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Social context factors and Consumer Innovativeness as drivers of organic food Adoption amongst Millennials in South Africa

Bongani Mhlophe

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Supervisors: Prof HB Klopper
Dr Melissa Zulu

DECLARATION

By submitting this thesis, I declare that the work contained within, and in its entirety, is my own original work. I am the principal author, and I worked under the direction of my supervisors mentioned above.

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ABSTRACT

Modern-day marketing practitioners are more interested in understanding consumers' acceptance of innovative products rather than obliviously introducing new products to the market, only to be left to endure the costly and disruptive consequences of product rejection. Once practitioners fully understand the aspects that stimulate consumers to adopt innovations, they will be able to devise well-informed strategies that are bound to accelerate the adoption of new products, create more demand, and positively impact their long-term profitability. Furthermore, once relevant knowledge is available, the high rejection of new products will likely to be lessened to a reasonable proportion. For marketing practitioners to understand the drivers of organic food espousal amongst Millennials, scholars must conduct relevant studies on the complex relationships that exist between adoption and its antecedent factors. Recent studies have maintained that research focus is skewed towards individual-level factors, while most scholars overlook the predictive ability of social context factors on Adoption Behaviour. Therefore, it became expedient that an empirical analysis of this kind must be conducted to forge a more profound understanding of how the social context factors impact the Adoption Behaviour of organic food, particularly in an emerging economy like South Africa.

This study targeted Millennials, particularly in the urban cities of South Africa, i.e., Johannesburg and Pretoria (Gauteng), Durban (Kwa-Zulu Natal) and Cape Town (Western Cape). A proposed conceptual framework portraying the relationships between the studied constructs was developed, resulting in several suppositions that were later subjected to hypothesis testing. A non-probabilty and conveniently accessible sample was used to gather primary data from 385 respondents. Both self-administered online suveys and researcher administered survey questionnaires were used for data colletion which yielded a response rate of 78.9%. This raw data was quantitatively analysed through SPSS 27 (for descriptive statistics) and through Structural Equation Modelling using Amos 27 (for inferential statistics). Path Modelling was used to test the hypothesised relationships of the structural model in a bid to either reject or fail to reject these suppositions. Moderation and moderated mediation effects were analysed using Hayes' PROCESS Procedure for SPSS 4.0. While the moderating effect of Consumer Innovativesness was firmly establishled, this study, however, failed to garner enough statistical evidence to support the moderated mediation effects. Although the results of this study mostly confirmed the results from earlier studies, some new and exciting insights were derived; for example, an inverse relationship was found between Attitude and Adoption Behaviour, resulting in the nullification of hypothesis 8.

The findings of this study delivered some critical theoretical contributions to the extant literature and meaningfully advanced the frontier of knowledge within the broader fields of generational and behavioural studies by providing fresh insights into the nature of the relationships between the studied constructs. Furthermore, this study also proffers practical suggestions that may aid marketing practitioners in devising and adopting well-informed strategies that will eventually enhance the adoption of organic food, particularly within the younger generational cohort. While a mismatch between Millennials' Attitudes and their Adoption Behaviour was firmly established, this study further corroborates the findings from previous scholars that addressing negative Attitudes towards novelties is fundamental for their effective diffusion. These Attitudes must be fully understood and channelled to the right direction (e.g., through relevant promotional activities), in order to improve the espousal of organic foods, thus paving the way for these foodstuffs to realise their full market potential. Eventually, marketers will have the assurance of future demand and sustainable profitability

if the adoption of organic food is accelerated to new heights. Although this study proffered meaningful contributions, some constraints were apparent, and these hurdles inevitably affected the generalisability of the findings of this study. Owing to these limitations, the results of this study lacked external validity and thus cannot be confidently applied to other similar research contexts. On the other hand, these limitations further unlocked avenues for future research endeavours.

Key words: Organic Food, Millennials, South Africa, Attitude-Behaviour Gap

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The following verse continuously stirred this study to the right direction:

" I can endure all things through the power of the one who gives me strength" – Philippians 4:13

In whatever predicaments I stumbled upon, the Almighty GOD saw me through and kept me inspired, despite all the mishaps that engulfed my way.

To GOD be the glory

DEDICATION

I dedicate this great piece of work to my late uncle – Thabang Brian Mhlophe, who piloted my educational and childhood path in the right direction. Thank you for setting a proper groundwork upon which my later edification was built and ushered.

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KEY ABBREVIATIONS

Variables:

SI	-	Social Influence
SR	-	Social Representation
SIN	-	Social Influence
PV	-	Perceived Value
ATT	-	Attitude
CI	-	Consumer Innovativeness
AB	-	Adoption Behaviour

Others:

SEM	-	Structural Equation Modelling
CFA	-	Confirmatory Factor Analysis
CR	-	Composite Reliability
AVE	-	Average Variance Extracted
SPSS	-	Statistical Package for the Social Sciences
AMOS	-	Analysis of a MOment Structures.
MLE	-	Maximum Likelihood Estimation

Key Concepts:

Millennials	-	A demographic cohort that precedes Generation Z (born 1982 to 2000.
Organic food	-	Produces grown naturally, without any chemical substances

CHAPTER 1

INTRODUCTION, BACKGROUND AND JUSTIFICATION OF THE STUDY

1.0. Introduction and Background

When faced with socio-ecological problems like global warming, water and air pollution, among others, the undeniable negative impact of these issues can be substantial, particularly when such hurdles become a threat to the environment, people's pursuit of their lifestyles and the broader society at large (Carrington, Neville & Whitwell, 2010; De Barcellos, Krystallis, de Melo Saab, Kügler & Grunert, 2011). The disastrous effect of climate change, owing to global warming, has altered many consumers' adoption and purchase behaviours by inculcating a willingness to espouse 'green' or organically produced foodstuffs to their lifestyles, owing to the belief that such produces are sustainable (Carrington et al., 2010; De Barcellos et al., 2011; Persaud & Shillo, 2017). However, amid these consumer behavioural changes, some unsustainable behaviours continue to prevail, like the apparent rejection of natural foodstuffs in some markets in favour of inorganic produces, which has primarily been attributed and aggravated by increasing dynamics in consumers' social environment, food neophobia, among others (Jasiulewicz & Lemanowicz, 2016). Another exacerbating feature of organic food rejection has been the widespread misconception that organic foodstuffs are ridiculously expensive (Mladenova 2019; Seegebarth, Behrens, Klarmann, Hennigs & Scribner, 2016), and this fallacy has led to a general contention that there is no value for money in espousing these produces (Prakash, Singh & Yadav, 2018). Consumers' failure to benefit from adopting organic foods has inevitably evoked negative attitudes towards these foodstuffs (Hwang & Chung, 2019). The effect of this pessimism towards organic food has immensely facilitated the lack of approval of 'naturally grown foodstuffs' amongst most consumers (Siegrist & Sutterlin, 2017).

Over time, researchers like McCarthy, Liu and Chen (2015) and Persuad and Schillo (2017) have made numerous attempts to understand the relationship between Adoption Behaviour and its antecedents. However, documented evidence suggests that contemporary scholars are often left with the challenge of providing well-researched solutions for practitioners to use when formulating strategies that seek to facilitate an effective adoption process for food innovations (e.g., Lee, Kim, Rhee & Trimi, 2006; Talukder, 2016). Further studies, for example, Bartels and Reinders (2010), have emphasised the significance of understanding social context factors and determining their relationship with the adoption of organic foodstuffs. Moreover, earlier studies have variously and consistently concluded that Adoption Behaviour is socially constructed (e.g.., Persaud & Schillo, 2017). Due to the costly and destructive effect that new product rejection has on companies' profits and their continued survival, it is now paramount

that practitioners should devise proactive rather than reactive mechanisms to facilitate the successful introduction and adoption of organic foodstuffs. Despite the burgeoning research attention that has been directed towards understanding the influence of social-context factors on organic food adoption (e.g., Bartels & Reinders, 2010), there are still concerns that continue to dominate as significant problems confronting marketing practice. However, scholars are gradually shifting their research attention from generic organic food study contexts and are now directing their focus at understanding specific groups like Millennials (e.g., Linnhoff, Volovich, Russell & Smith, 2017; Smith & Brower, 2012), thus culminating in the bourgeoning research interest in these cohorts and their effect on the adoption of organic food.

Organic produces have gained a favourable status in recent times, even in emerging markets like South Africa (e.g., Chauke, 2018; Du Toit & Crafford, 2003; Engel, 2009). At present, organic versions for different product categories are available, for example, foods, clothing, personal care products, and accessories (Olivová, 2011). However, many behavioural studies have failed to concentrate on contexts other than the environmental or ethical perspectives of organic food adoption or consumption (Thøgersen & Ölander, 2003; Papaoikonomou, 2013; Sirieix, Delanchy, Remaud, Zepeda & Gurviez 2013; Zander & Hamm, 2012). For this reason, this research sought to unravel social context factors influencing organic food adoption, as recent inquiries suggests that the espousal of these products seems to be socially-oriented (Bartels & Reinders, 2010; Persaud & Schillo, 2017). Furthermore, previous studies have clearly shown that social context-related factors are consistently related to consumer Adoption Behaviour (e.g., Persaud & Schillo, 2017), and such findings underscore the importance of conducting this study. Therefore, the current study provides an extended effort in the quest for answers to what underlies the Adoption Behaviour of Millennials relative to organic food.

Extant literature has linked consumer Adoption Behaviour for organic food to their social status or class (Griskevicius, Tybur & Van den Bergh 2010; Tapp & Warren, 2010). Some previous researchers have also recognised that food adoption is an expression of one's identity, norms and values (e.g., Persaud & Shillo, 2017; Senauer, 2001), while others have seen it as a reflection of one's lifestyle (Brunsø, Scholderer & Grunert, 2004b). However, a limited number of previous reseachers have studied whether organic foods can depict one's Social Identity, status or class (Lin & Huang, 2012). Moreover, within the food context, the Social Representation of novel products has been recently acknowledged as a vital predictor of consumers' behavioural acceptance of novelties (Huotilainen, Pirttilä-backman, & Tuorila, 2006; Huotilainen & Tuorila, 2005; Huotilainen, Seppälä, Pirttilä-Backman, & Tuorila, 2006).

Social Representations play a crucial role in the adoption of new products because consumers' beliefs enable them to attach meaning to such products (Huotilainen et al., 2006). Another key social determinant of one's food adoption behaviour is the influence of relevant others. Relevant others are important members of one's shared network, whose opinions are valuable, and who are more likely to judge one's choices (Bertrandias & Elgaaied-Gambier, 2014; Persaud & Schillo, 2017). Bertrandias and Elgaaied-Gambier (2014) also identified that studies on the influence of 'relevant others' in consumer Adoption Behaviour are currently missing. Therefore, including Social Identity, Social Representations, and Social Influence was justified for further inquiry as Langner, Hennigs and Wiedmann (2013) also argued that studies on socially-oriented consumer behaviour are lacking in organic food literature. This void in the extant literature still prevails due to the lack of conclusive results, although other studies have submitted that a strong relationship exists between belonging to a social group, a person's Attitude and their adoption-related behaviour (Bartels & Reinders, 2010).

Based on the guidelines from the extant literature, this study included the mediation effect of Perceived Value and Attitude for further investigation (Persaud & Schillo, 2017; Tsakiridou, Boutsouki, Zotos & Mattas, 2008). Testing the mediation effect of Perceived Value and Attitude helped in establishing whether socially-inclined customers positively perceive greater value in organic products before accepting them (Persaud & Schillo, 2017). Therefore, the review of the extant literature pointed out the need to include the mediating effect of Perceived Value and Attitude in this research (Persaud & Schillo, 2017; Poortinga, Steg & Vlek, 2004). This study will thus unravel whether Millennials' perceptions of value for organic impacts their willingness to espouse the produces. While it is common that there is a mismatch between consumers' Attitudes and Adoption Behaviour, i.e., the attitude-behaviour gap (e.g., Berger & Heath, 2007), providing insights on this aspect will help practitioners deal with undesirable Attitudes that can be harmful to the diffusion of new products. The problem of consumers having positive pre-dispositions yet constantly failing to transform this favourable Attitude into a behaviour remains a massive hurdle for practitioners (Hassan, Yee & Ray, 2015).

In this study, Consumer Innovativeness (i.e., an inherent predisposition of consumers) was used to moderate the relationship between the social context factors and Adoption Behaviour. The concept of domain-specific Consumer Innovativeness, advanced by Goldsmith and Flynn (1992), was applied to this study within a specific product class (i.e., organic food product category) instead of using a universal innovativeness trait. As suggested by Goldsmith and Flynn (1992), the underlying argument presented here was that some individuals might adopt

novelties earlier than others if such innovations were in their domain of interest but could be laggards in other product categories outside their area of interest. In both the trait and domain-specific perspectives, an inadvertent consequence of the emphasis on individual-level factors seems to disregard the effect of social context factors in the adoption process (Bartels & Reinders, 2010). For this reason, social considerations were evaluated in this study, and their influence on Adoption Behaviour was moderated by Consumer Innovativeness.

1.1. The Millennial Generation (Generation Y)

Millennials, also referred to as Generation Y or the Internet generation, are individuals who were born between the years 1982 until 2000 and this group of people continues to attract enormous attention of managers, marketers and researchers (Bilgihan, 2016; Howe & Strauss, 2007; Nowak, Thach, & Olsen, 2006; Severt, Fjelstul & Breiter, 2013; Shatto & Erwin, 2017). Millennials are the most sensitive generation, and they care about their health, environment, sustainability issues, social causes, income, and they are very image-conscious (Smith, 2010). In addition, Millennials are technologically savvy, i.e., they are characterised by the high usage of technology, the Internet, and social media (Muralidharan, Rejón-Guardia & Xue, 2016; Sheahan, 2005; Smith, 2010). Moreover, Millennials are better educated, better connected to information, and are progressively involved in organic food adoption and consumption (Howe & Strauss, 2007; Nowak et al., 2006; Patel, Sharma & Purohit, 2021). As opposed to being merely convinced by advertisements, it has been established that Millennials share and review ideas (e.g., with their peers and social networks) before making an adoption or purchase decision (Segokgo, 2016). Thus, from a South African perspective, there is a need to investigate this generational phenomenon to understand their social reasons for adopting organic food.

1.2. Justification for Measuring Adoption Behaviour

Organic food adoption and consumption is still at its infant stage or early adoption phase (according to the Product Life Cycle) in South Africa (Engel, 2009; Naidoo & Ramatsetse, 2016). It is against this understanding that the researcher found it expedient to focus attention on adoption rather than ‘actual’ purchase behaviour since there is a better chance of analysing Adoption Behaviour before the actual manifestation of buying behaviour. As echoed in earlier studies, Adoption Behaviour should attract primary research focus since it constitutes an antecedent activity to actual buying behaviour (Juhl, Fenger & Thøgersen, 2017). A study conducted by Malik, Suresh and Sharma (2017) established that adoption is a prerequisite to

actual buying behaviour. Thus, concentration on adoption behaviour was also profoundly informed by the difficulty in empirically testing 'actual' purchase behaviour for 'new' products (Zhang, Fan, Zhang & Zhang, 2019). Besides the challenge of statistically testing the variable of purchase behaviour, sometimes it may yield incomplete and misleading results, thus necessitating a post-mortem evaluation, which can almost be an impossible task to accomplish (Zhang et al., 2019). Therefore, this study was more likely to accurately and validly measure adoption rather than the actual purchase behaviour.

One of the key reasons that have been provided for the inadequacy of existing organic food models or theories is the uncertainty around their precision to predict Adoption Behaviour through the lens of social-context factors (Bartels & Reinders, 2010). The following section provides a theoretical account of the deficiencies that exist in existing models or theories.

1.3. Model Deficiencies in Extant Literature

New foodstuffs' slow and often complex adoption process has motivated several scholars and practitioners to endeavour to understand, manage and forecast their diffusion (e.g., Attewell 1992; Bartels & Reinders, 2010; Lyytinen 1991, Persaud & Shillo, 2017). This section questions the efficacy and applicability of the prevailing models that were adapted to ground this study or theoretically support the arguments presented herein. Identifying these deficiencies in existing models or theories also invites further research that can aid in resolving the resulting shortcomings. The implications of this analysis will also help in sketching a pathway to establish better theoretical accounts of adoption. Moreover, in this section, relevant models in the current literature were reviewed to provide a historical context to the present study. This study argues that adoption is socially constructed (Bertrandias & Elgaaied-Gambier, 2014; Persaud & Schillo, 2021), even though the justification for this social construction has been lacking in most existing theoretical models. As often adoption factors tend to be locally unique, extant literature suggests that economic structure, socially-related aspects like local culture, and the supporting infrastructure (government policies, education system) are more likely to shape these constructs (Bartels & Reinders, 2010).

One prevalent account for predicting and explaining consumers' adoption rates is the Diffusion of Innovation theory – as propagated by Rogers (Rogers, 1962), which sought to explain specific adoption intentions or decisions necessary for the effective adoption of well-defined innovations like TV sets or organic farming among agriculturalists. Unfortunately, scholars measuring the diffusion of innovations have thus far been quick at applying the general

Diffusion of Innovation theory to their studies without carefully analysing whether it is justifiable to extend or modify this theory for it to better explain people's Adoption Behaviour of modern-day innovations.

From the Diffusion of Innovation theory, the following factors were found to influence diffusion rates: adopter characteristics, the communication process, the features of the promoters, as well as the innovation attributes including observability, compatibility, trialability, relative advantage and complexity (Lyytinen & Damsgaard, 2001). These adopter characteristics that have been identified in literature further demonstrate that there has been less emphasis placed on the social-context factors that can powerfully predict the adoption of novelties. Arguably, ignoring the social aspects of the diffusion of innovations is farfetched as most studies have demonstrated that such innovations are learning-intensive, complex, networked and most importantly, socially constructed (e.g., Flight, D'Souza & Allaway, 2011; de Oca Munguia, David, Pannell & Llewellyn, 2021).

It is equally important to note that diffusion does not necessarily traverse through sequential stages as submitted by the Diffusion of Innovation theory. Complex innovations will not diffuse in distinct stages (Rogers, 1995). Several basic premises of the Diffusion of Innovation theory need careful reconsideration when it comes to complex novelties. In particular, the Diffusion of Innovation theory does not provide adequate variables to deal with collective Adoption Behaviours like the vital role of standards, e.g., societal values (Lyytinen & Damsgaard, 2001). Due to the inattention to social-related factors, the Diffusion of Innovation model lacks predictive ability in its endeavour to fully explain adoptions, leaving a 'theoretical' gap, and its inadequacy in wholly capturing all the antecedents that effectively determine acceptance of new novelties remains to be addressed. Although Rogers (1962) penned down the theory of Diffusion of Innovation, this study utilised Klonglan and Coward (1970)'s modified version of this theory by concentrating on 'symbolic adoption' instead of 'use adoption'. Symbolic adoption in this study sought to describe Millennials' emotive response to cognitive messages about the innovation and social persuasion from relevant others.

In an attempt to advance the scientific understanding of consumer behaviour, the modification of the Theory of Reasoned Action was done (Ajzen & Fishbein, 1975), resulting in the conceptualisation of the Theory of Planned Behaviour (Ajzen, 1985, 1991). This theory has been a dominant theoretical model that has guided research on individual behaviour for the past three decades. However, the Theory of Planned Behaviour has been criticised because of

its exclusive emphasis on rational cognition, while excluding other dominant factors that predicts behaviour (Sheeran, Gollwitzer & Bargh, 2013), as well as its total disregard of the role emotions have beyond the expected affective outcomes (Conner, Gaston, Sheeran, & Germain, 2013). Also, the fixed explanatory nature of the Theory of Planned Behaviour does not aid in understanding the confirmed effects of behaviour relative to an individual's perceptions and future behaviour (McEachan, Conner, Taylor & Lawton, 2011). Ajzen (2011) acknowledged that since the introduction of the Theory of Planned Behaviour, research has made considerable progress but did not suggest any alterations to the basic theory to create new insights that will keep it relevantin light of the issues stemming from the 21st Century.

As identified in the extant literature, there are two leading criticisms about the Theory of Planned Behaviour, and they include its lack of predictive validity and its diminishing utility (Orbell, Hodgkins & Sheeran, 1997). Over the years, the main criticism of the Theory of Planned Behaviour has been its limited predictive validity (Sniehotta, Presseau & Araújo-Soares, 2014). Furthermore, reviews from extant literature show that the Theory of Planned Behaviour measures does not account for the bulk of variability in observed behaviour (e.g., Tornikoski & Maalaoui, 2019). In particular, the problem of individuals who form an intention but subsequently fail to act has been identified as a 'key' limitation of this theory, and to date, this drawback remains unaddressed (Orbell et al., 1997; Tornikoski & Maalaoui, 2019).

