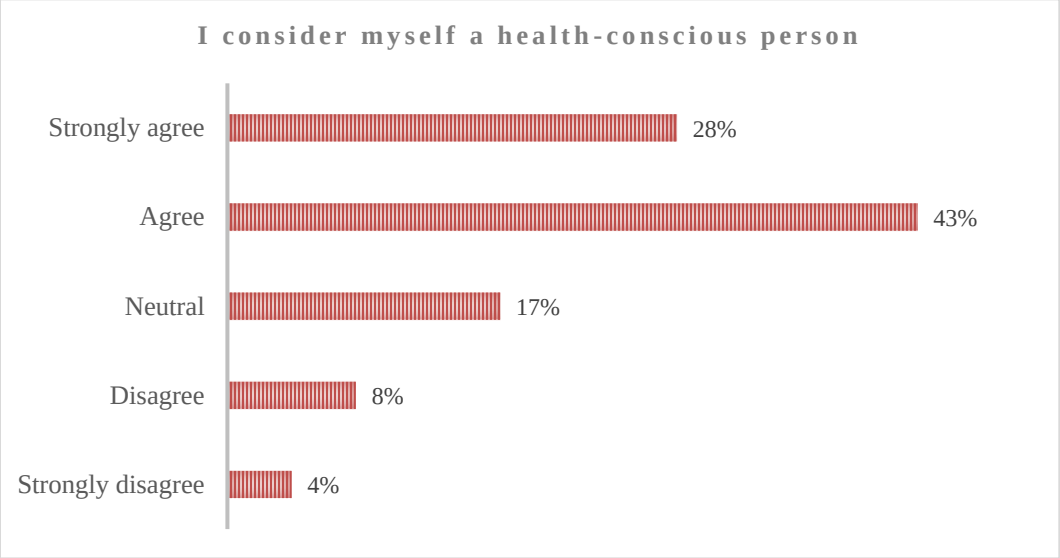

Figure 4.3.7. Health consciousness

4.3.8 Purchasing intent

Items used in this study were adapted from previously validated scales. Self-identity purchase intent was measured with a five-item scale derived from Brenner *et al.* (2018). These questions sought respondents’ opinions about themselves and their behavioural intentions in relation to

leading a healthy lifestyle. To establish the respondents' behavioural intentions, they responded to questions such as "I intend to do physical activities such as running, cycling, gym, swimming, etc. on a regular basis" and "I intend to buy and eat fruits and vegetables on a weekly basis". Each item was anchored on a 5-point Likert scale from (1)" strongly disagree" to (5) "strongly agree." It was observed that 90% of the respondents intend to eat fruits and vegetables on a regular basis and 66% intend to engage in physical activities such as running and cycling. The findings confirm that the respondents have a medium-to-low propensity to execute the desired healthy lifestyle.

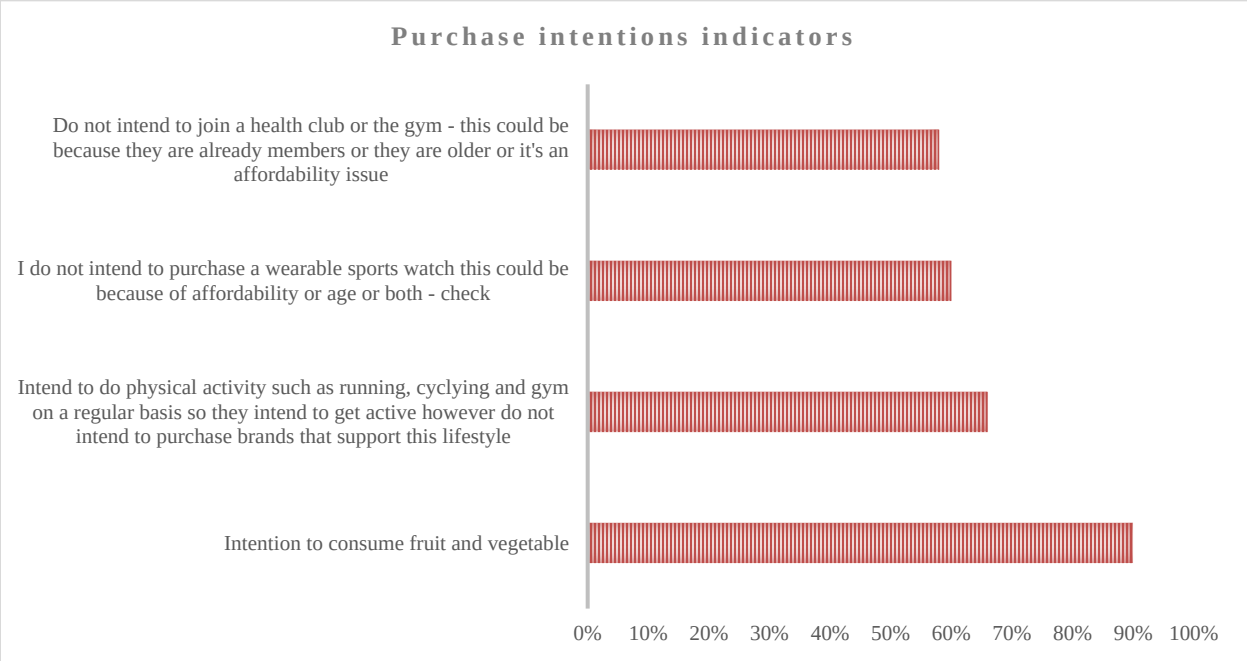

Figure 4.3.8. Purchase intentions indicators

4.4 Measurement Model Estimation – validity measurement

The measurement scales were validated through confirmatory factor analysis (CFA). The recommendation by Anderson and Gerbing (1988) was followed to perform structural equation modelling. A measurement model must be performed initially in order to confirm the integrity of the scale items before subsequent analyses are performed; therefore, a covariance-based structural equation modelling procedure with Mplus version 8 was employed (Muthén and Muthén, 1998–2017). Due to missing data, the full information maximum likelihood model (FIML) with the robust estimation model was used for the CFA analysis. The robust estimation model was used because the data was assumed not to be normally distributed. Table 7 depicts the confirmatory factor analysis results.