The other problem with the Theory of Planned Behaviour is that it does not explain sufficient variability in behaviour, and some of the theory's propositions are overtly false (Sniehotta et al., 2014). In particular, the mediation assumptions in the Theory of Planned Behaviour clash with available evidence; for example, beliefs often predict behaviour over and above intentions (Araújo-Soares, Rodrigues, Presseau, & Sniehotta, 2013; Conner, McEachan, Jackson, Mc Millan, Woolridge & Lawton, 2013). More critically, the sufficiency of the hypothesis alleging that all theory-external impacts on behaviour are accounted for through the Theory of Planned Behaviour is conceptually and empirically indefensible and has been fabricated (Conner et al., 2013; Sniehotta et al., 2014). There is reliable evidence that socioeconomic status, age, physical or mental health, and environmental features objectively and better predict measured physical activity when the Theory of Planned Behaviour predictors are controlled for (e.g., Sniehotta et al., 2014; French & Hankins, 2003). Furthermore, this further demonstrates that the way the Theory of Planned Behaviour describes how behaviour is predicted is misleading, and thus this study suggests the consideration of a variety of alternative approaches to it. There is also sizeable evidence to corroborate that the strength of habits (Gardner, De Bruijn, & Lally,

2011), self-determination, identity (Conner & Armitage, 1998), and anticipated self-controlled measures like planning (Carraro & Gaudreau, 2013) often predict behaviour better than the predictors from Ajzen's Theory of Planned Behaviour (Gardner et al., 2011).

In the 1970s, the Theory of Reasoned Action presented great utility in proposing that behaviour was not a mere reflection of attitudes as submitted in earlier theories (e.g., Al-Mamary, Al-nashmi & Ghaffar, 2016; Conner & Armitage, 1998; Blue, 1995). As an extension of the Theory of Reasoned Action, i.e., the Theory of Planned Behaviour submitted new explanatory measures (i.e., subjective norm and intention), new research designs that further contributed to the development of new knowledge (Conner & Armitage, 1998). Three decades later, it seems the Theory of Planned Behaviour has lost its utility as it does not meaningfully help practitioners in developing appropriate practical interventions (Sniehotta et al., 2014). It is no longer lends itself well in experimental tests, and it does not deliver helpful hypotheses that robustly differ from other dominant theories (Sniehotta et al., 2014; Sutton, 2002).

Nowadays, scholars use the 'extended' forms of the theory and add self-regulatory behaviour change strategies to their models while elaborating them around the theory due the notable insufficiency of this theory in predicting behaviour (Sniehotta et al., 2014). Thus, by doing so, these scholars have indicated that they are convinced that the Theory of Planned Behaviour, as it stands, does not provide an acceptable explanation for human behaviour and that it must be altered or extended. A recent debate is about changing this 'outdated' theory and closing the current gap in line with available evidence (Head & Noar, 2014; Kok & Ruiter, 2014). Although many critics have lambasted the Theory of Planned Behaviour by arguing that it is no longer a plausible theory of behaviour or behavioural change and must be permitted to enjoy its well-deserved retirement, this study cautiously applied this theory, as there is yet to be a better-proposed alternative to it.

This study also borrowed from the insights submitted by Davis, Bagozzi and Warshaw's (1989) Technology Acceptance Model, which was designed from an information systems perspective. For this theory to apply to this study, several considerations were considered (for example, its predictive ability to ground this study), and in endeavouring to do so, the researcher was acutely aware of its inherent limitations. Several studies (e.g., Lim, Osman, Salahuddin, Romle, & Abdullah, 2016; Ngulube, Mathipa, & Gumbo, 2015; Torres & Gerhart, 2017) have expressed the inadequacies of the Technology Acceptance Model in addressing the nexus between innovation and adoption. These findings revealed the weaknesses of this model in explaining

users' Adoption Behaviour (e.g., Lim et al., 2016; Hai & Alam-Kazmi, 2015) and further submitted that this model could not sufficiently predict the acceptance of innovations (Hojjati & Khodakarami, 2016; Torres & Gerhart, 2017). Further arguments indicated that, although several studies have amplified the popularity of the Technology Acceptance Model, this model was found to be insufficient to explain users' adoption and use of innovation (Chandio, Burfat, Abro, & Naqvi, 2017; Lim et al., 2016).

One of the key criticisms of the Technology Acceptance Model is that it is not robust enough to explain individual behaviour (Hai & Alam-Kazmi, 2015). According to Hsu and Lu (2004), various researchers have adopted the Technology Acceptance Model due to its simplicity but failed to consider its actual applicability to their studies. Therefore, its questionable applicability to earlier studies and its unclear relevance to this research were sufficient reasons why this model was not applied to this study. Thus, again, using this theory to ground this study was not going to have a robust bearing in achieving the purpose of this study. Moreover, it could be argued that when using the Technology Acceptance Model, it is challenging to measure behaviour, as hidden personality traits usually motivate behaviour. Thus, although the Technology Acceptance Model may be accurate in theory to predict individuals' adoption behaviour and use of technology (Venkatesh, Brown, Maruping & Bala, 2006), in light of the recent literature mentioned above, its conceptualisation and dubious applicability deemed it implausible or inaccurate in aiding the achievement the objectives of this study.

1.4. Problem Statement

Extant literature has presented evidence to corroborate the claim that the rejection of new products like organic foodstuffs is very costly and destructive to businesses (Henard & Szymanski, 2001; Kuokkanen, Uusitalo, Koistinen, 2019; Michaut, 2004). Disruptive food innovations create new or drastically transforms existing markets – as is the case with organic food (Kuokkanen et al., 2019). Often consumers around the globe present slow adoption rates towards new or disruptive food innovations (Purwanegara & Garnida, 2016). Moreover, consumers tend to reject 'too much' novelty in food as it 'upsets' their daily eating habits, thus creating solid barriers to genuine innovation, and frequently resulting in the utter failure of many new food introductions (Faccio & Fovino, 2019). Furthermore, companies that bring innovative products to the market often face unjustified neophobia, which is unwarranted anxiety, i.e., fear of anything new or unknown (Siegrist & Hartmann, 2020). In addition, food neophobia is the phenomenon where consumers utterly avoid fresh, unfamiliar foods (Huang,

Bai, Zhang & Gong, 2019), and its prevalence has resulted in failures of many new food introductions, as it usually results in low or no adoption rates altogether (Ronquest-Ross, Vink, Sigge, 2015). It appears that individuals who possess the qualities of innovators in their social groups play a vital part in overcoming this neophobia problem (Jasiulewicz & Lemanowicz, 2016). Less aversion to unfamiliar food characterises Consumer Innovativeness and is generally considered a complex variable to measure (De Barcellos et al., 2009). Despite the difficulty in validating the construct of Consumer Innovativeness (as alluded to in the extant literature), this study acknowledged the crucial role that 'innovative' customers (i.e., early adopters) play in the success of new products by legitimising these novel products to other consumers after their adoption (Huotilainen et al., 2006). Therefore, Consumer Innovativeness was used as a moderating variable in this study.

New product failure is a frequent phenomenon in most industries, yet how investors react to these failures is still poorly understood. There is empirical evidence that there is a high failure rate for new products in South Africa (Bushe, 2019; Olawale & Garwe, 2010). This poor survival rate of fresh market introductions is corroborated by existing statistics that an estimated 40% of all new products in the country fail in their first year of launch, while 60% stumble in the second year and 90% reach the end of their lifecycle within the first ten years from their initial launch (Bushe, 2019). Extant literature identifies poor planning due to lack of relevant information as the dominant cause of new product and business failures, as consumers tend to reject products that do not appeal to their needs and wants (Nemaenzhe, 2010). However, the problem of high rejection rates of new products is not only limited to organic foodstuffs or South Africa *per se*; instead, it cuts across various product classifications and sectors globally (Mani & Chouk, 2018). Other developed countries like the United States of America, Great Britain, Germany, among others, have also cited market failure rates of new products, ranging from an estimated 7% to 18% within the first year of launch (Cooper, 2019; de Brentani, Kleinschmidt, Salomo, 2010). The abovementioned statistics firmly suggest the universality of new product failures as a global phenomenon. Hence, meaningful and well-researched solutions, mainly regarding the effective adoption of organic foods, must be provided to prevent the future prevalence of this setback.

There is also substantial evidence to corroborate the fact that social-context factors affect consumers' willingness to adopt certain new foods (e.g., Bartels & Reinders, 2010; Ha-Brookshire & Norum, 2011; Persaud & Schillo, 2017). However, there is a lack of current research to indicate whether social factors are more likely to affect consumers' adoption of

organic food, particularly in an emerging economy like South Africa (Flynn-Green, Mason & Giampiccoli, 2019; Mhlophe, 2016). The scant evidence in extant literature can be attributable to the fact that the organic food market is still in its early stages, thus providing a fertile ground for marketers to devise robust market penetration strategies. Earlier researchers have argued that inquiries into the socially-oriented Adoption Behaviours are limited in the extant literature, particularly from an organic food perspective (e.g., Bartels & Reinders, 2010; Ha-Brookshire & Norum, 2011; Persaud & Schillo, 2017). The scarcity of these studies is prevalent even though a strong association exists between, for example, belonging to a specific social group and an individual's Adoption Behaviour (Bartels & Reinders, 2010; Langner et al., 2013). In particular, little research has been done on social factors, consumers' Perceived Value and Attitude, and higher-level traits like Consumer Innovativeness as drivers of organic food adoption, particularly amongst Millennials from an emerging market like South Africa. The scarcity of research outputs in this field thus further justified the need for this study.

The above-documented evidence further suggests that a more pragmatic and effective way of promoting the adoption of 'new' products is by identifying factors that trigger or stimulate individuals to espouse these 'new' products (Aertsens, Verbeke, Mondelaers & Van Huylenbroeck, 2009; Curtis & Quarnstrom, 2019; McCarthy et al., 2015). The works of previous scholars have built both theoretical and empirical models of adoption, and these models have established effective relationships between the antecedents of consumers' adoption behaviour (e.g., Bartels & Reinders, 2010). However, the efforts of previous scholars have fallen short in presenting conclusive evidence that provides proper comprehension of the underlying variables relating to adoption. Therefore, it is in the interest of this study to unravel these antecedent factors, hoping that once they are utterly understood, practitioners will be able to take suitable remedial actions to prevent the manifestation of product rejection behaviour by their potential customers.

While consumers may profoundly express their concerns toward the rampant environmental degradation, previous research shows that this does not necessarily translate into their adoption of organic food (Hughner, McDonagh, Prothero, Shultz II & Stanton, 2007). This argument was further reinforced by Young, Hwang, McDonald, and Oates (2010), who stated that although consumers may have a favourable attitude toward organic food, this does not necessarily guarantee the adoption of such foodstuffs. Consequently, there exists a severe gap between consumers' Attitudes and their Adoption Behaviour, and this void has been referred to as the attitude-behaviour gap (Bray, Johns & Kilburn, 2011). Thus, due to the discrepancy

between attitudes and behaviour, i.e., attitude-behaviour gap, marketers encounter a gruelling task of developing effective and well-informed segmentation, positioning and targeting strategies for organic foodstuffs (D'Souza, Taghian & Khosla, 2007). Therefore, this study was cautious when devising the hypothesised relationships between Attitude and Adoption Behaviour as the discrepancy has a well-entrenched history in the extant literature.

Millennials or the so-called Generation Y consumers are regarded as the most influential and progressive generation in the espousal of 'healthy' foodstuffs (Howe & Strauss, 2007; Nowak, Thach, & Olsen, 2006; Ntanos, Skordoulis & Ntanos, 2014). Extant literature submits that Millennial shoppers are highly prepared to pay a price premium based on the quality and healthiness of the food (Ntanos et al., 2014). Given that this cohort represents approximately 16.3 million consumers or makes up 27% of the South African market (which has a total of 60.2 million people) (Worldometer, 2021), Millennials have proven to be the key target market for the organic food movement. However, from the Millennial cohort's perspective, the adoption of organic food remains an under-researched subject (Bollani, Bonadonna & Peira, 2019; Mhlophe 2016; Ntanos et al., 2014). Owing to the scant literature on Millennials' adoption rates for organic food in the country, it became necessary that this study unravels this phenomenon within this generational cohort, with hopes for meaningful insights will ensue from this analysis.

Succinctly, this study presents the following research problems that justified the gap prevailing in extant literature:

- slow adoption rates for new or disruptive food innovations (in this case, organic food that is still in its infancy in South Africa)
- scant research outputs specifically on social-context factors that affect consumers' adoption of organic food
- lack of targeted research endeavours, e.g., research that analyses adoption rates for organic food, with focus on specific generational cohorts, for example, Millennials
- there exists a severe gap between consumers' Attitudes and Adoption Behaviour
- Finally, a lack of proper understanding of consumer adoption from the lens of social-contexts factors and from a South African perspective.

1.5. Purpose

The drive behind this thesis entailed examining how social factors and individual innovativeness shape Millennials' adoption decisions for organic food. In particular, the purpose of this study was to investigate whether or not Perceived Value and Attitude mediate the impact of social factors on South African Millennials' Adoption Behaviour of organic food through the moderation effect of Consumer Innovativeness.

Stemming directly from the purpose of this study were the research objectives listed in the section below. These objectives were designed to ensure that relevant and valuable insights were generated at the end of this investigation.

1.6. Research Objectives

The objectives of this research were closely related to the purpose of this inquiry, which denoted the researcher's version of a typical business problem (Bryman & Bell, 2011). These objectives intended to explain the purpose of the study in measurable terms by defining the standards of what the study precisely sought to achieve (McDaniel & Gates, 2013). In an endeavour to address the research problems identified above while simultaneously providing answers to the research questions below, the following primary research objectives that were used to fulfil the purpose of this study were identified as follows:

1.6.1. Primary Objectives: To:

i). Ascertain and evaluate the associations that exist between the carefully chosen variables that were predictors or antecedents of Millennials' Adoption Behaviour for organic food;

1.6.2. Secondary Objectives:

The primary objective were to be realised by supplementing them with the following secondary objectives:

1. Investigate whether there is a positive relationship between Social Identity and Perceived Value.
   1a) Assess whether Consumer Innovativeness positively and significantly moderates the mediated relationship between Social Identity and Perceived Value on Adoption Behaviour.
2. Assess whether there is a positive relationship between Social Representation and Perceived Value.

3. Determine whether there is a positive relationship between Social Influence and Perceived Value.
    3a) Examine whether Consumer Innovativeness positively and significantly moderates the mediated relationship between Social Influence and Perceived Value on Adoption Behaviour.
4. Evaluate whether there is a positive relationship between Perceived Value and Attitude.
5. Investigate whether there is a significant and positive relationship between Social Identity on Adoption Behaviour.
    5a) Examine whether Consumer Innovativeness positively and significantly moderates the relationship between Social Identity and Adoption Behaviour.
6. Ascertain whether there is a positive and significant relationship between Social Influence and Adoption Behaviour.
    6a) Examine whether Consumer Innovativeness positively and significantly moderates the relationship between Social Influence and Adoption Behaviour.
7. Establish whether there is a positive relationship between Perceived Value and Adoption Behaviour.
8. Assess whether there is a positive relationship between Attitude and Adoption Behaviour.

Linked to the above objectives were the research questions – which are highlighted below:

1.7. Research Questions

Research questions depicts an investigator's interpretation of research problems while shedding light from overall purpose of the study (Bryman & Bell, 2011). The study questions explicitly specified the exact information that the researcher sought to get from conducting this investigation. Therefore, the research questions were vital, as they guided the literature that was to be reviewed by the researcher. Moreover, research questions also guided decisions on which research design to employ, the type of data to be gathered, the analysis methodology and the mechanism used to interpret the results of the study (Bryman, 2007; McGaghie, Bordage & Shea, 2001). Like the research objectives, this study divided this section into two distinct but related parts: i.e., primary and secondary research questions.

1.7.1. Primary Research Question

Based on the above-stated research problem and in line with the purpose and objectives of this study, the primary research question was:

- To what extent do the anteceding variables of Social Identity, Social Representation, Social Influence, Perceived Value, Attitude, and Consumer Innovativeness drive Millennials' organic food Adoption Behaviour in South Africa, with or without the presence of the moderating effect of Consumer Innovativeness?

1.7.2. Secondary Research Questions

Providing answers to the research question, as mentioned above, sought to help better understand the relationship between the selected variables by disentangling the complexity that characterises them. Based on the primary research question and in line with the supplementary objectives, the hypotheses of this study (while guided by the insights from the extant literature and the overarching purpose of this study), the secondary research questions for this study were the following:

1. Does Social Identity have a positive impact on Perceived Value?
   1a) Does Consumer Innovativeness positively and significantly moderates the mediated relationship between Social Identity and Perceived Value on Adoption Behaviour?
2. Does Social Representation have a positive impact on Perceived Value?
3. Does Social Influence have a positive impact on Perceived Value?
   3a) Does Consumer Innovativeness positively and significantly moderates the mediated relationship between Social Influence and Perceived Value on Adoption Behaviour?
4. Does Perceived Value have a positive impact on Attitude?
5. Does Social Identity have a significant and positive impact on Adoption Behaviour?
   5a) Does Consumer Innovativeness positively and significantly moderates the relationship between Social Identity and Adoption Behaviour?
6. Does Social Influence have a significant and positive impact on Adoption Behaviour?
   6a) Does Consumer Innovativeness positively and significantly moderates the relationship between Social Influence and Adoption Behaviour?
7. Does Perceived Value have a positive impact on Adoption Behaviour?
8. Does Attitude have a positive impact on Adoption Behaviour?

1.8. Motivation and Importance of the Study

Innovation in the food industry remains a fundamental source of differentiation and a value-adding opportunity for executives to develop or market their novel products while simultaneously diversifying their offerings in order for them to stay profitable and relevant in this highly dynamic marketplace (de Barcellos et al., 2009). Also, innovation remains a crucial driver of a firm's competitive advantage, particularly in the globalised agro-food context. Also, new product launches are essential in enhancing the overall business' sustainability in today's ever-changing markets (Michaut, 2004). Apart from business establishments, ascertaining the reasons that drive consumers to adopt new innovative food products is generally vital for the society and policymakers alike (Loizou, Michailidis & Tzimitra-Kalogianni, 2009). Thus, stimulating and accelerating the adoption of more sustainable food behaviours is indispensable in enhancing retailers' profitability, environmental sustainability, as well as individual and public well-being (Nguyen, Nguyen, Nguyen, Lobo & Vu, 2019). Furthermore, extant literature states that innovative consumers constitute a critical market segment for researchers to study, as these consumers can drive novelties further by being the first adopters of a particular food consumption pattern, which they later transfer to other consumers (Barrena-Figueroa & Garcia-Lopez-de-Meneses, 2013; Rogers, 1962). Accordingly, an understanding of what prompts consumers to adopt or reject innovative products is indispensable for marketers that seek to entice a new customer base and then benefit from proceeds of first-mover advantage as well as other relevant stakeholders.

One of the critical impetuses of this research was to generate noteworthy theoretical and practical contributions to the broader field of Marketing. Accordingly, the insights generated from this study sought to provide a deeper understanding of the antecedents of consumer Adoption Behaviour for organic food while simultaneously contributing to theory and practice. Accordingly, the theoretical and practical contributions of this study are detailed below.

1.8.1. Theoretical Justification

This study contributed to the burgeoning body of research on the adoption of, mainly, organic food. From the theoretical side, it is envisaged that this study contributed to the engendering of 'new' knowledge for the Marketing field and behavioural studies by facilitating a nuanced understanding of the interplay between variables that predict organic food adoption in light of Millennials in South Africa. By addressing the identified research problem, this study contributed to filling the lacuna that exists within the extant literature.

In light of organic food research endeavours, many previous studies on organic food concentrated mainly on older and wealthy consumers (i.e., Baby boomers and Generation X), who, for example, want to keep themselves healthy (Kashani-Nazari & Rasli, 2018; Vilceanu, Grasso & Johnson, 2019) and less research attention has been directed towards the younger generational cohorts (Linnhoff, Volovich, Russel & Smith, 2017; Molinillo, Vidal-Branco & Japutra, 2020). This study used Millennials as the targeted cohort, as it sought to fill the current void in generational studies relating to organic food adoption. Moreover, the predictive ability of the independent constructs was established within the South African market, which added value to the current knowledge on the adoption of 'new' foods from the perspective of an emerging market. Since there is an apparent mismatch between consumers' attitudes and their adoption behaviour for 'new' products (Berger & Heath, 2007), new knowledge became crucial in ensuring that there is an effective diffusion of these innovative foodstuffs, with the hope of ultimately closing this research vacuum. Therefore, a good grasp of how social considerations (combined with Consumer Innovativeness) helps in stimulating the diffusion of organic food, was deemed pertinent for scholars, marketing executives and other relevant stakeholders.

The key strength and possibly the salient contribution of this research to the Marketing field was the creation and validation of a unique conceptual model that depicted the structural relationships between the selected predictors of Adoption Behaviour of organic food in light of Millennials, as well as the outcome variable – i.e., organic food Adoption Behaviour. Therefore, it can be argued that this study meaningfully enriched the frontier of knowledge.

1.8.2. Practical Justification

Practically, this research provided concrete guidelines for marketing managers, thus aiding them in forecasting and managing behaviour that precedes the adoption of organic food amongst the younger generation in South Africa. Furthermore, it is believed that the findings from this study will also aid marketing managers in framing and applying practical and 'winning' adoption strategies that will further help their businesses to become or remain profitable while concurrently bolstering their sustainable competitive edge. Therefore, this study provided valuable information that will allow markers to devise appropriate, effective and well-informed strategies that seek to penetrate the country's organic food market and cascade it to new heights. Also, the results of this study provide practitioners with a nuanced understanding of how each of the variables directly influenced, mediated or moderated the relationship in light of the outcome variable, thus painting a much broader picture of the behavioural aspects surrounding consumer adoption.

1.9. Outline of the Study

- Chapter 1 introduced the current study while at the same time presenting the research problem, study objectives, and questions, which gave this project the required focus and direction. Moreover, this chapter identified and deliberated on the dominant theories and models of consumer adoption behaviour, and critiqued them in light of their predictive ability and notable deficiencies. The crucial predictors of Millennials' Adoption Behaviour for organic food were also presented and justified in light of the mediating, moderating and outcome variables. Finally, this chapter justified the worthwhileness of conducting this study by highlighting its contributions from both theoretical and practical perspectives.

- Chapter 2 provides a conceptualisation of the manifest variables that were selected for the present study. In addition, it is in Chapter 2 that literature relating to the study constructs was reviewed. Accordingly, this study separated this section into two distinct parts: i.e. theoretical grounding (i.e., all the theories that underpinned this study were explored) and empirical grounding (i.e., this part empirically dissected and reviewed every variable underlying this study in line with evidence from the extant literature).

- Chapter 3 presents the proposed conceptual framework that was to determine whether significant relationships exist between the selected variables. Before depicting this conceptual framework, theoretical and empirical justifications for the underlying research hypotheses were provided through hypotheses development. The study hypotheses ensued from the hypotheses development section and these assumptions were only stated at this stage while being reserved for further empirical tests at a later stage (i.e., hypothesis testing through path modelling).

- Chapter 4 focuses on the methodology that was employed in conducting this empirical research. This chapter further explicates how the research problem was systematically disentangled. Again, this section was divided into two different parts: i.e., research philosophy (i.e., the philosophical underpinnings of this study were spelt out, i.e., aspects relating to ontology and epistemology) and research design (which elaborated more on the research strategy, sampling strategy, questionnaire design as well as the procedure that was used for data collection).

- Chapter 5 explains how the data was processed and highlights the methods that were employed to analyse the gathered raw data. Data processing procedures entailed the actual editing, coding, classification and tabulation. The analysis section was similarly divided into two parts: descriptive analysis (where SPSS 27 was used to determine the unidimensional scales like mean, standard deviation, Univariate analysis - i.e., the computation of Cronbach alpha values as well as the Bivariate analysis like Pearson's simple inter-construct correlation) and inferential analysis (through Amos 27 for Structural Equation Modelling which entailed Confirmatory Factor Analysis and Path Modelling). It is equally worth mentioning that the moderation and moderated mediation effects were analysed using Hayes' PROCESS Procedure for SPSS Version 4.0. Only the statistical data analysis methods that were used in this study were discussed in this chapter.

- Chapter 6 reported and presented the results of this study from both descriptive and inferential analyses. No interpretation of these results was provided at this stage

- Chapter 7 was reserved for the interpretation of the results that were presented in Chapter 6. This was done to provide deeper meaning for the study results while at the same time drawing key findings and highlighting them. Much emphasis was placed on giving meaning on whether the study findings supported or failed to support the hypotheses that were stated in Chapter 3. Finally, the results of this study were compared, interpreted and contextualised with the submissions from previous studies in a way that painted a broader picture with respect to the existing knowledge.

- Chapter 8 provides a discussion of the contributions of this inquiry, which further justifies the importance of this study. Theoretical and practical or managerial implications derived from the research findings were also identified and highlighted. Based on the study's findings, recommendations were presented. This part concludes by identifying and discussing the limitations of this study while simultaneously delivering propositions that sought to guide future research endeavours. Accordingly, the impact of these limitations on the generalisability of the study findings to other settings was explicated alongside the directions for upcoming research activities.

1.10. Chapter Summary

This chapter provided a broad overview of Adoption Behaviour and its antecedents to create a foundation that helped in understanding the study topic. This outline was presented by introducing the seven variables of this study and contextualising their role in the organic food adoption landscape, particularly within the Millennial cohort. Existing knowledge surrounding these variables was briefly discussed to further understand the underlying relationships between them. After that, dominant models underlying consumer Adoption Behaviour were reviewed and critiqued to provide a historical context to the current study. Furthermore, a discussion of the research problem was provided to identify the gaps in the extant literature. Then, to give the focus and direction required for this study, research objectives and questions were set out and stated, and thes significantly helped in formulating a conceptual framework that graphically depicted the relationships to be explored. Finally, the importance of studying Adoption Behaviour was presented, and the relevant literature-based precursors of adoption were identified, motivated and justified.

The following chapter provides a detailed review of the literature on the constructs mentioned above. In addition, the theoretical and empirical contexts that underpinned these relationships are also identified, expanded and justified.

CHAPTER 2

A REVIEW OF LITERATURE – THEORETICAL AND EMPIRICAL CONCEPTUALISATIONS

2.0. Introduction

This chapter provides theoretical conceptualisations that underlay the background for formulating causal relationships between the selected variables of this study. A discussion of the seven chosen variables (including the moderating variable – Consumer Innovativeness) is provided within its definition and conceptual development framework. The review of the literature was pertinent to the establishment of the fundamental elements of this research project and further informed the researcher of existing theories, highlighted the gaps in existing studies, and provided the related information to enable the formulation of an argument for the justification of this study. The literature review was also pertinent in shaping the direction that this study eventually took and facilitated the formulation of the research objectives, questions, hypotheses, and the study's overall purpose. Therefore, the insights from the extant literature helped build a theoretical framework for the substantive aspect of this research while at the same time shedding light on the empirical aspects of this study. Before delving into the discussion on the theoretical and empirical underpinnings of this investigation, a definition of the critical concepts that were employed in this study was first provided.

2.1. Definition of Concepts

This study used several concepts (i.e., abstract ideas or phenomena that were studied), for example, organic food to aid in achieving the overall purpose. Variables (e.g., Social Influence) were used as characteristics of the studied concepts, while statistical indicators (to be discussed later) were the ways that this study used to measure or quantify these variables. The next section provides a brief elucidation of the concepts that were encompassed in this study.

2.2.1. Organic Food

Global warming has intensified the persistent societal and environmental problem of climate change (Krystallis et al., 2011). Researchers have been battling to find and proffer practical solutions to the continued proliferation of climate change, and there has been little convergence in research findings on how to remedy this issue (De Barcellos et al., 2011). Arguably, the basis for these inconclusive research findings has been attributable to the multiplicity of variables that have been investigated and the poor reliability (or lack thereof) of the measurement instruments (Buhaug, Gleditsch, Theisen, 2010). One of the causes of climate change has been identified to be the 'hazardous' traditional production systems that are deemed to be not in harmony with nature, owing to their excessive usage of chemicals like fertilisers (Altieri; &

Nicholls, 2017; Kumar, Sridhara, Hanumanthappa & Marimuthu, 2019; Sharma & Rai, 2012). In this regard, organic food production appears to be a panacea to the prevailing predicament of climate change, and thus it became the key theme of this research.

Organic food is the yield from agricultural methods that are executed in harmony with nature, i.e., foods grown without chemical fertilizers in a way that ultimately reduces environmental contamination while promoting the 'naturalness' of such produces (Rittenhofer & Povlsen, 2015; Vindigni, Janssen & Jager 2002). The term 'organic' is frequently used to denote different product categories, including fruit and vegetables, dairy and animal foodstuffs, cereals, grains, pulses and the variety now extends to non-food products like shampoos and cosmetics, among others (Hau & Joaris, 2000). Notably, this study excluded other organic product classifications and only concentrated on foodstuffs.

The following section explores the organic food phenomenon from a global perspective to bring a worldwide view of the *status quo* regarding these produces.

2.2.2. The Organic Food Industry: A Global Perspective

Organic food has a well-entrenched history for many worldwide markets, and the key countries spearheading the organic food drive are the United States of America, European countries (like Germany, France, Italy, Spain), and Asian countries (like China and India). In line with the evidence from existing literature, approximately 181 countries participate in the international organic food trade, and the market is worth nearly $97 billion (Bazaluk, Yatsenko, Zakharchuk, Ovcharenko, Khrystenko & Nitsenko, 2020). This active participation by different countries has accounted for 57.8 million hectares (worldwide) being set aside for organic agriculture (recorded in 2016), compared to 11 million hectares in 1999 (Willer, Lernoud, Huber& Sahota, 2018). Although the global sales for organic food and drinks are densely concentrated in American and European countries (i.e., almost 90%), more than 87% of the world's organic producers are in developing countries or in emerging markets like China (Ayyub, Asif & Nawaz, 2021). Based on this regional classification, the production contribution from Asia is the highest in this regard (i.e., approximately 40%), with India having the most significant number of organic producers (Willer et al., 2018). Furthermore, the statistics reveal that China is the fourth-largest country globally in terms of the land reserved and used primarily for organic agriculture (Ayyub et al., 2021). These figures point out a rapid adoption of organic agricultural practices and organic food consumption, particularly in South Asian countries.

The leading organic food markets comprise the United States of America (43%), Germany (11%), France (9%) and China (8%). The top five organic food exporters list includes the United States of America, Italy, the Netherlands, China, and Spain (Ayyub et al., 2021). The most popular organic product classifications are fresh fruits, vegetables and crops (Willer & Lernoud, 2019). Countries with markets close to maturity (e.g., USA, Germany, France, Denmark, and Italy) usually dictate the development trends of other organic markets. On the other hand, other markets like Spain, China, India, Australia, and others are quickly developing and closing the adoption gap versus developed countries (Willer, Lernoud & Kilcher, 2016).

2.2.3. Growth in Global Organic Food Market

The organic food market has witnessed unprecedented growth rates in the last two decades. It reached US$89.7 billion in 2016 from US$17.9 billion in 2000 (Willer et al., 2018). The global market for organic food is estimated to grow from $201.77 billion in 2020 to $221.37 billion in 2021 (i.e., at a compounded annual growth rate of 9.7% - however, this percentage growth does not take into account the impact of Corona virus). The organic food market is also expected to reach US$380.84 billion in 2025 (i.e., at a compounded annual growth rate of 14.5% - excluding the impact of Corona virus) (The Business Research Company, 2021). Globally, the mounting health concerns due to the rising number of chemical poisoning cases are crucial stimulants towards more chemical-free and naturally-grown products like organic food (Ayyub et al., 2021). Hence, global consumers are increasingly becoming more health-conscious and aware that the toxicity of chemical pesticides in food products can result in congenital disabilities, cancer and hormone disruption, among others. These health-related concerns are increasingly triggering consumers to shift their attention and consumption patterns towards the more sustainable and ‘healthy foods’ like organic food products.

2.2.4. Characteristics of the Global Organic Food Market

The development imbalance that characterises the worldwide market is often caused by the diverse levels of socio-economic development in different countries, the existence (or non-existence) of production and natural resources, government support programs for organic production and shifts in consumer tastes towards organic foodstuffs (Willer & Lernoud, 2019). However, it is also important to note that the primary driver towards the worldwide development of organic food is the specific consumer groups with a shaped pro-ecological orientation – which has been proven to be dominated by Millennials with high education and an average to above-average income level (Biondo, 2013).

Table 2.1 shows the country-specific aspects of the leading global markets for organic foods.

Table 2.1: Country-Specific Organic Food Market Characteristics

Country	Specifics on Market characteristics
USA	Characterised by tough competition Generates new tendencies in the global organic food market, which organic food consumers promptly adopt from other countries 75% of organic food is exported to Canada and Mexico
Germany	Favourable competitive environment More significant organic food imports are from European Union countries since demand considerably exceeds supply
France	A considerable difference between organic and traditional products Demand satisfaction - 70% from local production, 30% from imports from European Union countries
Italy	Competitive but fragmented market Approximately 5% of food exports are organic food Major trade partners of Italy are Germany and France
Spain	Widespread of "sustainable restaurants" that prefer local organic food suppliers The organic sector is export-oriented, mainly to Central European countries 80% of Spanish organic products are imported by Germany, Great Britain and France
China	More export-oriented, exports to mainly the USA, European countries and Japan Over 80% of the local market is controlled by hypermarkets and specialised shops
India	20%–30% annual growth of organic food market Has the largest concentration of organic producers Exports to USA, Switzerland, Canada and Israel; considerable
Latin American countries	The most significant quantities of organic land are located in Brazil, Argentina and Uruguay 80% to 90% of the organic food produces are exported to the USA, European Union countries and Japan
African countries	The most significant quantity of organic areas, favourable climate and a lot of water bodies; Organic food is mainly exported to the USA and European countries

Source: Modified from Bazaluk et al. (2020), Statista (2021), and Willer & Lernoud (2019)

From an international perspective, the market with considerable development potential, that is also likely to dominate the formation of certain organic tendencies is China, which exports over $500 million of its total organic food per annum.

The following section puts into context the nature of the organic food landscape in Africa, with particular focus on South Africa.

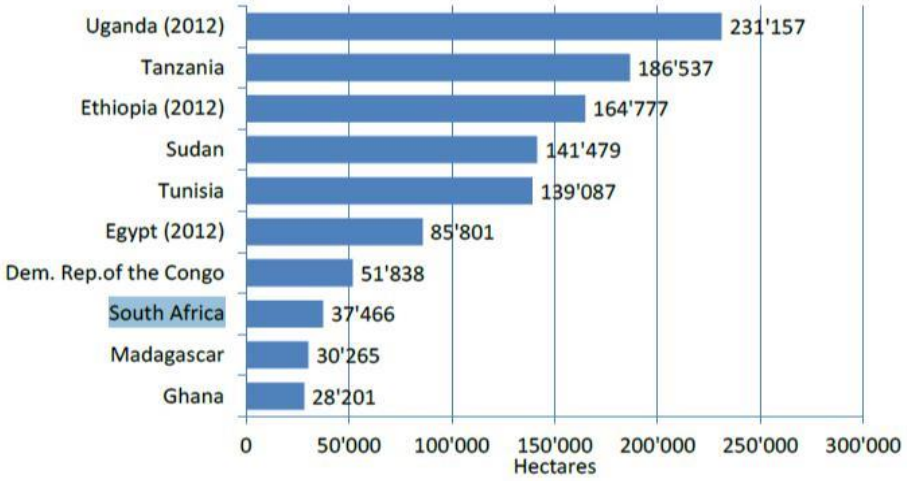
2.2.5. Market Trends for Organic Food: South African Perspective

South Africa has a long history of involvement in organic-related products, with the existence of several organic producers and associations dating back from as early as the 1970s (Kelly & Metelerkamp, 2015). In fact, the South African Biodynamic Association was one of the five founders of IFOAM in 1972 (UNEP-UNCTAD, 2008b). Thus, the South African organic sector has pioneered several practices from informal groups since the 1970s to guide both private and public sector aspects relating to health, and environmental sustainability issues, among others. In 1990, approximately 50 organic farms were certified for the export market. Certified organic food production began with fruits (i.e., mangoes, bananas, and avocados), vegetables, rooibos tea, and spices and rapidly expanded to organic meat, wines, and olive oil and dairy products. Presently, only draft regulations exist to control the sale or trade of organic products and there is yet to be pieces of legislation formulated to regulate this industry (Kelly, & Metelerkamp, 2015).

While South Africa has historically been a significant player in the organic food sector, with a considerable number of certified organic produce in Africa (Willer, Yussefi-Menzler & Sorensen, 2008), it has recently been a relatively less powerful player, particularly in organic food production (Willer & Lernoud, 2015). When compared on a per hectare basis, South Africa has fallen from fourth position in Africa in 2005 (Willer & Yussefi, 2007) to the eighth position in 2013 (Willer & Lernoud, 2015) (see Figure 2.1). Furthermore, South Africa's rank on certified organic farms has worsened when measured in terms of a percentage of total farmland (i.e., it ranks twenty-first on the continent with only 0.04% of its entire land under certified organic control), falling from the third position in 2005 (Willer & Lernoud, 2015).

Figure 2.1 below depicts where South Africa stands versus other African countries in light of areas that have been set aside and certified for organic food production.

Figure 2.1: African Countries with the Most Areas Certified Organic (hectares)



Source: Willer and Lernoud (2015)

2.2.6. Organic Policy in South Africa

Despite its early involvement in the organic food movement, South Africa still lacks a fully legislated organic policy and comprehensive certification standards (Engel, 2008; Mhlophe, 2016). This delay in passing the regulations has been attributed to the conflict that these impending organic food policies have with current law in the Agricultural Products Standards Act of 23 of 1990 (Naidoo & Ramatsetse, 2016). According to Brodie (2014), the existing policies must be amended first before effective promulgation of new rules can take place. Also, the alleged internal politics that exist within the organic sector ought to be resolved before the decree of new laws (Naidoo & Ramatsetse, 2016). Although currently no specific legislation exclusively applies to organic produces, there are some regulations and policies that apply to the production and sale of organic food products in South Africa (Kelly & Metelerkamp, 2015). For example, The Agricultural Product Standards Act 23 of 1990 accommodates the Biodynamic and Organic Certification Authority, which was initially drafted to regulate and control the sale of organic commodities. Moreover, in light of the export of organically produced produces, the Perishable Products Export Control Board requires that a certificate of acceptance from the destination country must be issued by an organic certification organisation prior to any exports of such produces, and accordingly, such documentation should accompany all organic shipments (Kelly & Metelerkamp, 2015).

2.2.7. Growth in the South African Organic Food Market

South Africa has a growing organic food market, with products sold in specialised stores and supermarket chains (e.g., Woolworths, Pick ‘n Pay, Shoprite, Spar, Food Lovers Market, among others), and in specialised restaurants or organic markets. Although there is grey literature on the demand levels for organic food in South Africa (due to fewer research outputs), current statistics indicate a growing trend.

The demand (both local and export) is further explicated in the sections below.

2.2.8. Domestic Demand

South Africa is one of the few African countries with a substantial local market for its organic foodstuffs (Barrow, 2006; Engel, 2008; Institute of Natural Resources, 2008). Furthermore, Naidoo (2012) argued that South Africa could be the leading market for organic food in the African continent. The middle and upper-income consumer groups reflect these global food trends in the country, with many of these individuals being prepared to pay a premium price for organic food, as they perceive such produces to be healthier, safer, and tastier (Bienabe, Vermeulen & Bramley, 2011). While the FiBL data advocate a negative growth of organics in South Africa (as cited in Kelly & Metelerkamp, 2015), domestic players paint a somewhat different picture. For example, Waarts, Bakker, Snels, and Danse (2009) claimed that over 90% of organic foodstuffs were sold through the formal retail sector in 2009. In its 2013 yearly report, Woolworths South Africa reported a sturdy growth in its ‘Organic and Free Range’ food categories, which grew from R0.67 billion in 2011 to R1.7 billion in 2012, while also culminating in R4 billion worth of sales in 2013 (Woolworths Holdings Limited, 2013). In their annual report for 2013, competitors like Pick ’n Pay also cited a growing demand for Organic and ‘Fair Trade products’ (Pick ’n Pay, 2013), with one of its executives publicly stating that the organic food classification grew by 50% during 2012 (Van Biljon, 2013). Although it remains unclear how much of the overall organic market is controlled by the biggest player, i.e., Woolworths in South Africa, it is worth noting that this retailer is widely recognised as one of the leading outlets in light of organic food offerings (Engel 2008; Naidoo, 2012). Therefore, growth in demand (as reported by Woolworths) and supported by Pick ‘n Pay’s 2013 annual report can further indicate an overall organic market growth for South Africa.

The idea that the restraining factor in the South African organic sector is supply rather than demand also appears to be pervasive in the available 'grey' literature (Den Hartigh, 2008). This claim is in line with the Farmers' Weekly report in 2008 that 'in South Africa, the low supply of locally produced organic products is the main restriction for market growth' (Farmers' Weekly, 2008, cited from Kelly & Metelerkamp, 2015 as well as Chauke, 2018). Furthermore, Naidoo (2012) mentioned that the higher production costs for farmers (which invariably translates to higher prices for consumers) is one of the biggest impediment to the growth of the organic market in South Africa. Perhaps it is worth noting that the reasons why more producers are not stepping in to fill this demand-supply gap is still to be identified by future researchers.

2.2.9. Export Demand

On the export front, the North American and European winter seasons present an advantage for the South African organic food producers to export to these countries. To some extent, this shields South African organic producers from direct competition with organic farmers in North American and European markets, which (when combined) constitutes 90% of the world organic market in light of retail sales for organic produces (Waarts et al., 2009). Thus, although export markets play a crucial role in the South African organic food sector, exporting to these markets, to some extent, explains the lack of supply (as attested to by Farmers' Weekly 2008) that domestic retailers end up facing for them to effectively capture local demand.

Overall, it seems as if the land allocated for certified organic farming has increased in Africa, but South Africa is still lagging behind other African countries (Kelly & Metelerkamp, 2015). Additional research is necessary to determine why this is the case, despite the reported 'strong' and increasing local demand for organic food in South Africa (i.e., according to reports from major retailers, farmers' markets, and agricultural publications). It is also unclear why large-scale farmers have not taken superior advantage of the unmet domestic demand. However, other sources signalled that it might be because of high production costs and farmers' perceived risks in the conversion process and lack of government support coupled with the absence of detailed knowhow regarding organic food production systems. Once these issues are ironed out, the adoption of organic food in South Africa will likely happen at an unprecedented pace.