The goodness of fit indices was used to determine whether the data fitted the measurement model well. To achieve acceptable model fit indices, it is generally recommended that the X^2/df should be greater than 5; the standardised root mean square residual (SRMR) should be <0.08; comparative fit index (CFI) should be > 0.9; and the root mean square error of approximation (RMSEA) should be < 0.06 (Bagozzi and Yi, 1988; Hu and Bentler, 1999). The overall model fit statistic confirms that the measurement model fits the data reasonably well based on the values on these fit criteria [X^2 (459) = 899.796, RMSEA = 0.04, CFI = 0.94, TLI = 0.93, SRMR = 0.06]. Table 7 provides the complete overview of scale items loadings and fit indices. Following the acceptable fitness of the model, the validity of the scales was assessed through convergent validity. Thus, convergent validity is confirmed since all the standardised factor loadings are significant, with all items above the recommended threshold of 0.5 (Anderson & Gerbing, 1988), except two items below 0.5. Also, with the exception of one construct, all the composite reliability scores for

each construct exceeded 0.70. Discriminant validity was assessed based on Fornell and Larcker's approach, which requires that the average variance extracted (AVE) of any construct should be greater than the square root of the inter-item correlation between them, or the square root of the average variance extracted for each construct should exceed the correlations between the constructs (Fornell and Larcker, 1981). The recommended minimum threshold for AVE is 0.50 (Fornell & Larcker, 1981). The results in Table 7 show that about half the AVE values exceeded the recommended threshold of 0.50, with the other half approaching the threshold. However, Table 8 indicates that the square root of AVEs exceeded the corresponding inter-construct correlations (the square root of AVEs is depicted on the diagonal in bold). Specifically, AVEs for self-efficacy, consumer knowledge, healthy lifestyle attitudes and normative beliefs exceeded the 0.50 threshold, whereas the AVEs for identity-based motivations, healthy lifestyle, health consciousness and behavioural intentions approach the 0.50 threshold. Similar AVEs lower than the minimum threshold have been reported in the extant literature (Alden *et al.*, 2013). While some of the AVEs are lower than anticipated, they exceeded all the squared latent factor correlations; hence they are maintained to support discriminant validity (Burgess, 2011). Overall, these results provide sufficient grounds to conclude that convergent validity and discriminant validity were achieved.

Table 4. Constructs and measurement items

Items	λ	α	CR	AVE
Identity-based motivation		0.80	0.83	0.49
In general, being a healthy eater is an important part of my self-image	0.75			
Being athletic and sporty reflects who I am.	0.68			
I have come to think of myself as a health-conscious person	0.84			
I belong to a community of health-conscious people	0.63			
Being a part of a health club such as a running club or the gym is a part of my identity	0.57			
Self-efficacy		0.78	0.81	0.52
I believe I can exercise non-stop for 30 minutes, 3-4 times a week.	0.77			
I believe that I can engage in exercise even if I'm not in such a good mood	0.73			
I believe that performance is important when I exercise	0.64			
I believe that I have it in me to commit to an exercise and eating routine	0.73			
Consumer knowledge		0.82	0.82	0.54
I know what healthy living is.	0.69			
I know the benefits of being healthy	0.66			
I know how to live a healthy lifestyle	0.81			
I know a great deal about what developing a healthy lifestyle means	0.76			
Healthy lifestyle attitudes		0.92	0.95	0.84
Negative/ Positive	0.91			
Very bad/ Very good	0.91			
Unfavourable/ Favourable	0.93			
Unpleasant/ Pleasant	0.91			
Healthy lifestyle		0.77	0.78	0.43
I've made a conscious decision to live a healthy lifestyle	0.79			
I'm conscious of my fat and sugar intake on a daily basis	0.57			

I enjoy healthy lifestyle-oriented brands such as Bodyshop, Weight Watchers and Sportsman's Warehouse	0.49			
I have a favourable attitude towards health-oriented lifestyle brands	0.56			
Living a healthy lifestyle is fun and I enjoy it	0.80			
Health consciousness		0.74	0.77	0.47
I'm mindful of my general health status	0.55			
I consider myself a health-conscious person	0.74			
I'm very careful about what I eat and drink	0.69			
I sacrifice a lot to stay healthy	0.73			
Normative beliefs		0.81	0.84	0.58
When I'm not familiar with a product or brand, I often ask for opinions from the people that are important to me	0.80			
When I'm exploring brand options, I enjoy consulting with the people that I'm close to	0.87			
I often gather information from my family and friends about brands	0.78			
To make sure I buy the right brand, I sometimes observe what other people are buying	0.56			
Behavioural intentions		0.65	0.64	0.38
I intend to buy a wearable sports watch in the near future	0.48			
I intend to join a health club or group such as Vitality runners, my local running club or the gym	0.53			
I intend to do a physical activity such as running, cycling, gym, swimming, etc. on a regular basis	0.79			

CFA model fit: X^2 (459) = 899.796, RMSEA = 0.04, CFI = 0.94, TLI = 0.93, SRMR = 0.06; λ= standardised factor loadings, α = Cronbach alpha, CR = composite reliability, AVE = average variance extracted.