2.2.10. Justification for an Organic Food-Oriented Study

Organic foodstuffs were chosen as the research context because of the presumption that their adoption is driven by social considerations such as consumers' self-concept, social groupings and social networks – as highlighted in the extant literature, e.g., Bartels & Reinders (2010), Ha-Brookshire and Norum (2011) as well as Persaud and Schillo (2017), among other scholars. Moreover, these foodstuffs were regarded as a new class of products since they are still in their early stages of the product adoption life cycle and have not yet achieved mass-market status (particularly in South Africa) despite some market penetration efforts and intense promotion (Bartels & Hoogendam, 2011; Du Toit & Crafford, 2003; Engel, 2008; Mhlophe, 2016). The fact that several uncertainties (e.g., doubts about organic food benefits or ambivalence about their superiority over conventional foodstuffs) misconceptions (e.g., organic produces cost more yet they appear inferior to traditional foodstuffs) and risks (e.g., threats to individual's health and safety) associated with these 'new' products still exists, have inevitably spelt doom to the effective espousal of organic foodstuffs (Persaud & Schillo, 2017). These issues surrounding organic foods conveniently made them befit the purpose of this study and thus activated the context of this research.

The following section explains why Millennials were deemed an important generational cohort to understand in a bid to fulfil the purpose of this study.

2.3. The Millennials / Generation Y Consumers

Millennials or Generation Y are consumers born between the years 1982 to 2000 and are currently aged between 18 to 40 years (as at the year 2022) (Shatto & Erwin, 2017). High-quality standards characterise this group of consumers, alongside high education levels and increased discretionary income. Millennials are also socially, health and image-conscious, and they are technologically advanced individuals who are willing to pay more for brands that suit their needs, wants, and most importantly – image (Sullivan & Heitmeyer, 2008; Lee, 2008). Arguably, younger consumers lead the market that embraces organic foodstuffs (Park, Yu & Zhou, 2010), and they are poised to display their adoption patterns through consumption of organic food as soon as they start earning an income. Smith (2010) defined Generation Y individuals as Millennials and posited that little research attention had been directed at comprehending their 'green' adoption behaviour. Borchers, Duke and Parsons (2007) established that Millennials preferred green products to non-green products, while D'Souza et al. (2007) also linked 'green' adoption behaviour with the demographic characteristics of being

young, well-educated, affluent, and dwelling in urban areas. This linkage of Millennials residing in metropolitan areas helped in framing the sample for this study, which was also restricted to the main urban cities of South Africa. Morerover, Gatersleben, Steg and Vlek (2002) proposed that individuals who spend the most on organic and green products are the young, wealthy and classy, thus making Millennials a vital analysis cohort. Gilg, Barr and Ford (2005) noted that most organic food consumers are young females. As a result of insights from extant literature, this study focused on testing the social factors that are antecedent to Generation Y consumers' Adoption Behaviour of organic food, from the context of South African urban cities.

Previous studies have confirmed that differences in generational cohorts strongly and positively influence the adoption and consumption of organic foodstuffs (e.g., Persaud & Schillo, 2017). Empirical evidence suggests that this cohort of consumers demonstrates heightened awareness about the impact that their adoption and consumption choices have on the overall environment (Ngobo, 2011; van Doorn & Verhoef, 2011). Millennials are therefore more inclined to adopt and consume more organic foodstuffs (Grunert & Juhl, 1995) or espouse more environmentally friendly and sustainable products (Persaud & Schillo, 2017). Extant literature further suggests that Generation Y consumers are highly aware of the effects of global warming on human beings, the environment at large, and they tend to value and adopt green produces in a bid to lessen this problem (McDougle, Greenspan & Handy, 2011). Furthermore, their attitudes towards the environment are more likely to be positively aligned to their pro-environmental activities (Smith, 2010), making them highly active in the market for green products (Lee, 2008). Furthermore, this specific cohort is the most connected generation given its prevalent use of social media (Chatzigeorgiou, 2017; Kijek, Angowski & Skrzypek, 2020), which may exert significant social influence on their new product adoption behaviour.

The following section explains and discusses the relevant theory underpinning this study, thus making this theory the reference point that further guided the development of this study.

2.4. Theoretical Grounding

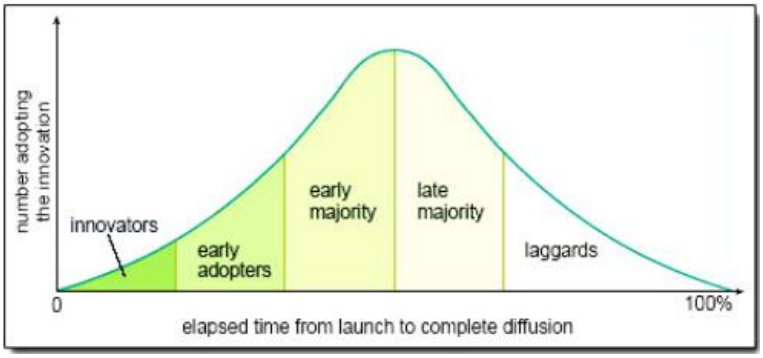
A rich literature has manifested itself around understanding consumers' motivations to adopt innovations, i.e., new products, services or ideas. The bulk of this literature is anchored on the few theoretical frameworks like Roger's Diffusion of Innovation model, Ajzen and Fishbein's Theory of Reasoned Action (1977), Davis et al., 1989's Technology Adoption Model and Consumer Innovativeness (Rogers & Shoemaker, 1971). This study was grounded on a specific theoretical framework, i.e., Roger's (1962)'s Diffusion of Innovation model, because of this theory's applicability to the research purpose, problem and objectives. This theory is broadly discussed in the section below.

2.4.1. Diffusion Theory of Innovation

Rogers' model, which measures the likelihood of consumers adopting a new product, has been widely used to measure Consumer Innovativeness and consumers' Adoption Behaviour (Rogers, 1962). In line with Rogers (1962), who penned the Diffusion theory of innovation, an individual's innovativeness is the degree to which that person adopts innovation earlier than others in the market. A consumer that embraces innovative goods sooner than others is perceived as more innovative (Rogers, 1962). Owing to the applicability of Rogers' Diffusion theory to this study, it became ideal for this study to underpin and make it the reference point. However, as Klonglan and Coward (1970) submitted an amended version of this theory by focussing on 'symbolic adoption' instead of 'use adoption', and the researcher believed symbolic adoption was even more applicable to this study.

In his theory, Rogers described five groups that define consumers' innovative behaviour: innovators, early adopters, the early majority, the late majority, and laggards. These groups are depicted in Figure 2.2 and further explicated below.

Figure 2.2: Rogers Curve, Diffusion Theory



Source: Diffusion of Innovations (Rogers, 1995)

According to Rogers (1962), innovators are 2.5% of society. Moreover, they do not have close ties with the community, and it is they that bring novelties to the market, as the existence of innovation in the market is dependent upon them. They are talented in advanced technology-related matters; they demonstrate originality and progressiveness and do not fear the risk of adopting completely new products to their daily lifestyles. When it comes to food products, they do not display any aspects of neophobia. Consumer innovators are essential for gauging the key target market for a new product since later adopter segments tend to take their cues from them (Klink & Athaide, 2010). Moreover, they are often disloyal, i.e., they are briefly fascinated by new products and then quickly lose interest as more contemporary and more attractive ones are launched. In light of early adopters, they comprise of 13.5% of the society, and they are open to new products. Through their early adoption, they help speed up the diffusion process. Foxall and Bhate (1993) observed that early adopters buy more innovative food products than innovators because they are more involved in a consistent and elongated healthy consumption or use (Barrena-Figueroa & Garcia-Lopez-de-Meneses, 2013).

Early majority, who comprise 34% of the society, are cautious individuals who judiciously weigh their every purchase (Rogers, 1962), and they are pragmatists who are not interested in products that do not have "reference purchasers". For these types of consumers, only time can determine if a product is worth adopting and buying. Also accounting for 34% of society are the late majority, who are incredibly vigilant and sceptical of new products (Rogers, 1962). Their decision to adopt a product is usually linked to its economic benefit and pressure from others. Finally, the laggards account for 16% of the society, and they are more isolated, extremely conservative or traditional, suspicious, do not like change and are more likely to display neophobia towards novelties. They view innovation with disapproval and suspicion as they have limited financial means, avoid the fear and the risk of wasting money. They require concrete arguments that convince them to make the right decision before adopting or purchasing innovations. They have a very high 'innovation threshold'; that is, they must see many other consumers using or eating a new product before they can adopt it too.

2.4.2. Applicability of Diffusion Innovation Theory on Organic Food Adoption

This study applied the theory of Diffusion of innovations in the context of organic food adoption. The agricultural and food sector have underwent significant changes over the past two decades and thus this study used the theory of Diffusion of innovations to better understand the process of adoption of innovations. The simplistic notion of adoption from the individualist

perspective has been criticised due to its pro-innovation bias and its lack of attention for social dimensions of innovation (Leeuwis & Aarts, 2020). Similarly, the issue of interdependence has been criticised as it assumes that the performance of a specific behaviour is always dependent on the performance of other people's behaviours (Mkhize & Ellis, 2020). The application of this theory from a social context, as opposed to its original individualistic nature will aid in closing the void that exist in light of its original conceptualisation.

Although Rogers (1962) penned down the theory of Diffusion of innovation, this study utilised Klonglan and Coward (1970)'s modified version of this theory by concentrating primarily on 'symbolic adoption' instead of 'use adoption'. Symbolic adoption is further discussed in the last section of this chapter (see section 2.5.7. ii). The following section spells out the empirical underpinning of this study, i.e., it provides a literature-based and scientific discussion of all the constructs that were subjected to empirical testing.

2.5. Empirical Grounding

This section harmoniously extends both the theory and the range of relevant scientific evidence on the selected variables under study. Therefore, empirical grounding was described by demonstrating the theory-dependent constructs in light of the existing scholarly evidence.

2.5.1. Conceptualising Social Identity

Past scholars on Social Identity have conceptualised and approached the study of this construct from diverse perspectives. Initially, Tajfel and Turner (1979) conceptualised Social Identity using four categories through the Social Identity theory: i.e. social categorisation, social identity, social comparison and positive distinctiveness. Although other scholars have also maintained that Social Identity is multi-dimensional (e.g. Ashmore, Deaux & McLaughlin-Volpe, 2004; Leach, van Zomeren, Zebel, Vliek, Pennekamp, Doosje & Spears, 2008); Johnson, Rowatt and LaBouff, (2012) others, for example, Johnson et al. (2012), have however argued for a two-dimensional representation of Social Identity, i.e., affective and cognitive dimension. Confusion has also occurred in terms of its conceptualisation and operationalisation due to the multi-disciplinary research submissions on this variable, leading to the latest calls for its refinement and further scale development (Lam, Ahearne, Hu & Schillewaert, 2010). Thus, approaching this construct from varied viewpoints highlights its complexity beyond the realms of affective and cognitive attachments. The prevailing misinterpretation of this variable

has made it worthwhile for this study to unravel this construct from a different context that was unique to this research.

Identity is a self-referential description that offers contextually relevant answers to the question, "Who am I?" or "Who are we?" (Ashforth, Harrison & Corley, 2008; Tajfel & Turner, 2004). Social identification refers to ''the perception of oneness with or belongingness to a group, where an individual defines himself or herself in terms of the group of which he or she is a member of" (Mael & Ashforth, 1992:104). The underlying impression is that individuals who feel attached to a particular group tend to also describe themselves in terms of the characteristics of that group (Ashforth et al., 2008). Therefore, the link between an individual and their social environment can be inextricably explained by social identification. In line with the purpose of this study, an individual's Social Identity predicted the likelihood of their Adoption Behaviour of organic food, i.e., it determined whether or not the adoption of organic food is constructed from a Social Identity perspective. Ultimately, this somewhat, provided answers to the question; Does the adoption of organic food have social symbolism?

People commonly belong to social groups that may result from their country of origin, culture, social networks, gender, race, and consumer groups they are affiliated to (Mael & Ashforth, 1992; Persaud & Schillo, 2017). An individual may simultaneously identify with numerous social groups, and when a person strongly identifies with one group, s/he tends to develop positive attitudes towards that group and is eager to propagate a favourable group-related image (Mael & Ashforth, 1992; Ahearne, Bhattacharya & Gruen, 2005; Monaco & Bonetto, 2019). Members usually identify with a specific social group based on their in-group norms, cultural expectations, and belongingness. The best social groups are those with a greater level of self-relevance, as these groups form a consumer's societal identity, and the individual can strongly relate with members of this cluster (Ahearne et al., 2005).

An essential aspect of Social Identity is the concept of salience (Tajfel &Turner, 2004), which means the likelihood that an individual invokes a specific type of identity in a given situation (Bartels & Reinders, 2010). According to Stryker and Burke (2000)'s contention, the higher the salience of a specific identity relative to other identities, the greater is the prospect of identity-related behavioural choices. Furthermore, individuals gain efficacy from the adoption of a particular product and from abiding by the social norms and behavioural expectations of their social group in a way that builds their Social Identity-related self-image (Andorfer & Liebe, 2013). In essence, individuals tend to be enticed by group identities and thus are more

likely to adopt products and brands that integrate features of their Social Identity (Andorfer & Liebe, 2013; Persaud & Schillo, 2017). This evidence suggests that an individual's understanding of their Social Identity can impact their decision to accept or reject certain products or innovations.

Extant literature further submits that acceptance of innovative foodstuffs is a socially accepted way of making a distinctive impression, and individuals build a specific identity through the adoption and possession of new products (Andorfer & Liebe, 2013; Bartels & Hoogendam, 2011; Van Doorn &Verhoef, 2011). When a consumer conforms to their social group (e.g., when an ethical consumer adopts naturally-grown foodstuffs), such an individual affirms their identity as an ethical consumer while simultaneously increasing their social status (Bartels & Reinders, 2010). Defiance of the group or social rules tends to result in cognitive dissonance and discomfort (Van Doorn &Verhoef, 2011). Therefore, this approach to identity is eventually attached to a social image of self. Also, organic foodstuffs provide some pro-social benefits (Van Doorn &Verhoef, 2011) that inspire specific adoption behavioural decisions, as they reflect consumers' concerns for the entire society (e.g., environmental consciousness, sustainability) and not just their individual benefits (e.g. quality, tastes, price and appearance) (Bartels & Hoogendam, 2011; Persaud & Schillo, 2017).

The following section explains individuals' associations with large social groups from the lens of Social Identity theory.

2.5.1 i) Social Identity Theory

Social Identity theory is a theoretical framework developed by Tajfel and Turner (1979). The relationship between social context factors and Adoption Behaviour for organic food can be explained within the context of Social Identity theory, which describes how individuals define themselves in light of their group memberships (Ahearne e al., 2005; Mael & Ashforth, 1992; Tajfel & Turner, 1979). According to the Social Identity theory, Social Identity is about 'an individual's knowledge that s/he belongs to specific groups, together with some emotional attachments and value significance for him or her, as a result of this group membership (Israel & Tajfel, 1972:31). Traditionally, Social Identity theory concentrated on inter-group relations, while opponents have argued that it substitutes individualism when related to Social Identity, thus prioritising the prominence of societal or group culture at the expense of individualism or the notion of self (Ahearne e al., 2005).

2.5.1 ii) Operationalisation and Fluidity of Social Identity Theory

Although the operationalisation of Social Identity theory remains unclear due to its multi-dimensionality or multi-disciplinary nature, it was initially established that it is a psychological phenomenon that is likely to predict and drive behaviours (Tajfel & Turner, 1979). The complexity of its conceptualisation, which has invariably affected its operationalisation, is detailed below:

- unidimensional (i.e., group identification scale, e.g., in Kelly, 1988),
- two-dimensional fact (i.e., affective and cognitive, for example, e.g., in Johnson et al., 2012, Van Zomeren, Postmes and Spears (2008),
- three-dimensional (i.e., in-group ties, in-group affect and centrality, e.g., in Cameron (2004),
- four factors (i.e., social categorisation, Social Identity, social comparison and positive distinctiveness, e.g., in Tajfel and Turner (1979),
- four factors (i.e., depersonalization, perception of the intergroup context, interdependency beliefs and attraction to the in-group, e.g., in Jackson and Smith (1999) and,
- up to seven factors (i.e., evaluation, behavioural involvement, self-categorisation, social embeddedness, importance, attachment and sense of interdependence, and content and meaning, e.g., in Ashmore et al., 2004.

The Social Identity approach ascertains that social identities are not fixed but are somewhat flexible and dynamic. They change in an individual's mind due to a person's respective context or situation (Johnson et al., 2012). Extant literature also reveals the fluid nature of social identities in the environmental domain; for example, a pro-and less-environmental nation has individuals that display different identities in line with their overarching social identity (Rabinovich, Morton, Postmes & Verplanken, 2012).

This study identified three key dimensions which appeared to widely capture the Social Identity construct. These dimensions were in light of the two critical factors (i.e., cognitive and affective components) that sought to dispel the discrepancies of Social Identity theory owing to its multi-dimensionality. These two critical factors were further divided into four sub-dimensions, i.e., (i) categorisation, (ii) sense of belonging and (iii) positive Attitude.

These sub-dimensions are described below:

- **Categorisation –** Categorisation is a cognitive component that entails people espousing similarities with other people in their in-group context while stressing their differences with their out-groups (Stewart-Knox, Sittlington, Rugkasa, Harrison, Treacy, Santos, 2005). Once categorised, people are viewed through the lens of their relevant group prototype and are represented by how well they embody this prototype. In this way, social categorisation *depersonalises* an individual's perception of others, i.e., they are not viewed as unique individuals but as embodiments of the attributes of their group. Categorisation can be enhanced through social mobility, i.e., by social change – when a person adapts to the activities and norms of the group that they want to identify with (Schmitt, Branscombe & Kappen, 2003), for example, adolescent smoking behaviour resulting from peer pressure (Stewart-Knox et al., 2005). As a result, people are usually biased towards and favour their group (Tajfel & Turner, 1979). The categorisation process also affects how a person views themselves and thus affects an individual's self-concept (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). An individual's self-concept entails a set of memories, attitudes, behaviours, and emotions that frame an his or her perception, other people, and the universe in its entirety (Turner et al., 1987).
- **Sense of Belonging** – A sense of belonging refers to the connection level an individual has with their group of interest (Feitosa, Salas & Salazar, 2012). Food adoption is often an identity-based behaviour, through which individuals seek to fulfil their self-definitional needs, including self-consistency and self-enhancement (Bhattacharya & Sen, 2003; Reed, Forehand, Puntoni & Warlop, 2012). For example, consumers adopt and become loyal to products that they perceive a sense of belonging to or coherence with, and in turn, the adoption of these foodstuffs becomes a central way of expressing their Social Identity (Bhattacharya & Sen, 2003).
- **Attitude towards the In-Group Membership** – Attitude is more related to an individual's personal feelings about being a member of a particular group or the value derived from being a member of a specific group (Feitosa et al., 2012). Attitude was measured as a separate construct in this study, and a detailed discussion of this variable is provided in one of the sections below (see section 2.5.5).

The following section presents and describes a system of practices, values, beliefs, metaphors and ideas that create social order, orient members and allow them to communicate effectively in their groups of interest or communities.

2.5.2. Conceptualising Social Representation

Another notable construct that was established to explain consumers' socially constructed behaviours is Social Representation. The Social Representation of new products has recently been identified as a significant predictor in the Adoption Behaviour of new products (Backstrom, Pirttila-Backman & Tuorila, 2004; Bartels & Hoogendam, 2011; Huotilainen, Pirttila-Backman & Tuorila, 2006). Moreover, extant literature has dubbed Social Representation as a 'collective phenomenon' that is socially constructed in people's daily talk, thoughts, actions, and communications (Huotilainen et al., 2006; Moscovici, 2001). Therefore, representations are embodied in individuals' minds and communication, and they are socially shared in a way similar to language (Bauer & Gaskell, 2008). Moreover, Social Representation entails the collection or combination of ideas, values, practices, feelings, thoughts and actions expressed in behaviour that characterises a specific social group (Wagner, Duveen, Farr, Jovchelovitch, Lorenzi-Cioldi, Markova & Rose, 1999). Also, social representations can be very unpredictable, and their volatility can be deduced when they start to transform over time (Vuillot & Sirami, 2020). Literature further suggests that groups are typified by consensual and shared social representations (Huotilainen et al., 2006). Since social representations work as a code for social exchange, this shows that they establish an orientation for people by enabling communication between them (Moscovici, 1973).

In light of this study, and as per Bäckström et al. (2004)'s argument, new foodstuffs offer a fertile ground for the growth of social representations, which emphasises an everyday familiarisation and understanding of the latest developments or the unknown. Therefore, in the context of 'new' foods like organic produces, the theory of Social Representations opens up possibilities to clarify the link that novelties have in shaping people's everyday thinking. Furthermore, the relevance of linking novelties to individuals' daily reflections makes Social Representations an appropriate construct in the quest of understanding how consumers deal with novel foodstuffs. Moreover, Social Representations play a vital role in the acceptance of innovative products in that they allow people to give meaning to new foodstuffs and, as a result, help them make valuable food-related choices. Thus, Social Representation can be dubbed as a critical variable that enables individuals to deal with the new and unknown, while in turn facilitating their adoption of innovative products (Bäckström et al., 2004; Moscovici, 1981).

The prolific scientific investigations conducted by organisational and academic researchers have identified Social Representation as a multi-dimensional construct. Furthermore, these Social Representation components have proven to strongly predict consumers' willingness to try and possibly use these foods. For example, a study conducted by Bäckström et al. (2004) conceptualised Social Representation as a five-dimensional construct, i.e., (i) suspicion, (ii) adherence to natural food, (iii) adherence to technology, (iv) eating as enjoyment, and (v) eating as a necessity, thus further highlighting the complex nature of this construct. These dimensions, as submitted by Bäckström et al. (2004), are discussed below.

Suspicion represents a reserved position or a cautionary approach towards the espousal new products (Huotilainen & Tuorila, 2005). Previous researchers have argued that suspicion strongly and positively correlates with food neophobia (which represents resistance to new food technologies) (Bäckström et al., 2004; Huotilainen & Tuorila, 2005). Suspicion has also been seen as a complement of trust in that it is a precondition for conviction and, in the end, it has been regarded as a prerequisite for the formation of representations (Huotilainen & Tuorila, 2005). A suspicious person is also unlikely to be innovative, as previous studies have established that suspicion correlated negatively with change seeking behaviours or innovativeness (Huotilainen & Tuorila, 2005). Therefore, there would perhaps be no need for any representation without the feeling of 'nothing to be alarmed for'.

Adherence to technology represents an accepting position towards new foods, while natural food represents trust in nature and its overall naturalness. In particular, adherence to technology projects the consumers' willingness to try organic foods (Bäckström et al., 2004). Thus, adherence to technology and natural food reflects trust in either food technology or natural food. Furthermore, since Social Representations can be understood as symbolic coping with unfamiliar and threatening matters, trusting food technology and consumer belief in the naturalness of these foodstuffs may lessen anxieties concerning their safety (Rozin, Fischler & Shields-Argeles, 2012; Wagner & Kronberger, 2001). Moreover, adherence to natural food signals the prominence of nature and naturalness, particularly among environmentally conscious consumers (Rozin et al., 2012).

Food as an enjoyment represents a hedonistic position to the espousal of food and eating, while food as a necessity represents consumers' indifference and the irrelevance of food (Bäckström et al., 2004). Eating as a necessity and eating as an enjoyment both characterises the personal aspects, and in essence, it typifies a societally and culturally shared perception towards new

foods (either from an indifferent or hedonistic position) (Huotilainen & Tuorila, 2005). Furthermore, enjoyment tends to be positively correlated with change seeking behaviours and innovativeness, thus representing a differing pattern to suspicion. Regarding food as a necessity, customers are more likely to convey an image of indifference, as food fuels the body, i.e., it is a basic necessity (as per Maslow 1943's hierarchy of needs), and this can be perceived as a way for consumers to avoid food-related issues (Bäckström et al., 2004; Huotilainen & Tuorila, 2005). This further highlights the earlier point on consumers' indifference towards food and perceptions of its irrelevance since it is reduced to being a mere basic necessity.

In light of this study, adherence to food technology and dedication to natural food proved to be the only two relevant dimensions from the five dimensions represented in Bäckström et al. (2004)'s conceptualisation of Social Representations. Therefore, the two dimensions of adherence to food technology and commitment to natural food were applied to this study.

The following section presents the Social Representations theory and links it to relevant literature on organic food adoption.

2.5.2 i) Social Representations Theory

The development of literature on Social Representation is rooted predominantly in the Social Representations theory, formerly developed by Moscovici (1981). Its conceptualisation further highlights the multidimensional nature of this construct, as it presents it as a mixture of ideas, practices, values, and beliefs that are common among members of groups and communities (Moscovici, 2001). The multidimensionality of this construct, based on the Social Representations theory, has garnered much criticism from rivals who argue that this theory is too broad and too vague, causing several theoretical ambiguities (Monaco, Piermatteo, Rateau & Tavani, 2017; Tomicic, 2018). More specific criticism of Social Representations theory entails its purported and over-emphasis of social or group influence (e.g. Parker, 1987) while neglecting an individual's capacity of reflexivity (e.g. De Rosa et al., 2018; Jahoda, 1988). In an attempt to reduce the vagueness and overlap, previous scholars have linked Social Representation with Social Influence (e.g., in Jahoda 1988), but this study tested this variable as a unique construct, and this was in line with findings from the survey conducted by Bartels and Hoogendam (2011), who found discriminant validity between these two constructs. The following section explains how individuals' behaviour, beliefs and attitudes can be modified by the presence or action of others through, for example, conformity, compliance or obedience.

2.5.3. Conceptualising Social Influence

One important construct that has significantly shaped the literature on consumer Adoption Behaviour is Social Influence. Literature has pointed out, many times, that individuals modify or manipulate their opinions, actions or behaviour to conform to groups norms or to adapt to the society they belong to (Chen-Yu & Seock, 2002). The derivation of Social Influence lies in the theory of homophily (e.g., McPherson, Smith-Lovin & Cook, 2001), which has been considered as a social dynamism that propels people to affiliate with others that exhibit the same behaviour as theirs (McPherson et al., 2001). The theory of homophily can be regarded as a relevant factor in behavioural studies as individuals seek social proof before trying a new product category (Thøgersen & Zhou, 2012). Langley, Bijmolt, Ortt and Pals (2012) demonstrated that social contagion (i.e., the process through which buyers influence each other to adopt products) plays a central role in the espousal of new products. Furthermore, Han, Hsu and Sheu (2010) also highlighted the issue of referents (or relevant others) where a consumer acts in a certain way while deliberating on whether their referent(s) would approve or disapprove a specific behaviour. According to Pickett-Baker and Ozaki (2008), young buyers, e.g., Millennials, are strongly affected by the coercive power of certain groups and are more readily open to change.

Social Influence occurs when people change their feelings, thoughts or behaviours in response to their surroundings or society they are exposed to (Turner, 1991; Varshneya, Pandey & Das, 2017). The information conveyed through Social Influences is likely to activate emotional reactions through aspects like instruction modelling and social persuasion (Delre, Jager, Bijmolt & Janssen, 2010). These interpersonal relationships and processes involving professionals and opinion leaders are prone to positively influence attitudes towards purchasing new products. Furthermore, these social relationships can happen when opinion leaders endorse specific products or when they are seen consuming them (Langner et al., 2013). In essence, opinion leaders stimulate adoption and buying behaviour through intensifying in-group salience, i.e., the feeling of belonging to a specific social group. This notable influence of opinion leaders suggests that individuals do not always buy goods for their functional or hedonic value but also because they want to impress others or increase their social status through social rewards and social differentiation (Foxall, 1998). In terms of organic food, Bertrandias and Elgaaied-Gambier (2014), for example, claimed that when environmental concerns are considered as a social norm, their impact on a person's choice is more prominent when they are related to relevant others. In effect, individuals who believe others in their

relevant social networks are concerned about environmental issues will be more likely to avoid less environmentally friendly products (Bartels & Hoogendam, 2011). In effect, this study sought to highlight the significance of the symbolic component of Social Influence, which is yet to be established (Bartels & Onwezen, 2014; Cheah & Phau, 2011; Roehrich, 2004).

Social factors that influence consumer adoption of 'new' products include, but are not limited to, family, peers, social media, relevant others' status and roles (Pandey & Dixit, 2011). Family members (for example, one's spouse, children, parents, relatives) can strongly influence a particular consumer's Adoption Behaviour. A person is affected by their home environment when s/he is growing up, and thus family members greatly influence an individual's adoption and buying behaviour. Peer pressure is also a decisive factor that determines a person's Adoption Behaviour. Every person belongs to a group of some sort, from friends to co-workers and neighbours. Rather than feeling left out, individuals adopt products that make them fit in to their respective groups (Pandey & Dixit, 2011). An individual's role in life, for example, as a supervisor and the status of this position, can determine specific adoption choices (Langner et al., 2013). According to Pandey and Dixit (2011), a person's Adoption Behaviour is strongly influenced by social factors, like reference groups, family, and social roles and statuses. Therefore, reference groups largely determine the desired or undesired products that individuals ought to embrace within a particular social circle (Makgose & Mohube, 2007). These reference groups are also inclined to affect certain individuals' choice of products, the way they process information, adoption novelties, and ultimately their buying behaviours (Lachance, Beaudoin & Robitaille, 2003). The following section highlights the notion that behaviour is learned through observation and imitating the conduct of others.

2.5.3. i) Social Learning Theory

The development of literature on Social Influence is rooted in the conceptualisation of Social Learning theory. Bush, Martin and Clark (2001) expanded on consumers' socialisation process through this theory. Social Learning theory has proved that direct role models, for example, family members (fathers, mothers, siblings), friends, teachers, and mentors, among others, have the most significant effect, particularly on young consumers' market knowledge, attitudes, adoption and buying decisions (Bandura, 1977; Chen, Lu & Wang, 2017). Thus, young people are 'socialised' into the marketplace through the process of consumer socialisation, as they gain skills, knowledge from their social circle and form attitudes towards products in the market (Ho & Teo, 2020; Mikeska, Harrison & Carlson, 2017).

Celebrity endorsers or role models can also induce social pressure in high status, materialistic and expensive goods and food-related products (Bandura, 1977; Knoll & Matthes, 2017). Recently, social media has radically influenced young peoples' adoption and buying decisions (Kijek, Angowski & Skrzypek, 2020). Nowadays, social media allows consumers to search, learn, review and share information regarding different brands and new products, thus completely changing the structure of social networks through which potential adopters find information to eventually adopt any innovations (Lindsey-Mullikin & Borin, 2017).

In light of the above discussion, it can be argued that the conceptualisation of Social Learning theory helped in explaining how individuals learn through observing others' attitudes, behaviour, and the effects of those behaviours. Nowadays, the Internet has made social learning possible via different social media networks. The success of applying Social Learning theory is thus based on the quality of the role model that individuals learn from and the social medium's effectiveness. Likewise, the motivation level of a person to enact what they observe can ultimately change their behaviour (Kijek et al., 2020). However, it is also important to note that not all observed behaviours are effectively learned or applied (Bandura, 1977).

2.5.4. Conceptualising Perceived Value

The lack of agreement on the description and conceptualisation of Perceived Value among different researchers has shown that Perceived Value can be a very complex construct (Lapierre, 2000). The differences in thoughts regarding the conceptualisation of Perceived Value can be seen from two major perspectives: i.e., as a unidimensional construct and multi-dimensional construct (Sanchez-Fernandez & Iniesta-Bonillo, 2007). Although mainstream researchers agree that Perceived Value must be considered as a multi-dimensional construct, Sanchez-Fernandez and Iniesta-Bonillo (2007) established that some opponents have contended that the multidimensional nature of this construct makes it to be conceptually ambiguous. The conceptual ambiguousness of Perceived Value due to its multidimensionality further explains the variance between its dimensions and other variables (Mcgowan, Shiu & Hassan, 2016). However, this lack of agreement does not imply any consensus in conceptualising Perceived Value but leaves a gap in its conceptual meaning. The generic and assumed conceptualisation is that Perceived Value encompasses the relationship between the customer and the product (Holbrook, 1996), which is strongly linked to the benefits or utility derived by the customer in return for the money or any other costs (Zeithaml, 1988). Thus, this suggests that Perceived Value was conceptualised as a multi-dimensional construct.

Due to the complexity of the Perceived Value, several alternative conceptualisations exist in the extant literature (Mcgowan et al., 2016). The unidimensional perspective puts forward that consumers are involved in a cognitive trade-off between costs (price) and benefits they obtain from a specific product – i.e., the value for money perspective (Zeithaml, 1988). However, Babin, Darden and Griffin (1994), in their argument for the two-dimensional nature of this construct, distinguished between the utilitarian value (product's cognitive, task-oriented value) and hedonic value (product's affective, experiential value). Mattson (1991) further proposed practical (functional), emotional and logical (abstract, rational) value dimensions, with a further extension in Holbrook's (1999) typology of perceived consumer value. Sweeney and Soutar (2001) again distinguished between social, emotional, performance or quality and price value dimensions of this construct. Generally, value perceptions seem to have a functional or tangible and an experiential or intangible component, even though research has mainly concentrated on the concrete (price and quality) value dimensions (e.g., Sánchez-Fernández & Iniesta-Bonillo, 2007).

In line with the above conceptualisations, literature also presents Perceived Value as one of the most extensively researched concepts in the modern marketing literature (De Toni, Elberie, Larentis & Milan, 2018; Curvelo, Watanabe & Alfinito, 2019). Perceived Value has been defined as 'the consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given' (Zeithaml, 1988:31). Furthermore, Zeithaml (1988) described value in four different ways: value as low price, value as whatever the consumer wants in a product, value as the quality received from the price that the customer pays and value as what is accepted for what is given. The prevailing argument in most organic food studies is that a socially-oriented consumer will perceive greater value in 'natural' foodstuffs to benefit from the image of being a good citizen (Cheah & Phau, 2011). Some factors can impact Perceived Value, for example, quality and price perceptions, among others (Grewal, Roggeveen, Compeau & Levy, 2012). According to Midmore, Francois & Ness (2011), individuals who adopt organic products are more likely to perceive greater value in these foodstuffs. The Perceived Value of organic foods ought to be judged beyond quality, convenience, and monetary value, i.e., must be judged on the basis of the societal benefits that such products provide to consumers (Ha-Brookshire & Norum, 2011). Individuals may alternatively try to evade the cognitive dissonance associated with not adopting such products by embracing these foodstuffs in their everyday lives (Midmore et al., 2011). Hence, this will propel them to adopt organic foods to their daily lifestyles.

The above section highlighted that Perceived Value is a multidimensional construct composed of several dimensions. Relevant dimensions are explained below.

2.5.4. i) Value Dimension Category

Values can either be personal, social or product-related. However, since the focal point of this study was on social context factors that underlie the adoption of organic food, only social values were explored as they were in line with the study purpose, objectives and questions to be answered.

2.5.4. i(a) Social Values

Social value has been conceptualised as the image that one acquires from the society (i.e., the product is assessed based on how well it can aid the individual to be accepted in the society) coupled with emotional value (i.e., the feeling aroused from adopting and using the product) (Hansjurgens, Schroter-Schlaack, Berghofer & Lienhoop, 2017). In this category, consumers view the society as a place where they can benefit from interacting with other people (Aulia, Sukati & Sulaiman, 2016). These benefits can be understood from two fundamental perspectives: i.e., the need for acceptance (i.e., the value is gained when an individual feels connected to other people) and the need for a compliment (i.e., the value that is achieved when an individual feels admired by other people) (Sheth, Newman, Gross, 1991a).

2.5.4 i(1a) Need for Acceptance (Acceptance Value)

Several findings from earlier studies showed that being accepted in society is part of the basic need that affects customer satisfaction (e.g., Gallarza & Gil, 2006). As expounded by Maslow (1943), being accepted in society is part of an individual's basic needs. A product's failure to fulfil this need creates an uncomfortable feeling that leads to undesirable attitudes and behaviours (Persaud & Schillo, 2007). The society will not only cause social pressure to perform the conduct in question (Fishbein & Ajzen, 1975) but can also influence an individual's perception of its value because individuals are viewed as people who actualise cultural characteristics that are linked to their social or shared values and norms (Yang & Jolly, 2009). Therefore, it can be said that to be accepted in their social circle, individuals tend to follow or take other people's perceptions and are susceptible to behave as others behave (Yang & Jolly, 2009). In other words, an individual may value a particular product based on how others like that product. As described in the Theory of Reason Action (Fishbein & Ajzen, 1975), individuals tend to perform a specific behaviour consistent with what is expected by

people who are close or important to them, e.g., family or friends. This effect is the subjective norm in Ajzen's Theory of Planned Behaviour, whereby an individual under immense social pressure can end uo having cognitive conflict or mental discomfort, particularly if that person's actions are inconsistent with that of society (Ajzen, 1991; Ha, 1998). However, not all of the perceptions in the community are entirely adopted by its members for them to be accepted, as sometimes acceptance of these perceptions largely depends on personal values (Lai, 1995).

2.5.4. i(1b) Need for Compliment (i.e., Impression Value)

On the other hand, the product's value can also be understood from the viewpoint of how that product can assist in making a good impression on others. Individuals see the society as a place where they can get appreciation or compliments from other people through their interaction with them. Therefore, for an individual to gain recognition or be respected in society, s/he tends to seek a product that can enhance their social self-concept (Sweeney & Soutar, 2001). As it was conceptualised by Park, Bernard & Deborah (1986), the enhancement of self-concept or self-identity in the society is part of an individual's immediate need, and the failure of the product to fulfil this need will cause an uncomfortable feeling. Park et al. (1986) further submitted that this need underlies the customer's perception of value. In his hierarchy of needs, Maslow (1943) described the need for appreciation or respect as the higher level of a person's basic need and failure to fulfil this need will make the individual feel tense and anxious.

2.5.4. i(1c) The Value-Action Gap

The value-action gap pinpoints a vital point of influence in that many individuals tend to act responsibly when in the midst of others (Pickett-Baker & Ozaki, 2008). For example, some people may throw garbage in bins when other people are around them and may not do so, if otherwise. Moreover, Social Influences have been described as promoters to many recycling activities, particularly for young individuals (Pickett-Baker & Ozaki, 2008). People's social surroundings can highly influence them in decision-making, for example, friends, relatives, business partners, colleagues, or reference groups in mass-media adverts (Han, Hsu & Sheu, 2010). Therefore, it is in light of the above discussion, it was necessary that this study tested whether individuals' values are impacted by social-context factors while at the same time affecting a person's attitude and behaviour.

The next section delves on individuals'feelings or their way of thinking that eventually affects their behaviours.

2.5.5. Conceptualising Attitude

Since the 1980s and even beyond, Attitude has continued to gain the scientific status as a construct that warrants scholars' theoretical and empirical attention. Moreover, due to its centrality within the context of consumer behavioural studies, there are a plethora of studies that have previously sought to understand this concept (e.g., Armitage & Christian, 2017; Fazio, Powell & Williams, 1989; Otto, Evans, Moon & Kaiser, 2019). There is consensus among researchers that the concept of Attitude is multidimensional in nature as it does not lend itself to a straightforward definition. The conceptualisation of this construct has been closely linked to Ajzen (1991)'s Theory of Planned Behaviour which offers a valuable framework for understanding individuals' behaviours. According to the Theory of Planned Behaviour, an Attitude toward an action results in a stronger intention to perform or execute that conduct or activity (Fishbein & Ajzen, 2011). This assumption is predicated on the evidence that Attitude influences preferences held by end-users such that the more favourable the Attitude is, the more one plans to conduct that specific behaviour (Tarkiainen & Sundqvist, 2005). Moreover, in line with the expectancy-value theory, Attitudes arise from the proliferation of beliefs of an individual's evaluations (Ajzen, 2001; Fishbein & Ajzen, 2011). The various articulations of Attitudes in different theories may suggest that this is a very intricate construct.

As people's Attitudes are inner dispositions, it can be tough to successfully predict them, resulting in gross misinterpretations of these dispositions (Ajzen, 1991). For example, consumers' Attitudes toward organic food are generally positive (Ashraf, Joarder & Ratan, 2019; Richetin, Mattavelli & Perugini, 2016), even though these favourable Attitudes do not always translate into adoption and ultimately purchase behaviour (Itchakov, Uziel & Wood, 2018; Kruglanski, Baldner, Chernikova, Destro & Pierro, 2018; Smith Paladino, 2010). This has been dubbed as the attitude-behaviour inconsistency in the extant literature.

The following section discusses the existing discrepancy between attitude and behaviour, which has been a major topic amongst previous scholars.

2.5.5. i) Attitude-Behaviour Inconsistency

While a mismatch between individuals' attitudes and adoption or purchase behaviour is usual with new products (Berger & Heath, 2007; Shaw, McMaster & Newholm, 2016; Yamoah & Acquaye, 2019), overcoming such Attitudes is vital for the diffusion of novel foods. Therefore, a deeper understanding of how social considerations merge with Attitudes to stimulate the

diffusion of organic products is relevant to both scholars and marketing executives (Bartels & Reinders, 2010). Attitude–behaviour consistency refers to the degree to which individuals' Attitudes (opinions) predict their behaviour (actions) (Haddock & Maio, 2004). Moreover, attitude-behaviour consistency occurs when there is a strong link between opinions and actions. An example of high attitude–behaviour consistency is when an individual has a positive Attitude toward the environment and goes an extra mile in protecting it through recycling paper, bottles and adopting organic food. Therefore, much of the utility of the Attitude concept is derived from the notion that individuals' sentiments help in guiding their actions.