4.5 Hypothesis testing using Structural Equation Modelling

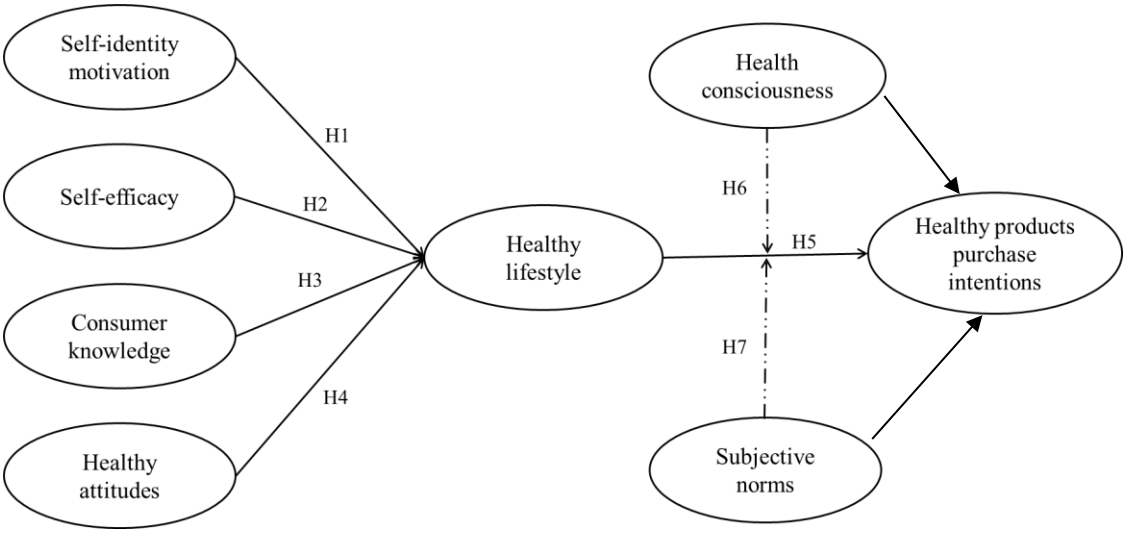

Figure 4.5. The Conceptual Framework

4.5.1. Overview of SEM application

Following adequate measurement model assessment through CFA, the various hypotheses were tested through structural equation modelling (SEM) path analysis in figure 4.10. The hypothesised paths with their standardised estimates and significance levels were used to determine the explanatory power of the hypothesised model. Overall, the goodness-of-fit estimates demonstrate acceptable model fitness (X^2 (528) = 1023.582, RMSEA = 0.04, CFI = 0.94, TLI = 0.93, SRMR = 0.06). Table 9 reveals the SEM results with path coefficients and goodness of fit indices. Table 9 and figure 4 both show the path coefficients for the hypothesised models.

Table 9. Results of the Structural Equation Modelling

Hypothesis/path analysis		**Λ**	**t-value**	**Hypothesis**
H1	Self-identity motivation → Healthy lifestyle	0.64	10.59**	Supported
H2	Self-efficacy → Healthy lifestyle	0.24	3.52**	Supported
H3	Consumer knowledge → Healthy lifestyle	-0.04	-0.63	Not supported
H4	Healthy lifestyle attitudes → Healthy lifestyle	0.19	4.74**	Supported
H5a	Health consciousness → Behavioural intentions	-0.02	-0.12	Not supported
H5b	Health consciousness x Healthy lifestyle → Behavioural intentions	-0.10	-0.86	Not supported
H6a	Normative beliefs → Behavioural intentions	0.14	2.69**	Supported
H6b	Normative beliefs x Healthy lifestyle → Behavioural intentions	0.15	1.04	Not supported
H7	Healthy lifestyle → Behavioural intentions	0.67	4.85**	Supported

SEM model fit: X^2 (528) = 1023.582, RMSEA = 0.04, CFI = 0.94, TLI = 0.93, SRMR = 0.06; λ= standardised factor loading; ** p<0.01.

4.5.2 A summary of the Hypothesis results

4.5.2.1 H1: identity-based motivation has a significant relationship with healthy lifestyle choices

As hypothesised in H1, the results show a significant relationship between self-identity motivations and healthy lifestyle among South African consumers ($\beta = 0.64$; $t = 10.59$; $p < 0.01$), thus supporting H1.

4.5.2.2 H2: self-efficacy has a significant relationship with healthy lifestyle choices

Hypothesis H2 predicted that consumers' self-efficacy beliefs will influence healthy lifestyle choices. This hypothesis is also supported due to the significant and positive link between self-efficacy and a healthy lifestyle ($\beta = 0.24$; $t = 3.52$; $p < 0.01$).

4.5.2.3 H3: consumer knowledge has a significant relationship with healthy lifestyle choices

Consumer knowledge was predicted to have a strong influence on healthy lifestyles. The more knowledge a consumer has about healthy living, the stronger the likelihood is that they would maintain healthy lifestyles. However, this hypothesis was not supported since no significant effect of consumer knowledge was observed on healthy lifestyle ($\beta = -0.02$; $t = -0.12$; $p > 0.05$). The relationship is also found to be negative, suggesting that the more consumers know about healthy living, the less likely they would be to choose a better healthy lifestyle.

4.5.2.4 H4: Attitudes have a significant relationship with healthy lifestyle choices

Furthermore, hypothesis H4 predicted that consumers with favourable **attitudes** towards healthy living would be more willing to maintain healthy lifestyle choices and goals. We find support for this hypothesis because the link between attitudes towards healthy living and healthy lifestyle is significant and positive ($\beta = 0.19$; $t = 4.74$; $p < 0.01$), thus supporting H4.

4.5.2.5 H7: healthy lifestyles choices have a significant impact on purchase intention

The study also hypothesised that, ultimately, healthy lifestyle choices would predict behavioural outcomes such as intention to buy wearable watches in future, joining a health studio, gym or running club, and engaging in physical activity. The findings show that a consumer's healthy lifestyle choice is strongly related to favourable behavioural outcomes (β = 0.67; t = 4.85; p < 0.01), thus confirming H7.