While exploring consumers' Adoption Behaviour of organic food, various studies have also reported a "gap" or discrepancy between consumers' expressed positive Attitudes and their Adoption Behaviours (Armittage & Christian, 2017; Persaud & Schillo, 2017; Vermeir & Verbeke, 2008). In one of the earliest conceptualisations of Attitude, LaPiere (1934) submitted empirical evidence which suggested that Attitude may not predict behaviour. Moreover, Hughner et al. (2007) validated that while many consumers displayed a favourable Attitude towards organic food purchases (67%), only a small number of customers (4%) adopted and bought those products. This inconsistency signifies that consumers' positive Attitude towards organic food does not always translate to action, as submitted by Armittage and Christian (2017). Therefore, this study claims that there is bound to be a discrepancy or gap between consumers' Attitudes and actual actions (Chen & Chai, 2010; Gupta & Ogden, 2009), i.e., 'green Attitude-behaviour gap' or 'green adoption inconsistency'.

2.5.5. ii) Theory of Planned Behaviour

The Theory of Planned Behaviour (Ajzen, 1985) was an extension of the Theory of Reasoned Action (TRA) (Ajzen, 1991; Fishbein & Ajzen, 1975), which has been the dominant theoretical approach to guide research on individual behaviour for the past three decades. This theory puts forward three predictor variables, one mediator variable and one outcome variable (Ajzen, 1991). First of all, the influence of Attitude and subjective norm on behaviour is posited to be fully mediated by intention, while that of perceived behavioural control on behaviour is posited to be partially mediated by intention. Secondly, the influence of normative, behavioural and control beliefs on choice and behaviour is assumed to be mediated by subjective norm, attitude and perceived behavioural control, respectively. Finally, the influence of all other social, biological, economic, environmental and cultural forces is posited to be mediated by this theory (Ajzen, 1985; Armitage & Christian, 2017; Cooke, Dahdah, Norman & French, 2016).

Although there have been widespread critiques of the Theory of Planned Behaviour (e.g., Armitage & Conner, 2001; Demarque, Charalambides, Hilton, Waroquier, 2015; Hassan, Shiu & Parry, 2016; Yuzhanin & Fisher, 2016), this theory has, however, managed to consistently prove its applicability to different research contexts (Holst & Iversen, 2011; Khasawneh & Irshaidat, 2017). Evidence from previous literature demonstrates that the Theory of Planned Behaviour was also used in many organic-related studies (Aertsens et al., 2009; Arvola, Vassallo, Dean, Lampila, Saba, Lahteenmaki & Shepherd, 2008; Scalco, Noventa, Santori & Ceschi, 2017; Tarkiainen & Sundqvist, 2005; Vermeir & Verbeke, 2004). For this reason, it was deemed appropriate and projected to be helpful in this study's quest for the determination of consumer Adoption Behaviour for organic food. Accordingly, this study borrowed from the Theory of Planned Behaviour variables like Attitude and subjective norm (since this theory sets out that subjective norm is linked to social pressures to perform or not to perform a specific behaviour, e.g., Han, Nunes & Drèze, 2010). However, borrowing from the Theory of Planned Behaviour did not imply that it grounded this study, as the Diffusion of Innovation theory was deemed more relevant in this regard.

The following section breaks down the concept of Consumer Innovativeness by explaining how individuals are receptive to new products. Individuals' propensity to embrace or buy new products was deemed relevant in light of organic food adoption patterns.

2.5.6. Conceptualising Consumer Innovativeness

Introducing innovation is necessary for companies that seek to diversify their operations while simultaneously boosting their profits and enhancing their sustainable competitive advantage in the market. However, for companies to benefit from it, the innovation must be accepted and bought by consumers. Current research suggests that only a tiny fraction of new products are successfully diffused and accepted by consumers (De Jong, Gillert & Stock, 2018; Tomas-Simin & Janković, 2014). Many authors believe that consumer characteristics largely influence the acceptance or rejection of innovation, for example, the degree of their innovativeness and neophobia, among others (Goldsmith, 2001; Hussain & Rashidi, 2017; Jeong, Kim, Park & Choi, 2017; Persaud & Schillo, 2017). Research on the acceptance of innovation has focused on instrumental beliefs like perceived usefulness or ease of use as drivers of adoption (Lua, Yao & Yu, 2005). However, individual psychology and behavioural sciences submitted that personal traits and Social Influences (e.g., individual innovativeness) are potentially the key

determinants of adoption and might be more critical in shaping potential adopters' decisions (Lua et al., 2005).

According to Rogers (1962)'s theory of the Diffusion of Innovation, individual innovativeness is the extent to which a person adopts innovation earlier than others in a system, i.e., an innate predisposition of individuals to look for novelty from new products earlier than others. In line with Rogers' initial conceptualisation, Goldsmith (2001) described Consumer Innovativeness as an individual's need to discover new developments in the market so as to own them. Other scholars described Consumer Innovativeness as a personality trait or personal characteristic relating to an individual's willingness to accept change (Clark & Goldsmith, 2006; Gielens & Steenkamp, 2007). When consumer innovators adopt new products, they demonstrate their innovativeness to other members of their group while at the same time reinforcing their belongingness to a specific group, in order to evade any negative impressions or reactions (Gentina, Tang & Gu, 2015; Persaud & Schillo, 2017). Findings from extant literature further show that Consumer Innovativeness reflects an innovators' tendency to communicate specific social identities (e.g. their distinctive individuality) through their Adoption Behaviour (Berger & Heath, 2007; Maden & Koker, 2013). Therefore, a consumer that adopts novel products earlier than others is perceived to be more innovative. This study perceived consumer innovators (through the lens of social context factors) as individuals who are predisposed or willing to adopt (or are receptive) to innovative products like organic food.

Consumer Innovativeness has been conceptualised as a multi-dimensional construct – i.e., it has been theorised from a trait and domain-specific perspective (Cowart, Fox & Wilson, 2008; Lassar, Manolis & Lassar, 2005). The multidimensionality of Consumer Innovativeness has further exacerbated the prevailing lack of unanimity on its theoretical definitions and its measurements (Roehrich, 2004). Furthermore, in both the trait and domain-specific perspectives of Consumer Innovativeness, it appears that there is an unintended consequence of placing greater emphasis on individual-level aspects while neglecting the social context factors of consumer Adoption Behaviour (Bertrandias & Elgaaied-Gambier, 2014). Hence, the inclusion of Consumer Innovativeness as a moderating variable was deemed relevant for the current study, and it was to be analysed from a socially oriented perspective.

Literature further suggests that while a consumer can demonstrate innovative behaviour in a specific context, at the same time, the same customer can be conservative in another field. This characteristic reflects the features of domain-specific Consumer Innovativeness, which is discussed further below.

2.5.6. i) Domain-Specific Consumer Innovativeness

More recently, scholars reviewed the trait perspective of Consumer Innovativeness, resulting in the concept of domain-specific innovativeness. The seminal work of Labay and Kinnear (1981) established that viewing trait-specific Consumer Innovativeness across a wide range of domains can be problematic and suggested that this construct must be considered within a particular product classification – i.e., specific domain of interest. This argument conceptualised the domain-specific Consumer Innovativeness, which classifies innovativeness within a specific product class, versus a universal trait from its original conceptualisation (Goldsmith & Flynn, 1992; Goldsmith, Freiden & Eastman, 1995; Hoffmann & Soyez, 2010; Kavak, Turhan & Eryigit, 2018). The underlying argument from domain-specific innovativeness is that consumers may adopt innovations earlier than others if such innovations are within their domain interest but can be laggards in others (Persaud & Schillo, 2017).

Extant literature further submits that this is the most useful scale to measure Consumer Innovativeness within a particular product category (Hynes & Lo, 2006). Furthermore, Roehrich (2004) regards domain-specific innovativeness as an 'intermediary' between innate innovativeness and the acceptance of new products, although this is yet to be proven. Irrespective of the conceptualisation used, it appears as if Consumer Innovativeness, particularly domain-specific Consumer Innovativeness, has primarily been treated as a significant moderating variable for consumer Adoption Behaviour (Chau & Hui, 1998; Persaud & Schillo, 2017). This moderation effect of Consumer Innovativeness suggests that marketing strategies intended to generate greater awareness and enhance trial and adoption, must be product-specific and focus on creating unique brand experiences that align with innovative consumers' personality traits and self-image. Putting more emphasis on innovators' salient identities is crucial since these consumers have the greatest self-relevance to other consumers and often stimulate identity-related behavioural choices (Berger & Heath, 2007, Bertrand & Elgaaied-Gambier, 2014; Persaud & Schillo, 2017).

Consumer innovators tend to adopt new products earlier, are less concerned about having a perfect product and are keen to pay a premium to have the novel products (Barrena-Figueroa & Garcia-Lopez-de-Meneses, 2013; Robinson & Leonhardt, 2018). Moreover, they are vital in determining the primary target market for a new product, as late adopter segments are disposed to take their cues from them (Klink & Athaide, 2010; Persaud & Schillo, 2017). On the other hand, less innovative consumers are more likely to take longer to make new product choices as they attach greater emphasis on product quality and price (Passaro & Salomone, 2017). Organic food product adoption studies have confirmed these claims because early adopters of organic products are more environmentally sensitive and are less price-sensitive (e.g., Barrena-Figueroa & Garcia-Lopez-de-Meneses, 2013). Therefore, the above discussion justified the inclusion of domain-specific innovativeness as a moderating variable in this study.

2.5.7. Conceptualising Adoption Behaviour

Consumer Adoption Behaviour has long been the subject of investigation in marketing and consumer research and has garnered several conceptualisations (Curtis & Quarnstrom, 2019; Klonglan & Coward, 1970; McCarthy et al., 2015; Rogers, 1962). Existing literature points out that adoption essentially applies innovation and links it with the launch of new products or services to the marketplace (Dedehayir, Ortt, Riverola & Miralles, 2017; Rogers, 1962). The central and widely accepted diffusion model by Rogers (1962) portrays adoption or rejection as the ultimate step in a process, that is usually preceded by awareness, interest, trial and evaluation. Thus, before there is full-fledged adoption of innovation, a typical adopter would have gone through several stages from exposure to the novelties to information gathering and forming an understanding of it, to generating favourable Attitudes towards the innovation, which ultimately motivates an individual to end up trying it out (Rogers, 2003).

Consumers have the power to stall or reject an innovation at any stage during the adoption process. Therefore, taking the initial step(s) in the adoption process does not guarantee that the consumer will eventually adopt the innovation (Adebiyi, Olabisi, Richardson, Liverpool-Tasie & Delate, 2020; Rogers, 1962). This argument has necessitated that the research on the consumer decision-making process must distinguish between a high-effort and a low-effort paths to consumers' decision-making process (Hoyer & MacInnis, 2006). The widely accepted assumption is that innovation adoption usually follows a high-effort path, which starts with comprehension and inference, continues through to liking, and ends with trial and perhaps permanent adoption (Herrera & Dimitri, 2019; Kotler & Roberto, 1989). Furthermore, it is

often argued that consumer motives for adopting any new idea are strongly linked to social forces of, for example, Social Identity and Social Influence, among others (Persaud & Schillo, 2017). It was upon this argument that the foundation of this study was premised.

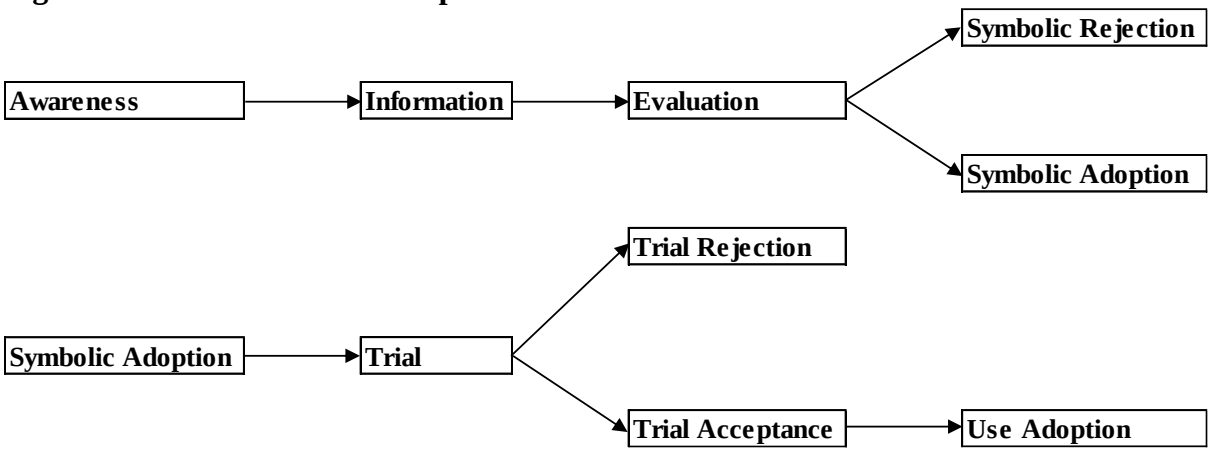
2.5.7. i) Two-Phase Adoption Model

Klonglan and Coward (1970) presented adoption as a multi-dimensional construct, i.e., with two crucial elements, in which (i) the idea is accepted (symbolic adoption), and (ii) the material object or practice is accepted (use adoption). This two-phase model explained 'the acceptance of an idea' regarding the product/service and behavioural adoption. Using this model also makes it possible to differentiate between rejection as symbolic or trial rejection. The two-stage process submitted by Klonglan and Coward (1970) presented that consumer awareness and evaluation results in either symbolic acceptance or rejection. With regards to symbolic acceptance, the trial of innovation occurs, and this is also termed implementation. After a trial period, approval or rejection occurs, and trial acceptance results in user adoption, also termed confirmation or continued use. Subsequent implementation and confirmation decisions include availability, trialability, financial resources, while symbolic adoption characterises the emotional response to cognitive messages about the innovation and social persuasion from relevant others. Thus, symbolic adoption is virtually a prerequisite for actual adoption (Konglan & Coward, 1970). As the current study was premised on the social context factors that drive adoption, it was assumed that symbolic adoption was ideal in reflecting Millennials' emotional and affective responses to social persuasion and perceived normative expectations.

Literature suggests a gap between symbolic adoption and use adoption (Konglan & Coward, 1970). The two-phase model also explains adoption through aspects external to the individual, over and above economic or sociological factors. Incomplete adoption (e.g., constrained or anticipatory adoption) is a situation where an individual is quite favourably persuaded to use the innovation, but structural issues restrain the usage (Konglan & Coward, 1970). Adding to the lag between symbolic and user adoption, subsequent studies that implicitly employed this model arrived at conflicting conclusions regarding whether this model's sociological or economic aspects explained the majority of variance in adoption (Karahanna, Agarwal & Angst, 2006; Tegtmeier, 2003). However, this is not to broadly imply that using the two-phase model in this study was to eliminate these prevailing contradictions, but it presented an opportunity to provide richer explanations of Adoption Behaviour. Klonglan and Coward (1970) hypothesised that sociological variables were significant in explaining symbolic

adoption, while economic variables were relatively more important in explaining use adoption. This hypothesis was supported by Sapp and Jensen (1997) in their study of beef adoption in Japan. As this study concentrated on symbolic rather than use adoption, only social factors (related to symbolic adoption) were considered for further scrutiny. The following figure depicts the two-phase adoption process spearheaded by Klonglan and Coward (1970).

Figure 2.3: The Two-Phase Adoption Process



Source: Klonglan and Coward (1970)

2.5.7. ii) Symbolic Adoption

The symbolic adoption model was conceptualised as one of the few theoretical frameworks that explain the pre-adoption process (Verra, Karoui & Dudezert, 2012). Klonglan and Coward (1970) defined symbolic adoption as the approval of the innovation idea. Moreover, symbolic adoption signifies a vital juncture in the innovation-decision making process since it is at this point that innovation principles are considered acceptable. Furthermore, the symbolic adoption model demonstrates that for an individual to decide whether to adopt any novelty, it is essential that the person becomes aware of the existence of the innovation, learn about it via information gathering, assess its relevance in light of his or her needs, and intellectually (i.e., symbolically) accept the product (Klonglan & Coward, 1970; Sapp & Korsching, 2004). Therefore, literature has presented symbolic adoption as an essential prerequisite to the adoption of novel products. As organic food is at its early adoption phase in South Africa, this study assumed that the symbolic adoption model would make it possible to better clarify the concept of pre-adoption in the context of Millennials.

Karahanna and Agarwal (2006) further added to the complexity that surrounds the conceptualisation of symbolic adoption by conceptualising it as a formative construct, with four sub-dimensions of:

- mental acceptance (i.e., the degree to which an individual views the artefact, in principle, as a good idea;
- (ii) use commitment (i.e., the extent to which one is dedicated to the use of innovation independent of whether it is authorised or not;
- (iii) effort worthiness (i.e., the user's optimistic evaluation of the return on resources expended to be able to use the novel product; and
- (iv) heightened enthusiasm (i.e., the enthusiasm with which an individual approaches the behaviours linked with the usage of the innovation).

Despite many other conceptualisations of symbolic adoption, this study was stuck to the initial submission of this theory as conceptualised by Klonglan and Coward (1970).

2.6. Chapter Summary

This chapter has presented an overview of the conceptualisations that underlie the constructs of this study. In addition, all the independent, mediating, moderating and outcome variables that underlie this study were explicated. This was done to provide a reasonably detailed account of the study variables in line with insights from the extant literature. This section further emphasised that since organic food is still in its early adoption stages in South Africa, it was practical to test symbolic adoption rather than use adoption.

The next chapter provides an articulation of the relationships between the constructs under investigation through hypotheses development. Once these hypotheses were developed in line with the existing relationships in the extant literature, several assumptions were derived and stated. Finally, the conceptual framework graphically portrays all the constructs under study and their causal relationships, setting the stage for empirical testing, as it is the same conceptual framework that was later subjected to statistical structural modelling and testing.

CHAPTER 3

HYPOTHESES DEVELOPMENT & STATEMENT + CONCEPTUAL MODEL

3.0. Introduction

This chapter presents the proposed relationships between the selected variables under investigation and the related hypotheses that were formulated for this study. Based on the theoretical and empirical assessment of the variables documented in the extant literature, the hypotheses were formulated to give this study a solid direction. Moreover, understanding the relationships between the studied variables sought to provide a platform for developing a conceptual framework upon which an adoption strategy could be established. Finally, this chapter presented the proposed conceptual framework, which depicted all the proposed relationships between the studied variables.

The following section explores the relationships between the variables, from which the hypotheses for this study were formulated and later subjected to various statistical tests.

3.1. Hypotheses Development and Statement

This study necessitated that sound research hypotheses were to be developed in order to meaningfully provide solutions to the identified research problems. Therefore, hypotheses development became an integral part of this research, as it resulted in the statement of the hypotheses that were tested later under Path Modelling. For this study to develop testable and sound hypotheses, extant literature was reviewed, and insights from previous research findings helped shape the hypotheses for this study.

3.1.1 Social Identity and Perceived Value

An individual's identification with a particular social group often predicts their value perceptions (Kleine, Kleine & Brunswick, 2009; He, Li & Harris, 2012), but previous research has not sufficiently evaluated the different dimensions of Social Identity and their relationships with consumers' value perceptions (McGowan et al., 2016). Findings from past studies show that value perceptions can represent consumers' evaluation of their trade-off between the social costs of adopting or buying organic food and the collective benefits they will receive from these foodstuffs (De Toni et al., 2018). Thus, the study's conceptual framework draws together two separate streams of research by linking dominant concepts of Social Identity and organic food-related cognitions (i.e., value perceptions). In line with the evidence provided by Jamal and Sharifuddin (2015), the thrust of this study was to model Perceived Value as an outcome of consumers' Social Identity. Moreover, existing literature revealed that identification leads to

more positive consumer-product evaluations for identity-linked products (e.g. Jamal & Sharifuddin, 2015; White & Dahl, 2007).

In line with Tajfel (1981), Social Identity entails deriving knowledge from group membership together with the positive *value* perceptions attached to that membership. According to Social Identity theory, and consistent with the finding from Chen and Lien (2019), an individual can derive significant value from socially identifying with a particular group such that the drive to become a member can change from being self-centered to include benefits for others as well. Identity theory further explains that an individual will find their personal value from categorizing themselves as part of the group. This change in self-concept can affect aspects in society like interaction, value perceptions and behaviour (McGowan, Shiu & Hassan, 2016).

The concerted efforts of Gawronski, Bodenhausen and Becker (2007) and Reed, Forehand, Puntoni & Warlop (2012) concluded that a favourable group evaluation usually transfers positive identities onto the product. In their submission, McGowan et al. (2016) posited that higher levels of cognitive Social Identity result in higher perceived emotional and social value derived primarily from the identity-linked product. Broadly, the existing literature indicates that an individual's relationship to the group prototype is perceived to be more favourable and valuable when shaping their food-adoption related decisions. According to Azis, Rahman and Yunus (2020), Social Identity has a positive influence on Perceived Value. This finding is consistent with the submission by Petrulaitiene and Jylha (2015) that social values entails an individual's desire to satisfy their self-esteem while enhancing their Social Identity. Thus, drawing from the variety of evidence provided in the extant literature, this study proposes that:

H1: Social Identity positively influences consumers' Perceived Value

3.1.2. Social Representation and Perceived Value

Perceived Value of organic foodstuffs can be judged beyond monetary value, quality and convenience, e.g., through the societal benefits that it confers to individuals (Ha-Brookshire & Norum, 2011). In this regard, research outcomes from the previous studies have suggested that consumers who uphold certain societal values are more likely to perceive greater value in, for example, organic food, as they also benefit from the image of being a good citizen (e.g., Cheah & Phau, 2011). Likewise, a study conducted by Midmore et al. (2011) found that individuals who adopt organic products are more inclined to perceive greater value in these products. In a more direct test of the relationship between Social Representation and Perceived Value,

Persaud & Schillo (2017) established that if group members share and powerfully demonstrate positive ideas, values, and beliefs about organic food, they are more expected to perceive greater value in these products.