4.5.3 Moderation Analysis through SEM - health consciousness and normative beliefs

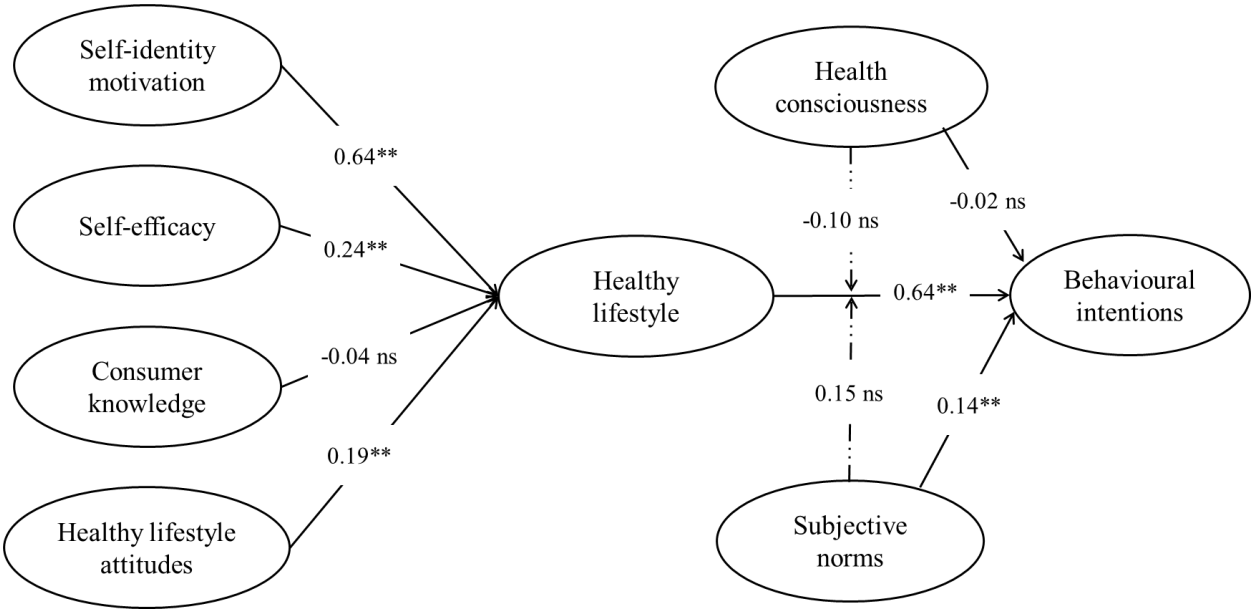

Figure 4.5.3. Path model depicting coefficients of estimation ** p<0.01; ns = not significant

***4.5.3.1. Moderation analysis** - effects of health consciousness and normative beliefs*

A moderation analysis was performed in the structural model to assess the interaction effects of health consciousness and normative beliefs on the relationship between healthy lifestyles and behavioural intentions. The procedure suggested by Muthén, Muthén and Asparouhov (2016) was followed to assess interaction effects in SEM. According to Muthén, Muthén and Asparouhov (2016), one effective way of performing moderation models is by using single indicants or single

composite variables in interaction-based structural models to minimise model complexity. Some prior studies have followed this approach (Shukla, 2011). Hence, the individual items reflecting healthy lifestyles, health consciousness and normative beliefs were averaged to create composite factors for each construct. The constructs used to generate the multiplicative interaction terms were mean centred to eliminate any potential threat of multi-collinearity for the use of the interaction terms in the SEM model. The interaction term was created by multiplying the composite factors for each construct. For example, mean scores for healthy lifestyles and health consciousness were multiplied to create a new interaction factor (healthy lifestyle x health consciousness). Similarly, the interaction term (healthy lifestyle x normative beliefs) was created and subsequently introduced into the SEM model and their direct effects on the outcome. The analytical procedure requires that the direct effects of moderator variables are estimated together with their corresponding interaction effects (Stride *et al.*, 2015).

4.5.3.2 H5: Health consciousness has a significant impact on purchase intentions

H5a: It was hypothesised that health consciousness would be positively related to favourable **behavioural intentions** for the sampled consumers. However, the relationship between health consciousness and behavioural intentions was negative and not significant (β = -0.02; t = -0.12; p > 0.05).

H5b: Concerning the interaction effects, we find no significant influence of the interaction between health consciousness and healthy lifestyles to predict behavioural intentions (β = -0.10; t = -0.86; p > 0.05). This suggests that consumers who are less conscious about their health but live a healthy lifestyle may or may not express positive attitudes toward healthy behaviour outcomes

since the link is not significant. Health consciousness does not meaningfully interact with a healthy lifestyle to predict positive behaviour outcomes.

4.5.3.3 H6: Normative beliefs have a significant impact on purchase intentions

H6a: It was hypothesised that normative beliefs would be positively related to favourable **behavioural intentions** for the sampled consumers. The magnitude of effect suggests that consumers who maintain strong normative beliefs with good healthy lifestyles are more likely to express positive behavioural intentions towards the need to live healthily.

H6b: Similarly, there is no significant influence of the interaction between normative beliefs and **healthy lifestyle** on predicting behavioural intentions ($\beta = 0.15$; $t = 1.04$; $p > 0.05$). However, the results show that normative beliefs are significant and positively related to behavioural intentions ($\beta = 0.14$; $t = 2.69$; $p < 0.01$), thus supporting hypothesis H6a.

4.6 The presentation of results

In summary, chapter four represents the data collected, analysed, and reported from 493 respondents on how healthy lifestyle choices impact their purchase intentions. The various hypotheses were tested through structural equation modelling (SEM) path analysis. Overall, the goodness-of-fit estimates demonstrate acceptable model fitness**.** These results provide sufficient grounds to conclude that convergent validity and discriminant validity were achieved. Furthermore, the findings from the study confirmed that five of the seven hypotheses were positive and significant; one is a partial mediating factor (normative beliefs). Lastly, health consciousness and knowledge are not supported.

CHAPTER 5: DISCUSSION OF RESULTS

5.1 INTRODUCTION

The results are discussed in this chapter. The previous chapters of this paper outlined the objectives and the context of the study from a market and theoretical perspective. In chapter one, the purpose of the research is discussed, investigating how the four psychosocial factors influence lifestyle choices among South Africans as there has been minimum research undertaken within this market. The first research objective aims to establish the influence of identity-based motivation, self-efficacy, product knowledge and attitude on consumer **purchase intentions**. The second research objective aims to establish the impact of normative influences and health consciousness **on behavioural intentions.** In chapter two, we called to attention the conceptual framework and the theoretical insights from other scholars and previous research papers. In chapter three and four, the researcher outlined the research methodology and reports back on these findings.

The results and findings are discussed in this chapter, as well as the tested hypotheses, which include identity-based motivation, self-efficacy, knowledge, attitude, lifestyle, and the two moderating factors: health consciousness and normative beliefs. The data was collected from an online survey publicly advertised on both Facebook and Instagram (social media platforms) by the researcher. The results were collected, compiled and analysed, using Excel and SEM. The study indicates that the majority of the hypotheses are significant. However, knowledge and health consciousness were not significant and did not support the study. The detailed results are discussed in the following section.

5.2 Demographic Discussion

A higher percentage of the respondents are aged over 35 years (74%) and between 45 – 54 years (23.12%). The ethnic distribution of respondents also shows a predominantly high White South African respondents (65.52), followed by Black South Africans (20.89%), and Coloured (8.72%). Consumer attitude has been linked with socio-demographic factors. The following studies support the researcher's earlier findings that most respondents from this study are female. A study conducted in Ireland postulates that females who are educated are most likely to have a positive attitude towards a healthy lifestyle and take an interest in reading about this lifestyle in order to avoid possible future illnesses (Hearty *et al*., 2007). From a socio-demographic perspective, insights from this paper were mainly collected from females (89% of the research respondents), most of whom are educated. The demographic profile of the respondents in the Irish study is similar to the demographic profile of this study, and we can therefore postulate that females in urban areas are more inclined to be more health-conscious and respond to research that is health- and lifestyle-oriented. Wardle *et al.* (2003) conclude by acknowledging that socioeconomic factors such as childhood background and education, financial status, and social stature impact purchase intent; these factors tend to influence attitudes and lifestyle choices such as the foods that people eat, efficacy and so forth.

5.3 Hypothesis Discussion

5.3.1 H1: Identity-based motivation has a significant relationship with healthy lifestyle choices

Identity-based motivation (IBM) is anchored on the assumption that consumers augment their behaviours based on context. This cognitive and affective premise allows people to support themselves in different contexts. Also, self-regulation is a key component of IBM (Oyserman *et al.*, 2017). This study posited that there is a robust relationship between self-identity motivation and a healthy lifestyle. This hypothesis was confirmed and supported. The path coefficient estimate of identity-based motivation, H1, was 0.64, reinforcing this robust relationship between self-identity motivation and a healthy lifestyle. From a respondent's perspective, the challenge is that they sometimes view choosing to live a healthy lifestyle as onerous, and in certain instances, they make choices that do not support their desire for a healthy lifestyle (Bradford, Grier and Henderson, 2017). Identity-based motivation theory provides a distinct way to understand aspiration-attainment gaps, gaps between what people aspire to become and what they actually attain over time. In contrast, The IBM theory emphasises the importance of context as well as what can be done about it (Oyserman *et al*., 2017). This conundrum was confirmed in the present study as the findings reveal that consumers view themselves as health-conscious people leading a healthy lifestyle. However, the respondents seem to be more individualistic, with less than half of them confirming that being a part of a health-conscious community is important to them. This attribute is also displayed in behavioural intentions, which indicates that by the respondents not prioritising community setups, this might negatively influence their intent to act and adapt to a healthy lifestyle. The same study mentioned above used the IBM framework and found that social segmentation is another tool that influences lifestyle choices as people find it comforting to join

social tribes that support their choices (Bradford *et al*., 2017). This behavioural trait was confirmed in this study as many of the respondents are involved in physical activities that enhance and support their personal well-being. Furthermore, insights from this study confirm that being health conscious and a healthy eater is a key part of the consumer respondents image. And this self-image is often carried through to the different social tribes and groups.

5.3.2 H2: Self-efficacy has a significant relationship with healthy lifestyle choices

This study anticipated that self-efficacy would positively influence healthy lifestyle choices, and this was the case and is supported by the study's findings. The path coefficient estimate of self-efficacy, H2, was 0.24. This supports the study's hypothesis of a strong relationship between self-efficacy and a healthy lifestyle. Findings from Strachan and Brawley (2009) confirm that when health consumers identify and believe that they are healthy eaters, this is a reliable indicator of their behaviour. Moreover, 89% of the research respondents generally view themselves as healthy eaters, and this supports their lifestyle behavioural actions with very high self-efficacy, indicating that they believe in their own ability to design a suitable healthy lifestyle. These findings add to the growing body of research suggesting that aspects of the self are related to various forms of health behaviour (Strachan *et al*., 2009). The theoretical insights confirm that individuals who believe in their abilities to execute a goal are more likely to lead a lifestyle that supports their well-being. This finding concurs with a previous study that aimed at investigating the recovery of patients. The empirical evidence of this study found a positive link between self-efficacy and patient recovery (Bourbeau *et al.,* 2004). This scholar acknowledges that self-efficacy is well supported when health consumers are engaged in an activity aligned with their interests.

Given the respondents' very high self-efficacy regarding their own ability to design a suitable healthy lifestyle, the researcher noted that they do have a preference in terms of action readiness, and most respondents displayed a preference for healthy foods instead of participating in physical exercise. Socio-demographic factors such as affordability and access are key when reviewing lifestyle levers. A study found that older female educated individuals tend to be more health-conscious with high self-efficacy (Carvalho de Menezes, Roux and Lopes, 2018). The present study has a similarity in demographic representations with the above study; 36% of the respondents are older than 50, and most of the sampled consumers are female. Based on these findings, we can conclude that female consumers believe in their abilities to lead a healthy lifestyle, and they are more inclined to be health-conscious.

5.3.3 H3: Consumer knowledge has a significant relationship with healthy lifestyle choices

The researcher predicted consumer knowledge to positively influence a healthy lifestyle; however, the research findings did not support this hypothesis. The path coefficient estimate of consumer knowledge, H3, was -0.04. This confirms that there is no significant relationship between consumer knowledge and a healthy lifestyle. The findings of this study confirmed that the more knowledge a consumer has about healthy living, the higher the likelihood that they will not action a healthy lifestyle. To affirm, the average knowledge score from this study is 88%. Additionally, the present study is consistent with a previous study, which found that consumer knowledge on its own does not yield results; it requires additional support interventions (Bourbeau *et al*., 2004). This study shows the importance of conducting research that will inform relevant hypotheses for the African context. This study by Bourbeau *et al*. (2004) was conducted among people with chronic illnesses and found that people can memorise information (objective knowledge); however, this does not imply that they will action it. The successful interventions introduced to

close the knowing-doing gap included consistency with a healthcare practitioner, rewards program, 'self-care rituals', and self-management at the core of knowledge transforming into action readiness. A Norway study combined knowledge, i.e. consumer education, as well as interventions such as farm visits, home economics and regular physical activity (Oostindjer, Amdam and Egelandsdal, 2015). This Scandinavian approach can be implemented within the South African market. The findings from this study relate to this paper as it confirms that knowledge alone is not sufficient, and needs to be combined with interventions that will close the knowing-doing gap. Robertson (2008) social marketing theory confirms that information sharing influences consumer behaviour but cannot be solely dependent upon it. In the social marketing communication context, the recommended approach to consumer interventions includes activities such as 'face-to-face counselling', teaching moments and promotions. Other scholars elaborate and indicate that social marketing is broader than direct consumer behaviour. A meaningful social change in macro-economic issues, such as the environment and government legislation, needs to be engaged (Aertsens *et al.*, 2010).