Extant literature suggests that Social Representations powerfully and positively shape and are being shaped by an individual's beliefs and values (Anderson, Williams & Ford, 2013). This implies that Social Representations conceptualize systems of ideas, norms, and values, that are largely shared and accepted by a particular group. To become aware of Social Representations, these are materialised and made tangible through through values and ideas (Bartels & Reinders, 2010: Moscovici, 1984; Wang, Yang & Zhang, 2021). Simultaneously, the systems of norms, ideas and values become observable reflections of Social Representations (Moscovici, 1973). As representations are socially constructed, they have been positively used to strongly promote the value interests of diverse groups of people (Phoenix, Howarth & Philogène, 2017; Martikainen & Hakokongas, 2022). Moreover, an empirical study conducted by Bryant and Barnett (2019) submitted that this positive effect is stronger, particularly for innovators than for later adopter segments.. Nevertheless, Bryant and Barnett (2019)'s finding is inconsistent with the submissions from Cowart et al. (2008), who revealed that innovators experience greater congruence between the symbolic aspects of new products, like conforming to specific norms, belonging to a particular group and sharing their ideas to later adopter segments. However, since Social Representations are not consistently shared by all members of a society (i.e., collective representations), individuals or groups can hold numerous Social Representations about the same social object (Jovchelovitch, 2008; Moscovici, 2001). In light of the above discussion, this study hypothesises that:

H2: Social Representation positively influences consumers' Perceived Value

3.1.3. Social Influence and Perceived Value

Individuals usually alter their perceptions, thoughts, feelings or behaviours in response to their society or surroundings (Turner, 1991). Prior research has thus far demonstrated that individuals modify, manipulate or change their perceptions, thoughts and actions to conform to other societies or groups (Chen-Yu & Seock, 2002; Varshneya et al., 2017). The extant literature review also revealed that Social Influence positively impacts values and these two constructs are significant determinants of Attitude, particularly on products in introductory stages, like organic food (e.g., Haws et al., 2013; Thøgersen & Zhou, 2012). Drawing from Social Influence theory, it is expected that the value of a user's perception will be influenced

by the size of the number of the current users of that product or service (Persaud & Schillo, 2017). The more the number of users is, the greater the influence on Perceived Value. This phenomenon is referred to as the network externality effect (You, Jong & Wiangin, 2020). The network externality effect happens when there is an increased value of the product or service, not because of its inherent qualities, but because of the growing numbers of others adopting and endorsing it (Qasim & Abu-Shanab, 2016). For instance, the Perceived Value of organic food may increase as more people communicate and exchange information with others about the benefits of such produces.

According to a study conducted by Tjokrosaputro and Cokki (2019), the results indicated that Social Influence had strong and positive effect on the value perception. In line with Schau, Muniz and Arnould (2009) and Persaud and Schillo (2017), customer's perception of value is affected by the Social Influence. Moreover, the results from the study conducted by Ahmed, Khalid and Ahmad (2018) highlighted that Social Influence plays a key role in strengthening and shaping value perception of customers. Moreover, in terms of organic food, Social Influence will have meaning if the Perceived Value of these foodstuffs is judged beyond quality, convenience and monetary value, to include the societal benefits that such foods offer to target consumers (Ha-Brookshire & Norum, 2011). Therefore, socially-oriented consumers will perceive greater value from products that have social worth for them to eventually benefit from the image of being good citizens (Cheah & Phau, 2011). Having considered the relationship between Social Influence and Perceived Value in the above literature review, alongside the empirical evidence presented therein, this study brings forth the following hypothesis:

H3: Social Identity positively influences consumers' Perceived Value

3.1.4. Perceived Value and Attitude

Values and beliefs are assumed to be the building blocks of Attitudes (e.g., Chen, 2009; Verplanken & Holland, 2002). In line with this notion, values serve as the key underlying determinants of Attitudes and behaviours (Muzikante & Renge, 2011). For consumers to form a positive Attitude towards organic foods resulting from higher Perceived Value, these foodstuffs must incorporate the worth that consumers value the most (Hamid, 2014). Therefore values stretch beyond consumers' expectations of what a product or service should offer, i.e., the product must not just meet consumers' expectations, but it must *exceed* these expectations for it to be deemed valuable.

The pool of arguments derived from extant literature has demonstrated a positive relationship between values and Attitudes (e.g., Hansen, 2008; Muzikante & Renge, 2011). A small but consistent body of research has argued that values influence Attitudes only under certain conditions (e.g., Shin, Moon, Jung & Severt, 2017). Extant literature further specifies that only those values that are part of the self-concept and are eventually triggered within specific behavioural contexts tend to meaningfully influence Attitudes (Ajzen & Fishbein, 1980). According to the V-A-B model, values influence Attitude, and Attitude correspondingly influences behaviour (Homer & Kahle, 1988). This research finding is supported by a plethora of similar studies, e.g., Thøgersen, Zhou and Huang (2016) and Shin et al. (2017), who also demonstrated that values have unique dimensions that are important in creating and developing attitudinal and behavioural tendencies.

Values are viewed as the most abstract motivators of human behaviour (Schwartz & Bilsky, 1987; Tan, 2011). Both theoretically and empirically, evidence has been advanced to support the argument that values can influence the creation of an individual's Attitude by guiding them to look for products that tend to be aligned to their personal values (Grunert & Juhl, 1995; Poortinga et al., 2004). Research has further shown that values may provide a basis for consumers' assessments, preferences, and adoption of specific products (Muzikante & Renge, 2011). However, in developing countries, Perceived Value is lower than expected and has consistently displayed an non-significant impact on consumers' Attitudes towards adopting and purchasing organic foodstuffs (Hamid, Shah & Ghafoor, 2012). Marketers can use promotional activities as an effective way to shape and ultimately increase consumers' Perceived Value by underlining the unique selling propositions of organic foods (e.g., its healthiness) while at the same time creating a trade-off between benefits and costs linked with such products (Hamid, 2014). As a result, consumers perceiving a bare minimum trade-off are more likely to start favouring organic foodstuffs (Moliner, Sanchez, Rodriguez & Callarisa, 2007). Moreover, Yang, Li and Liu (2018) found that Attitude plays a great role in influencing Perceived Value. This finding was in line with Huang and Lu (2020)'s finding that Perceived Value has a positive impact on consumer Attitudes. Given that literature supports the argument that values positively influence consumer Attitudes, this study sought to identify values linked to Millennials' Attitudes toward the adoption of organic food in South Africa. Based on the above arguments, this study proposes the following:

H4: Perceived Value positively influences consumers' Attitudes

3.1.5. Social Identity and Adoption Behaviour

An essential characteristic of Social Identity is the concept of salience (Tajfel & Turner, 2004), which refers to the likelihood that identity will be invoked in a particular situation (Bartels & Reinders, 2010) or play out in certain conditions (Stets & Burke, 2000). The higher the salience of a specific identity relative to other identities, the greater is the likelihood of identity-related behavioural choices. Moreover, consumers benefit from adopting a particular product and abiding by their social class' behavioural expectations and norms or Social Identity-related self-image (Andorfer & Liebe, 2013). In essence, individuals will be attracted to adopt brands and products that include features of their Social Identity (Drury, 2018; Persaud & Schillo, 2017). More specifically, studies conducted by Bartels and Reinders (2010) and Bartels and Hoogendam (2011) demonstrated that social identification with organic consumer groups directly and strongly influences individuals' likelihood to adopt such foodstuffs. Since social identification has been proven to be vital in explaining consumers' choices, it is expected that identification with organic consumers groups will directly impact the adoption of these produces.

An avalanche of research provides evidence to support a positive relationship between the social grouping of "ethical consumer" (which signifies behavioural expectations consistent with this image) and adoption of organic food (e.g., Bartels & Reinders, 2010; Persaud & Schillo, 2017). In line with the evidence provided in the previous literature, the present study argues that when an ethical consumer adopts organic foodstuffs, they affirm their identity as an ethical consumer while simultaneously increasing their social status (Bartels & Reinders, 2010). This argument provides evidence to support the suggestion that non-conformity with these expectations can lead to discomfort and cognitive dissonance (Andorfer & Liebe, 2013; Minton, Spielmann, Kahle & Kim, 2018). In their extensive review of literature, Van Doorn and Verhoef (2011) submitted that organic products provide certain prosocial benefits that stimulate adoption decisions as they replicate an individual's concerns for the entire society (e.g. sustainability) and not just their specific benefits (e.g. quality, price, taste and appearance). From a marketing context, social identification seems to be a strong predictor of positive Attitudes, Adoption Behaviours, and the disposition to propagate a positive group image (Bhattacharya, Rao, & Glynn, 1995). It was established, from a reasonable review of literature, that the adoption of innovative new foodstuffs is a socially accepted way of creating a unique impression (Simonson & Nowlis, 2000), and consumers build a particular identity through the espousal of these 'new products' (Tian, Bearden, Hunter, 2001).

It is in line with the above discussion that this study hypothesised that:

> *H5: Social Identity significantly and positively influences Adoption Behaviour for organic food*

3.1.6. Social Influence and Adoption Behaviour

The adoption of organic foodstuffs has become a norm for many societies owing to its alleged benefits (Tobler, Visschers & Siergrist, 2011). Different perspectives relating to Social Influence on Adoption Behaviour exist in extant literature (e.g., Baabdullah, 2018; Kulviwat, Bruner II & Al-Shuridah, 2009). Social Influences transfer information and trigger emotional responses through social persuasion, instruction and modelling (Delre et al., 2010). The seminal work conducted by Stayman and Deshpande (1989) suggested that interpersonal relationships involving opinion leaders and experts are also likely to positively impact Attitudes towards the adoption of new products. This can happen when, for example, opinion leaders endorse or profess to have adopted products or are seen consuming them (Langner et al., 2013). In essence, opinion leaders stimulate trial and ultimately Adoption Behaviour by increasing in-group salience, i.e., a sense of belongingness to specific social groups (Stayman & Deshpande, 1989). This argument puts forward the notion that consumers do not always adopt or use products for their functional or hedonic value, but also because they want to increase their social status or excite others (Foxall, 1998) through social rewards and social differentiation (Roehrich, 2004). Therefore, from a reasonable review of literature, it was established that another critical determinant of a person's behaviour is the influence of important others (Persaud & Schillo, 2017; Sadiq, Adil & Paul 2021; Stayman & Deshpande, 1989; Vannoy & Palvia, 2010).

With regards to organic foodstuffs, a considerable number of studies have also reported that a person's connection to social networks is vital in explaining their Adoption Behaviour (e.g., Bartels & Onwezen, 2014; Cheah & Phau, 2011; Persaud & Schillo, 2017; Schubert, de Groot & Newton, 2021; Tsakiridou et al., 2008). Furthermore, recent studies postulated that Social Influence significantly influences organic foods' adoption and eventually purchase behaviour (Salazar, Oelemans & Stroe-Biezen, 2013). For example, Bertrandias and Elgaaied-Gambier (2014) argued that when environmental concern is considered a social norm, its influence on an individual's choice is more critical when it is linked with relevant others. In effect, individuals who think that others in their important social networks are concerned about environmental problems will tend to circumvent environmentally less-friendly products and

are more accepting of sustainable foods (Bartels & Hoogendam, 2011). Research further suggests that social contagion (i.e., a process by which consumers influence each other to adopt products) also plays a vital role in adopting new products (Langley et al., 2012).

It is for the above arguments and reasons that this study hypothesises that:

H6: Social Influence significantly and positively influences Adoption Behaviour for organic food

3.1.7. Perceived Value and Adoption Behaviour

Individuals predominantly driven by perceived future-based value have a higher probability of pre-trial and symbolically adopting organic food, thus signalling a higher propensity to reach a full-adoption decision (Agrawal et al., 2012). Based on the nature of symbolic adoption (Klonglan & Coward 1970), its manifestation is expected to associate more with rational value expectations in the adoption of organic food. Empirical research by Tangari and Smith's (2012) found that consumers pursuing a future-based value on the product's symbolic significance (e.g., pro-environmental value linked with sustainable consumption behaviour) are more likely to endorse it before trial than people looking for a more present-based hedonic value.

The theoretical argument posited by many researchers is that values have a causal influence and are powerful enough to directly affect consumer behaviour (Akbar, Ali., Ahmad, Akbar, & Danish, 2019; Tan, 2011). The seminal work of Williams (1979) contended that absolute and fully conceptualised values tend to become the standard for shaping consumers' judgements, preferences, and choices. In investigating the hierarchical relationship of the value-belief-behaviour (V-A-B) model, Pitts and Woodside (1983) reported a strong positive association between values and Attitude, but a weak positive association was found between values and behaviour. On the one hand, some scholars project that values generally function as grounds for adoption-related behaviours, i.e., as argued in the means-end chain model (Williams, 1979). In contrast, it has been suggested that pre-Adoption Behaviours like product trial, selection and Adoption Behaviours like shopping, are means to achieving desired values or end states (Tandon, Jabeen, Talwar, Sakashita, Dhir, 2021).

On the other hand, Hines, Hungerford and Tomera (1987), and recently Tan (2011), reported a lower Attitude-behaviour correlation. This low correlation was found when Attitude was operationalised as a general adoption construct instead of actual behaviour. Similarly, Mainieri,

Barnett, Valdero, Unipan and Oskamp (1997) discovered that the green Adoption Behaviours were only significantly linked to specific environmental beliefs or Attitudes but were not linked to the general ecological concern. Moreover, Sharifi, Kheiri and Ghofrani (2021) established that Perceived Value have a significant effect on buyers' behaviour These two results seem to confirm Ajzen and Fishbein's (1977) and Ajzen (1991) submission that higher correlations can be acquired if Attitudes and behaviour are measured in a similar level of specificity.

Moreover, Tegtmeier (2003) found a direct link between consumers' Perceived Value and symbolic adoption. While Kahle (1980) and recently Mainardes, de Araujo, Lasso and Andrade (2017) maintained that values indirectly affect behaviour through less intangible mediating factors like domain-specific Attitudes, this study tested a direct relationship between these two variables.

Therefore, in light of the empirical studies and consistent with V-A-B theory, this study proposes that:

H7: Perceived Value positively influence Adoption Behaviour for organic food

3.1.8. Attitude and Adoption Behaviour

Attempts to predict behaviour from Attitudes have been mainly based on a general concept of consistency. It is generally considered reasonable or consistent for an individual who holds a positive Attitude toward some object to perform favourable behaviours (Hidalgo-Baz, Martos-Partal & González-Benito, 2017; Florenthal & Arling, 2011). Likewise, an individual with an unfavourable Attitude is likely to perform opposing behaviours (Ajzen, 1991). According to the Theory of Planned Behaviour (Ajzen, 1991), Attitude positively but indirectly (i.e., it passes through the mediation effect of intention) impacts behaviour. Consistent with the Theory of Planned Behaviour, Attitudes should not directly lead to behaviour, as an intention to perform the behaviour must be created first. A convergence of literature on the predictive power of the theory of Reasoned Action has also established the predictive power of Attitudes in predicting behaviour (Cooke et al., 2016; Glasman & Albarracin, 2006). As mentioned above, it is usually believed that the causality flows from values through Attitudes and intention and then ultimately to behaviour, not vice versa (Ajzen, 1991). However, it has been found that real consumer adoption or consumption behaviour often deviates from Attitudes. This discrepancy

is called Attitude-behaviour-gap (Gupta & Ogden, 2006; Auger & Devinny, 2007; Carrington et al., 2010; Rana & Paul, 2017).

Even when individuals state very favourable Attitudes toward organic products (e.g., during the pre-trial or trial phase), they often exhibit unpredictable behaviours and fail to adopt these products to their daily lives (Hidalgo-Baz et al., 2017). This implies that a positive Attitude does not usually translate into the espousal of particular products (Gleim, Smith & Andrews & Cronin, 2013; Pickett-Baker & Ozaki, 2008; Moraes, Carrigan & Szmigin, 2012; Gleim et al., 2013). Thus, in light of organic food, its market is likely to be characterised by an Attitude-behaviour incongruity.

A study conducted by Bekoglu, Ergen and Inci (2016) show that innovators influence consumer Attitudes towards other new and innovative food products. Thus, equipping novel products with attributes necessary for acceptance by customers can aid in their adoption (Jasiulewicz & Lemanowicz, 2016). Furthermore, the features of innovative products, to a large extent, determine whether consumers would eventually develop a positive or negative Attitude towards them (Persaud & Schillo, 2017). Pieniak, Aertsens, and Verbeke (2010) also submitted that Attitude is one of the significant and positive predictor of organic food adoption while Sharma (2017) submitted that Attitude is one of the key predictors of adoption an consumption

It is on the strength of the above-discussed literature and in light of the relevant theories that this study proposes that:

H8: Attitude positively influences consumers' Adoption Behaviour

The following section links the above relationships with the moderation effect of Consumer Innovativeness (also see section 6.5). Also, it touches on the notion of moderated-mediation analysis, which sought to simultaneously analyse the mediation and moderation effects derived from linking the relevant constructs of this study (also refer to section 6.6).

3.2. Moderation Analysis

This study also analysed the variables in terms of the moderation effect, in which the moderating variable (i.e., Consumer Innovativeness) altered the impact of the independent variables on the dependent variable. Rather than testing causal links between the study variables, testing the moderation influence accounted for when or under what conditions a particular effect is likely to occur. In a similar vein, the inclusion of the moderating variable meant that the impact of the predictor variable on the outcome variable varied in line with the level of this third variable, which interacted with the predictor variable to create the third variable (i.e., the interaction variable) (Andersson, Cuervo-Cazurra & Nielsen, 2014; Baron & Kenny, 1986; Frazier, Tix & Barron, 2004; Memon, Cheah, Ting, Chuah & Cham, 2019). Conceptually speaking, the moderating variable was expected to alter or modify the strength of a causal relationship between two other variables (i.e. the independent and the dependent variables) due to the presence of the interaction variable (Wu & Zumbo, 2008). Specifically, the addition of the moderator was to result in either strengthening, weakening or even changing the relationship altogether. Thus, the addition of the moderating variable also sought to strengthen or even alter the direction of the relationship between the independent and the dependent variables.

3.3. Justification for the Inclusion of Moderating Variable

Extant literature has identified the moderator role of Consumer Innovativeness as an emerging theme (e.g.., Eryigit, 2020). Therefore, investigating the moderating effect of Consumer Innovativeness on different relationships is likely to contribute to existing literature and revive its relevance so that it can continue to thrive in consumer behaviour literature.

The moderating variable was incorporated to influence the paths that constitute the direct and indirect effects of the conceptual framework. The choice of moderator was based on theoretical grounding, with sizeable literature support (Aguinis, Edwards & Bradley, 2016; Frazier et al., 2004; Gardner, Harris, Li, Kirkman & Mathieu, 2017). In addition to literature support, a discussion with experts (like academicians) in a similar field together with key informants (i.e., organic food managers) in the organic food industry was a technique that the researcher used to brainstorm and identify the likely moderators. Of note, the researcher ensured that these experts and key informants were appropriately selected, leading to the final choice of the moderating variable suitable for this study. Moreover, the choice of the moderating variable was premised on past studies' inconsistent findings of the antecedent variables' effect on the

outcome variable. The application of the above notion is in line with Froese, Peltokorpi, Varma, and Hitotsuyanagi-Hansel (2018)'s submission that authors can point out previous inconclusive results as the basis for testing the moderating effects.

Moreover, this study tested the moderation effect to generate new theoretical insights (Andersson et al., 2014). For instance, Hauff, Richter, and Tressin (2015) filled a research gap by examining how national culture moderated the effect of different job characteristics on job satisfaction. In either case, solid theoretical support was required to justify the inclusion of a moderating variable in the conceptual framework for this study. Therefore, the addition of moderating effects that underlie this study was justified by extant literature instead of just mere statistical significance of the moderating influence for it to hold a strong contingent effect on the relationship between the independent and dependent variables. This study used "simple moderation analysis" (Memon, Cheah, Ramayah, Ting, Chuah & Cham, 2019), and it was deemed appropriate since the moderating variable was expected to influence the specific structural paths with the support of the relevant theory.

The following section provides theoretical arguments on why the moderating variable's inclusion better explained the phenomenon under study (Andersson et al., 2014).

3.3.1. Consumer Innovativeness Moderates the Relationship between Social Identity and Organic Food Adoption

The relationship between Social Identity and organic food adoption was also investigated as a function of the moderating influence of Consumer Innovativeness. This way, this study sought to forge a deeper understanding of how Consumer Innovativeness has a moderating role on Social Identity during the formation of Adoption Behaviour of organic foodstuffs. Previous scholars have variously submitted that Social Identity is a vital concept for explaining individuals' relationship with their social environment (e.g., Bartels & Reinders, 2010; Persaud & Schillo, 2017; Stryker & Burke, 2000). There is also a high probability of identity-related behavioural choices when individuals gain utility from adopting foodstuffs consistent with their social norms and behavioural expectations of their social category (Andorfer & Liebe, 2013). Consumer innovators tend to be attracted to and adopt brands that incorporate features of their Social Identity (Persaud & Schillo, 2017; Stayman & Deshpande, 1989). This evidence suggests that consumers' concept of their Social Identity significantly affects their adoption and purchase decisions, and the strength or direction of this influence is impacted by their level of innovativeness (Persaud & Schillo, 2017).