5.3.4 H4:Attitude has a significant relationship with healthy lifestyle choices

This study anticipated that attitude would positively influence healthy lifestyle choices, which was significant and supported by this study. The path coefficient estimate of attitude, H4, was 0.19. This reinforces a significant relationship between attitude and a healthy lifestyle. This study found that consumers with a favourable attitude towards a healthy lifestyle have a higher probability of maintaining healthy lifestyle choices and goals. Similar findings have been confirmed in previous studies (Fredricks and Dossett, 1983; Cook, Kerr and Moore, 2002). These findings confirm that attitude is a reliable predictor of consumers' probability to execute a desired behaviour (Fredricks and Dossett, 1983). The findings from the studies mentioned above are confirmatory; attitude is

critical in influencing consumer behaviour. According to the results of this report, consumers who have a positive and receptive attitude toward living a healthy lifestyle prefer this lifestyle. A recent study observing consumer attitudes and purchase intentions towards choosing healthy meat products also found that even though consumers had limited knowledge on this subject, whenever they displayed positive attitudes towards the recommended change, this resulted in a healthy choice (Hung, de Kok and Verbeke, 2016). Findings of the study mentioned above are supported by various scholars and concur that favourable attitudes lead to purchase intentions (Hung *et al*., 2016; Irianto, 2015).

In the literature review, the researcher mentioned that attitude is three-pronged: cognitive (mental), affective (feelings) and conative (behaviour). Indeed, the research findings confirm that attitude leads to behavioural intentions, which is conative. The results of this study support the findings of previous studies, indicating that a positive attitude influences conative behaviour, which influences consumers' purchase intentions. Conative attitude is a reliable indicator of the probability to engage in a particular behaviour. Therefore, marketers should use this construct as an indicator when establishing probable behavioural intentions (Synodinos, Bevon-Dye and de Klerk, 2013).

5.3.5 H7: Healthy lifestyle choices have a significant impact on purchase intentions

The study hypothesised that healthy lifestyle choices would positively influence behavioural outcomes, such as intention to buy wearable watches in future, joining a health club, or engaging in physical activities. This hypothesis is supported and significant. The path coefficient estimate of a healthy lifestyle, H7, was 0.67. This reinforces a significant relationship between a healthy lifestyle and behavioural intentions. Consumers' healthy lifestyle choices are strongly related to favourable behavioural outcomes. Previous studies have highlighted the link between lifestyle

choices and sociodemographic structures, such as access to education and general life opportunities (Wardle *et al.,* 2003). Saint Onge and Krueger (2017) highlight that sociodemographic structures affect socialisation. According to the abovementioned researchers, individual's lifestyles are influenced by social structures and their 'collective framework'; "Our results suggest that individual behaviours tend to group together by health behaviour typologies into meaningful health lifestyles that are anchored in social circumstances." Divine *et al*. (2005) and Kempen *et al*. (2012) support the notion of demographics segmentation and lifestyles. They found that older people tend to be more health-conscious, and this is a market that health marketers often overlook. Their findings support the patterns from this study as we found that older people yielded higher response rates in terms of completing the online survey and displayed a high likelihood of leading a healthy lifestyle. However, they also displayed low interest in health-oriented brands, and this is likely because marketers overlook them and do not create campaigns that resonate with their psychographics and demographics. Furthermore, these scholars confirm that older people who lead a healthy lifestyle by exercising, sleeping well, and making choices that nourish their bodies tend to be happier and healthy (Sapranaviciute-Zabazlajeva *et al.*, 2017).

5.3.6 H5: Health consciousness has a significant impact on purchase intentions

Health consciousness was hypothesised to have a significant influence on healthy lifestyles. However, the outcomes of the study did not support this assumption. The path coefficient estimate of health consciousness and behavioural intention, H5a, was -0.02, and the path coefficient estimate of health consciousness and healthy lifestyle, H5b, was -0.10. This confirms that there is no significant relationship between health consciousness and behavioural intentions as well as a healthy lifestyle. Based on the findings from this study, healthy living is not mediated by health consciousness. These findings are inconsistent with previous research; for example, a study by

Wardle *et al*. (2003) confirm that health-conscious individuals are more likely to be involved in exercising and eating healthy. Another study confirmed that health consciousness drives purchase intentions (Kumar, 2014; Rana and Paul, 2017). Other scholars have also used health consciousness as a moderating factor: Lee *et al.* (2014) found that health-conscious consumers are generally more receptive to a healthy menu in restaurants. Crange *et al*. (2014) study of health-consciousness served as a "measure of an individual's readiness to take health actions". Furthermore, a Taiwan study using health consciousnesses and healthy lifestyle as moderating factors found that health consciousness is a positive moderating factor (Mei-Fang, 2011).

The results discussed insinuate that the consumer respondents are connected to the idea of being health-conscious (71% of them see themselves as health-conscious). They are mindful of their future state of health and view themselves as healthy. The obstacle seems to be the knowing-doing gap, as the respondents' willingness to engage in actions that support their lifestyles is minimum. The assumption is that the minimum take-up is driven by factors such as social structures and acceptance, affordability in terms of purchasing gadgets, healthy foods, and joining clubs that require payment - in order to support the desired healthy lifestyle. Therefore, marketers need to implement inclusive and critical strategies to the diverse consumers' needs and affordability. Also, they must be mindful of different languages used in their countries, especially when targeting older women and people from disadvantaged economic backgrounds (Hearty *et al*., 2007; Prasad, Strijnev and Zhang, 2008; Saint Onge *et al*., 2008). As well as this, there must be a focus on articulating a balanced view in terms of performance or living sacrificially and launching the concepts of doing everything in moderation (Previte *et al*., 2015). As Brehm theory postulates, wellness and marketing can be experienced as 'freedom limiting' and could indirectly discourage consumers. Additionally, in terms of health consciousness and behavioural intention, a balanced

lifestyle view could be one of the tools used to help consumers reach the suitable goals for their circumstance socio-demographically (Wright *et al*., 2012).

5.3.7 H6: Normative beliefs have a significant impact on purchase intentions

Normative beliefs were hypothesised to significantly influence healthy lifestyles and behavioural intentions for the sampled consumers. The results show that normative beliefs are significant and positively relate to behavioural intentions, thus supporting hypothesis H6. The path coefficient estimate of normative beliefs, H6, was 0.14. This reinforces a positive relationship between a healthy lifestyle and behavioural intentions. Research reveals that consumers seem to view products positively when others have high regard for them. These decisions are not always driven by rewards or fear of rejection; however, it was revealed that there is a link between social consultation and decision-making where approval is concerned (Burnkrant and Cousineau, 1975). Yun and Silk (2011) found that self-identity plays a significant role in influencing normative beliefs. Individuals with a stronger sense of self-identity are more likely to exercise regardless of situations because it is what they value, rather than their social circles, which tend to motivate people with a weaker sense of self-identity. In this study, it was found that 48% of the research respondents are open to receiving advice from their social groups; however, 58% are opposed to purchasing items because of social approvals. According to the findings of this study, age influences 75% of respondents aged 35 and above, who have a high propensity for stronger self-identity and seek minimum acceptance when making decisions about health-oriented brands and healthy lifestyle choices.

In conclusion, the results confirmed five hypotheses and disconfirmed two. Hypothesis three (H3) (knowledge) and moderating factor 5a and 5b (health consciousness) are disconfirmed. The

findings of H3 are consistent with previous studies that confirmed knowledge as important. However, to positively influence healthy lifestyle choices, relevant interventions need to be put in place. The findings of H5 were are inconsistent with previous research studies (Oostindjer, Amdam and Egelandsdal, 2015). Attitude is the strongest. Healthy lifestyles and identity-based motivation have the strongest path coefficients. Aside from the hypothesis results, the study's demographic composition was intriguing, as the majority of the respondents were white females, which contrasts with the demographic representation of the South African market. The next chapter is a summary of the research findings.

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

This chapter is a summary of this study. This chapter discusses highlights and insights from the proposed hypothesis, theoretical and managerial implications. The researcher concludes the paper with a futuristic view of how social marketing can impact healthy living, accompanied by suggestions for future research opportunities/fields of study.

6.2 Conclusion of the study

The purpose of this study is to investigate how key psychosocial factors influence lifestyle choices. Understanding psychosocial dynamics informs researchers on "why people behave the way they do" (Teixeira *et al.*, 2012). Understanding psychosocial dynamics is complex, and it calls for an in-depth exploration of the influence of personal behavioural change and one's environment (Teixeira *et al*., 2012). Specifically, the focus is on healthy living choices among South Africans. The key factors include identity-based motivations, self-efficacy, consumer attitude, and consumer knowledge. In addition, the susceptibility to normative influence and health consciousness serves as interaction factors and the link between consumers' healthy lifestyle attitudes and purchase intentions.

The identified problem statement for this study is the filling of the research gap to give a South African perspective in relation to healthy lifestyle choices and behavioural patterns. The sub-problem of the study investigates key psychosocial factors that influence a healthy lifestyle. Although not exhaustive, the results give us a sense of the mindset of South Africans regarding health consciousness.

The study demonstrates that out of the seven hypotheses, five are significant and supported, while two are insignificant: hypothesis three (knowledge) and hypothesis 5a and 5b, the moderating factor (health consciousness), are disconfirmed. The results indicate that healthy lifestyle choices are important to South Africans and a topic worth exploring further. Marketers focused on health-oriented brands can build on insights demonstrated in this study, in order to create strong brand positioning strategies that will lead to conative behaviour.

Identity-based motivation and healthy lifestyle choices: Oyserman (2009) states that group membership is one of the key factors that constitute IBM. The South African market displays a low statistical representation of the significance of being a part of a group. This market seems to be more inclined towards an individualistic mindset, differentiating the South African market from other markets. Age is a stronger indicator within the South African market in terms of the respondents' inclination to connect healthy living to their self-image. The insights from this study confirm that the South African market is more inclined to be motivated by individuality.

Self-efficacy and healthy lifestyle choices: a previous study on emerging economy (Brazil) highlights that self-efficacy can break down the contemporary barriers to choosing a healthy lifestyle, such as access to healthy foods, affordability, and social structures (Strachan *et al.*, 2009). This is an encouraging insight, as most of the respondents displayed a high sense of self-efficacy, indicating that South Africans who have high self-efficacy can positively contribute towards preventing NCDs in their lives. There are significant similarities between South Africa and other markets in relation to a heightened sense of self-efficacy displayed. This is a good predictor of conative behaviour in relation to healthy lifestyle choices that do not hinge on affordability and

social structures. Numerous studies have used self-belief as a good indicator of behavioural intentions, which was confirmed in this study.

Attitude and healthy lifestyle choices were the strongest indicators of significance. This shows that a favourable attitude towards a healthy lifestyle is important and leads to positive behaviour. Overall, the study confirmed a significant link between attitude and behaviour, a good indicator of a consumer view. A favourable attitude often leads to a conative attitude, which supports this study's findings and is aligned to findings from other markets. The study confirms that positive attitude towards a healthy lifestyle often leads to conative behaviour.

Knowledge and healthy lifestyle choices: the studies confirm that knowledge had no significant relationship with customers choosing a healthy lifestyle. It is important to note that the industry often focuses on disseminating information. Interventions paired with knowledge seem to be the approach that supports the effectiveness and impact of shifting behaviour. Social marketing theory highlights that social marketing is not about disseminating information but rather about influencing and shifting behaviour that influences human lives. The research findings support the social marketing approach. The study confirms that attained knowledge does not mean that consumers will action the required behaviour. Actually, the more people know, the higher the probability to not execute increases. For marketers, the focus should rather be on combining awareness initiatives, educational platforms, and interventions.

Lifestyle and purchase intent: leading a healthy lifestyle has recently become a trend and a personal responsibility. There is a general awareness that taking care of one's diet and physical well-being leads to improved health. Cockerham (2005) postulates that socioeconomic dynamics and chance influence the lifestyle choices that people make. Wardle *et al.* (2003) found that affluent individuals thought more actively about the future and were keener to invest in their health and prolong their lives' longevity. From this survey, people of colour were more inclined to purchase health-oriented brands, and the respondents generally have a positive attitude towards leading a healthy lifestyle.

Health consciousness on purchase intent and healthy lifestyle choices: intended to fulfil a moderating role for healthy living as wellness and healthy living are worldwide trends, but it was found not to be significant. In other markets, health consciousness is mostly related to income and brand purchase intentions, whereas, in the South African context, we found that the research respondents' responses were different from global trends. For the respondents, being health-conscious does not necessarily influence product/brand choices, whereas globally, integrating wellness into everyday life influences brand and lifestyle choices. The research respondents seem to know what health consciousness is, and they are mindful. The identified gap is within the intention space, the "knowing-doing gap", with only 35% of the respondents agreeing to sacrifice something for a healthy lifestyle.

From a **‘normative beliefs’** perspective, the respondents tend to be more inclined towards value expressiveness. They responded more positively towards the idea of receiving or sourcing advice instead of getting approval. Normative influence was found to be significant, which indicates that, for South Africans, the influence of others is pertinent.

Behavioural intentions: the general response trend seems to be openness to doing the easily attainable action such as running, cycling and consuming healthy foods instead of investing in healthy brands. The respondents of the study have a general openness and positivity towards leading a healthy lifestyle. From a marketer’s perspective, the gap is in creating brand relevance and creating a desire for health-oriented brands. There seems to be a gap between lifestyle choices and respondents purchasing products that support their intended lifestyle. Healthy lifestyle brands do not seem to have strong, compelling brand propositions relevant and appealing enough for their customer segment.

6.3 Recommendations

6.3.1 Theoretical implications

The theoretical findings in this study contribute to existing research and knowledge on the impact of healthy lifestyle choices on purchase intent in South Africa and contribute to the theory of planned behaviour. The study broadens the knowledge of psychosocial factors that influence lifestyle choices as there is a scarcity of literature on the integration of social marketing and the broader environment. Additionally, when investigating the hypotheses closely, the study contributes to the relationship between identity-based motivation, self-efficacy, knowledge, attitude, healthy lifestyle choices, normative influences, and health consciousness on purchase intentions. This study's theoretical contribution will help fill a gap in the research on health-oriented brand marketing, since most health-oriented research focuses on healthcare institutions rather than health-oriented products that will help consumers incorporate healthy living into their lives, supporting their health goals and intentions. As well as this, the research that does exist mostly focuses on chronic illnesses. Consequently, there is a scarcity of marketing-oriented studies that focus on health-oriented brands. The study confirms that IBM, self-efficacy, attitude, and healthy lifestyle choices positively influence South African consumers of healthy products and services. This implies that brands focusing on these factors will succeed when building brands that promote a healthy lifestyle.

6.3.2 Managerial Implications

In summary, for social marketing to be a success and influence behaviours positively, social marketers need not be lured into focusing on advertising messages only, even though using the marketing mix and holistic marketing interventions is a critical part of it (Grier and Bryant, 2005). Andreason (1994) indicates that for social marketing to be successful, the approach needs to be programmatic instead of campaign-focused. Social marketers should not create campaigns that only follow commercial marketing principles and simply disseminate information (Andreason, 1994). Unlike commercial marketing, which aims to get the word out, social marketing aims to influence behaviour that benefits the consumer positively (Kotler and Zaltman, 1971). Furthermore, the industry must switch its mindset and belief from meeting customers ' needs to influencing consumer behaviour that has a negative impact on their lives, such as smoking and excessive drinking (Kotler and Zaltman, 1971), by creating awareness campaigns and interventions to educate consumers about the dangers of smoking and excessive alcohol consumption. The researcher observed how advertising plays key role in transmitting information, particularly in the alcoholic beverage and unhealthy foods categories (Stead *et al.*, 2006). Based on the research paper findings, marketers can glean the fact that subjective knowledge and a health conscious mindset are not sufficient to shift people's intentions and influence their behaviour. The industry needs to create long term programmatic campaigns that aim to influence the consumers' attitude towards healthy living, and this can be achieved through various initiatives such as making healthy lifestyle a part of people's identity. Identity congruency shifts need a long-term measurable view that the business can monitor over a certain period of time. In the country, most healthy lifestyle events are sponsored by the financial services industry; the recommendation is for health-oriented brands to be a part of smaller sponsorship events that encourage identity congruency, such

as trail running, and beginner-focused sporting events such as swimming and cycling. The recommendation is based on the assumption that health-oriented brands do not often have the same financial muscle as the financial services sector to support the big lifestyle events such as the Argus Cycle Race or the Old Mutual 2 Oceans marathon. What leaders in marketing need to do is immerse themselves in the concept of driving self-efficacy and a positive attitude towards healthy living. Secondly, they should acknowledge that a healthy lifestyle is generally the high road and requires people to dig deep – as it is easier to buy take outs than cook; similarly, it is easier to watch TV than going to the gym. Health-conscious brands must turn their emphasis away from what they are offering, such as a gym membership or Vegan food, and instead, focus on the customers' desire to live a healthy lifestyle.

6.4 Limitations of the study

- The researcher employed the theory of planned behaviour as one of the theoretical pillars; other scholars are encouraged to use the Health Belief Model or the Prevention Motivation Theory.
- The study was conducted through two social media platforms, Facebook, and Instagram. The channel selection implies that the researcher targeted individuals with internet and data access and with devices that can host these applications.
- The study could also be more demographically representative. For example, the study attracted 90% females and mostly Caucasian respondents (65%), which is not a direct representation of the South African population.
- The study measured subjective knowledge, and the researcher would have done well to have also measured objective knowledge and asked consumers questions that establish their technical knowledge of what it means to lead a healthy lifestyle without it coming across as if they are writing a test.

6.5 Direction for future research

- This study focused on psychosocial factors that influence healthy lifestyles. The selected psychosocial factors were not exhaustive, though. Future research can investigate other psychosocial factors such as motivation and fear based on the Health Belief Model and Prevention Motion Theory.
- Future research can also add socioeconomic factors as research variables.
- The study focused on healthy lifestyle choices at a holistic level. Future research can focus on healthy lifestyle-oriented brands, utilising other theoretical models such as the Health Belief Model and Prevention Motivation Theory.
- The study focused on consumers. However, there is an opportunity to shift the research focus to upstream channels; this calls for the micro and macro environments research that will be reviewed through policy structures, general and social structural change, and organisational influences (Goldberg, 1995).
- Future research can target individuals in positions of influence, such as CEOs, board members, shareholders, heads of hospitals and news directors (Goldberg 1995). This study seeks to influence psychological and sociological costs and impact lives (Andreasen, 1997), and it needs theoretical and research investments.

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