From this perspective, it can be argued that when consumers conform to the expectations of their social category (e.g. when sustainable consumers adopt organic foods), they affirm their identity as ethical consumers, which is likely to increase their social status (Bartels & Reinders, 2010). Extant literature shows that self-identification with specific social groups also makes it possible for individuals to socially categorise other consumers by analysing what they adopt to their daily lifestyles. For example, the adoption of innovative new products can be viewed as a socially accepted way of making a unique impression (Simonson & Nowlis, 2000) and individuals shape a particular identity through the espousal of new products (Tian et al., 2001). Since Consumer Innovativeness classifies individuals into different categories, e.g., innovators and later adopters, Social Identity will likely affect innovators differently compared to later adopters. Thus, this study hypothesised that:

H5a Consumer Innovativeness moderates the relationship between Social Identity and organic food adoptions such that the relationship is stronger when Consumer Innovativeness is higher than when it is low

3.3.2. Consumer Innovativeness Moderates the Relationship between Social Influence and Organic Food Adoption

Consumer Innovativeness was also used to influence the nature, magnitude, or direction of the relationship between Social Influence and organic food adoption. As the literature suggests, another critical determinant of a person's behaviour is the influence of others (Bearden, Netemeyer & Teel, 1989; Langley et al., 2012; Persaud & Schillo, 2017), which plays a unique role in new product adoption. Social Influences primarily convey information that activates emotional reactions through aspects like social persuasion (Delre et al., 2010), where professionals and opinion leaders (e.g., through their recommendations) exert positive influences on Attitudes towards new product adoption (Langner et al., 2013). In addition, in-group salience (i.e., the feeling of belongingness to a specific social group) is intensified through their endorsements (Stayman & Deshpande, 1989). These recommendations cause individuals to adopt such products to impress others or primarily to nurture their social status (Foxall, 1998). When individuals develop the need to impress important others in order to raise their social status, this highlights the manifestation of their innovativeness' symbolic or social component (Roehrich, 2004).

In light of organic foods, several recent studies revealed that a consumer's relationship with their social networks is paramount in explaining Adoption Behaviour (Bartels and Onwezen, 2014; Persaud & Schillo, 2017). For example, Bertrandias and Elgaaied-Gambier (2014) argued that when the concern for the environment is perceived as a social norm, its effect on individuals' choices is more prominent when linked with important others. Similarly, Bartels and Hoogendam (2011) identified that individuals who associate strongly with organic consumers tend to have positive associations with such produces as well as environmentally friendly brands.

Thus, consistent with the submissions from previous scholars, this study hypothesised the following:

> *H6a Consumer Innovativeness moderates the relationship between Social Influence and organic food adoptions such that the relationship is stronger when Consumer Innovativeness is higher than when it is low*

Apart from previous studies purely focusing on the moderating effect of a specific variable, a stream of scholars has advocated for a combined analysis of the moderating and mediating effects, i.e., moderated mediation analysis (e.g., Bauer, Preacher & Gil, 2006 Hsu, & Liao, 2019). Thus, consumers' innovativeness level was projected to affect the roles of their Perceived Value and Attitude on the overall Adoption Behaviour. For this reason, this study explored the moderated mediation effect of Consumer Innovativeness on, particularly, Perceived Value in light of the overarching relationship between social context factors and Adoption Behaviour. However, this study did not explore the moderated mediation effect of consumer innovativess and Attitude due to the lack of theoretical and empirical basis from the extant literature.

3.4. Moderated Mediation Analysis

Another important aspect that this study sought to achieve was to assess the existence of the moderated-mediation analysis. Moderated mediation analysis proved to be a valuable technique to evaluate whether the indirect effects were conditional on the aspects of a moderating variable. Therefore, this study also reviewed the underlying variables based on moderation and mediation perspectives by combining these constructs into a framework of moderated mediation. This effect is explained below.

3.4.1. Consumer Innovativeness Moderates How Perceived Value Mediates the Relationship between Social Identity and Social Influence on Organic Food Adoption

The role of Consumer Innovativeness was also assessed on how it moderated the relationship between Perceived Value (as a mediating variable) against the independent variables of Social Identity and Social Influence on the dependent variable – i.e., organic food adoption. Previous researchers found a solid and consistent relationship between social context factors and organic food adoption – when mediated by Perceived Value (Grewal et al., 1998; Persaud & Schillo, 2017). Ha-Brookshire and Norum (2011) further noted that the Perceived Value of organic foodstuffs is judged beyond monetary value, quality and convenience, but primarily by the societal benefits they offer. Therefore, socially-oriented consumers tend to derive greater value from these products, boosting their image of being good residents (Cheah & Phau, 2011). Furthermore, other customers perceive greater benefits from being associated with relevant others who endorse these natural products, leading to them espousing them to their daily lifestyles (Persaud & Schillo, 2017). Consequently, it is expected that Consumer Innovativeness moderates how Perceived Value mediates the relationship between Social Identity and Social Influence on consumers' Adoption Behaviour for organic food.

Therefore, this study proposed the following hypotheses:

H1a Consumer Innovativeness moderates the mediated relationship between Perceived Value on Social Identity and organic food adoptions such that the relationship is stronger when Consumer Innovativeness is higher than when it is low

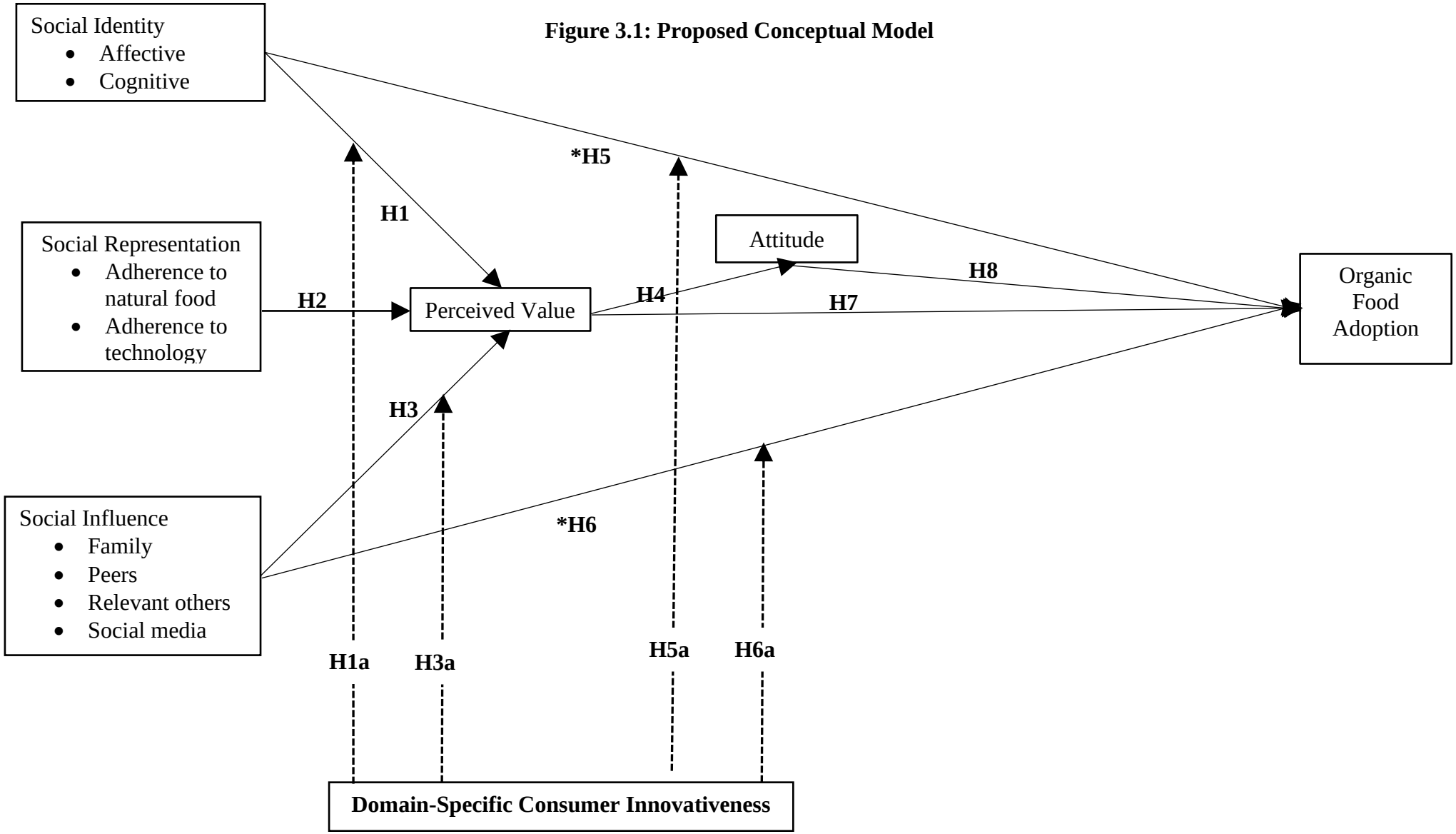
H3a Consumer Innovativeness moderates the mediated relationship between Perceived Value on Social Influence and organic food adoptions such that the relationship is stronger when Consumer Innovativeness is higher than when it is low

The following section presents the conceptual framework for this study. The same framework was subjected to significance testing under Structural Equation Modelling, i.e., path modelling.

3.5. Conceptual Model

The model in Figure 3.1 presents the predictor (Social Identity, Social Representation, Social Influence), mediating (Perceived Value, Attitude) and moderating (domain-specific Consumer Innovativeness) relationships between different latent variables and Adoption Behaviour as an outcome variable. Stated differently, while some of the independent variables are presumed to directly influence Adoption Behaviour, other relationships were mediated or moderated by other variables. Several postulations were formulated to show the causal paths and the strength of these relationships. In one of the subsequent chapters of this study (i.e., chapter 6), these hypotheses were tested to confirm or reject the validity of the proposed relationships depicted in the conceptual framework. As revealed in previous sections, all these links have been well-entrenched in the theoretical and empirical reviews.

Figure 3.1: Proposed Conceptual Model



3.6. Chapter Summary

This chapter presented and discussed the proposed relationships that exist between the selected predictor, mediator and mediating variables on the outcome variable. Then, in line with the theoretical and empirical evaluation of the variables derived from the extant literature, hypotheses were generated to give this study the required concrete path. This solid direction was further drawn from the foundation that was laid in the first chapter. Lastly, this chapter presented the proposed conceptual framework that detailed the antecedents of Adoption Behaviour and replicated the assumptions described in the hypotheses development section.

The following chapter outlines the methodology that was utilised to conduct the empirical aspects of this study.

CHAPTER 4

RESEARCH METHODOLOGY AND DESIGN

4.0. Introduction

This chapter outlines the research methodology (i.e., research philosophy and research design) and explains the statistical procedures that were employed in this study. This outline was necessary to give perspective on the research process that was followed while simultaneously outlining the procedures that were applied to effectively collect the relevant data. The outline of the research methodology, as well as the explanation of the procedures that were utilised, was arrived at after considering the primary objective of this research, i.e., to create and validate the proposed conceptual model that demonstrated the direct, mediating and moderating relationships between selected variables against the outcome variable of Adoption Behaviour. This principal objective required the development of the relevant research questions that provided a focus to this study. The theoretical and empirical arguments derived from the extant literature provided the foundation for formulating a proposed conceptual framework that depicted the structural relationships between the latent variables. The study hypotheses were drawn from these structural paths, making it indispensable to test them in later sections. Therefore, to ensure that impactful conclusions were drawn from this study, it was, to a larger extent, necessary that an appropriate research methodology was employed. Against this backdrop, the purpose of this chapter was to articulate and justify the methods or designs that were adopted to meaningfully achieve this study's primary objectives.

4.1. Research Methodology

Research methodology is a collective term for a well-thought-out process of piloting research (Babbie & Mouton, 2012). The researcher also used this methodical way to scientifically disentangle the current research problem (Yang, Wang & Su, 2006) through acquiring and analysing data to create new knowledge. As Kincheloe and Berry (2004) suggested, choices made about the research methodology profoundly affect the study's findings. Extant literature further argues that all the explanations for the methodology used must be valid and 'permissible' (Petty, Thomson & Stew, 2012). The methodological grounds are only permissible when their justification closely fits the data collection procedures and the corresponding data analysis methods (Yang et al., 2004). Babbie and Mouton (2012) further posited that if the methodology used is explained partially, the motivation for the choices made will be unjustified, making the study prone to suffer from methodological flaws. Depending on the extent of the methodological flaws, the validity of the conclusions will remain questionable, ultimately making it impossible to generalise the study results to other similar settings.

Once the methodology that befits the nature of a particular study is identified, methods specific to that methodology must also be established and justified (Petty et al., 2012). Finally, as with the choice of overall methodological strategy, methods best-suited to answering the research questions about a phenomenon were spelt out (Kincheloe & Berry, 2004). Thus, it became indispensable that a coherent and broad account of the methodology and equivalent methods was linked to the philosophical underpinning (as described in the conceptual framework) underlying this study. Therefore, consideration of the philosophical assumptions and the researcher's positionality were critical aspects to this research's methodological decision-making. Consequently, the research methodology of this study was divided into two sub-sections, i.e., research philosophy (ontology and epistemology) and research design (quantitative design, sampling design, and questionnaire design and data collection procedure).

In light of the above discussion, this section was set aside to discuss the methodologies employed in this study. These approaches are further explicated below.

4.2. Research Philosophy & Paradigm

Almost all research endeavours have an underlying philosophical underpinning. Ontological and epistemological perspectives were pertinent in selecting the study's methodology and the statistical techniques to be used (Jackson, 2013). As per Kincheloe and Berry (2004)'s indication, a researcher must clarify their position in the web of reality by explaining what counts as knowledge and how such knowledge will be gathered. Extant literature also suggests that without an explicit formulation of the philosophical background, together with implications for the understanding of reality, verification and explanation, researchers may remain innocently unaware of the profound meaning of how they can effectively conduct their research (e.g., Wilson & Stutchbury, 2009; Žukauskas, Vveinhardt & Andriukaitienė, 2018). As philosophical concepts remain mostly hidden, research rigour can be reinforced by the researcher by making transparent the philosophy that grounds the justification of the research methodology (Kincheloe & Berry, 2004). Awareness of the philosophical foundation for the research is vital in securing the quality of the results to be produced by a particular inquiry (Snape & Spencer, 2003). Therefore, the researcher's ontological stance is linked to the epistemological perspective (i.e., ontological perspective relates to the world's reality while epistemological perspective pertains to knowledge of that world).

4.3. Choice of the Study's Philosophical Underpinning

Just as it was important for the researcher to ascertain their ontological stance, it also became beneficial to determine and articulate the epistemological perspective as the latter informs the study's methodology. The decisions made herein were important in justifying how the research was to bring about new knowledge, hence spelling out the strength of the chosen methods. Therefore, clarification of philosophical underpinning was valuable to research design for the researcher to make informed choices regarding the methodology and the procedures to be utilised. The proposed conceptual framework in the previous chapter clarified the study's positionality and relationality. At the same time, ontology and epistemology helped the researcher make informed and appropriate methodological decisions in the quest to answer the research questions and eventually fulfil the purpose of this study. Through articulating and justifying the proposed conceptual framework in the previous chapter and the resulting methodology and methods, the rigour of the study was reinforced. These justifications further strengthened the reliability and validity as well as the credibility of the research outcomes.

As suggested by Jonathan (2002) and Kivunja and Kuyini (2017), ontology is the starting point for all research endeavours, after which one's epistemological positions logically follow.

4.3.1. Ontological Perspective

Ontology refers to the philosophical study of the nature of reality (Jackson, 2013). A researcher's ontological stance is more likely to ultimately shape the methodological decision-making (Al-Saadi, 2014). For example, from an ontological perspective, the researcher thought about whether or not the world exists independently of the underlying perceptions about it. Therefore, the application of this perspective largely depended on whether the researcher viewed the world as autonomous, experienced, external, or constructed reality based on social or individual human conception.

To aid in the choice of methodology and enhance this study's credibility, it became necessary for the researcher to provide a rationale for the choices made in order to validate the methodology and the successive methods of data collection and analysis. The researcher's ontological stance was thus closely linked to decisions on how to collect research data and was intimately linked to the basis upon which the truth was construed (Sherratt & Leicht, 2020). Furthermore, since this study sought to unravel the symbolic adoption of organic food from a social context, the reality was viewed based on this social conception. Again, as the study

focused on facts, causality, through following specific laws (e.g., the thresholds to be met under reliability and validity) and a survey questionnaire for data gathering and applying the principle of reductionism, it became necessary to adopt an objective ontological perspective (Lukyanenko, Larsen, Parsons, Gefen & Mueller, 2019).

Consistent with a quantitative technique, this study was constructed from an objective ontological perspective.

4.3.2. Epistemological Perspective

Epistemology is directly connected to ontology (Jackson, 2013), and it focuses on the philosophical study of knowledge and "the grounds upon which we believe something is true" (Oliver, 2010:35). As such, the researcher's epistemological stance became central to the choice of the methodology, and the determination of the suitable methodology that befitted this study was done in light of its purpose and objectives (Snape & Spencer, 2003). Thus, the creation of new knowledge depended on the epistemological assumptions that were adopted. Since this study was deductive in nature, a positivist research paradigm was relevant, as it was grounded on reason, truth, and validity (Bryman, 2008). Positivism was deemed consistent with this study because this paradigm also emphasises that facts must be gathered empirically, through the utilisation of relevant quantitative methods (Bell, Bryman & Harley, 2018; Saunders, Lewis & Thornhill, 2007; Easterby-Smith, Thorpe, & Jackson, 2008b; Eriksson & Kovalainen, 2008; Flowers, 2009). For example, positivism in this study entailed using surveys designs, from which the gathered data was analysed statistically, e.g. through Structural Equation Modelling.

In line with a quantitative technique, this study hinged on the positivist research paradigm.

The next section discusses the methods and techniques chosen by determining which tools were suitable and how they were to be used to set up this study for success.

4.4. Research Design & its Justification

The need to statistically test the quality of the structural relationships, as postulated by the conceptual framework (see Figure 3.1), necessitated a suitable research design. Therefore, formulating and validating the proposed conceptual framework required a specific research design that created the best structure to regulate how the validity of the hypothesised relationships between the variables was to be tested. Terre-Blanche, Durrheim and Painter (2006) submitted that a research design is a premeditated framework or plan that guides all the relevant research activities to ensure that meaningful conclusions are reached. In the same vein, other scholars also described the research design as a blueprint or plan of how an investigator expects to conduct a study in order to ultimately provide practical answers to the research questions (Babbie & Mouton, 2012; Jackson, 2013).

4.5. Research Methods

Research methods can be understood as all the strategies, techniques or processes used to gather evidence or data for analysis in order to eventually uncover new information or generate a better understanding of a specific topic (Khothari, 2004). As the philosophical underpinning of this study dictated that an objective ontology and positivist epistemology must be adopted, it became ideal that quantitative research techniques must be applied when endeavouring to fulfil the purpose of this study. The chosen research method is further elucidated below.

4.5.1. Quantitative Research Design

The plan, alongside the structure of this investigation, was best realised within the realms of a quantitative research design, which is equivalent to the objective ontology and positivist paradigm. A quantitative research design refers to a ‘systematic scientific investigation of quantitative properties and phenomena and their relationship’ (Cooper & Schindler, 2003: 563). The quantitative method became the appropriate option because this study developed and employed theories, hypotheses, and mathematical models about the investigated phenomenon in a bid to achieve the primary objective. Another feature central to the quantitative research design applied in this study was the measurement of numerical data (Bloomfield & Fisher, 2019). The quantification of data (e.g., the coding of statements or items in the questionnaire) was realised by ultimately deriving fundamental associations or patterns between empirical observations and the mathematical expressions of the enumerated relationships.

Therefore, the chosen research design warranted rigorous testing of primary data through statistical methods that enhanced reliability and validity, for example, tests on Composite Reliability and Average Variance Extracted, respectively.

To gain insights and information into the topic of interest, raw data was collected from a pre-defined group of respondents through a survey questionnaire as explained below.

4.5.2. Survey Research

This study employed a survey methodology that utilised standardised measuring instruments to achieve the primary objectives, provide answers to the research questions, and test the proposed hypotheses using the raw data collected from the target sample. As stated in the extant literature, survey research involves administering study questionnaires to a specific sample of respondents that forms part of the broader population in order to ultimately determine the relative distribution and inter-relationships between the variables under investigation (Andrew, 2017; Kerlinger & Lee, 2000). Surveys take different forms, including telephone, mail, self-administered, face-to-face surveys, and they can be used for descriptive, explanatory and exploratory research.

In light of this study, data collection methods included a researcher-administered mall-intercept survey (wherein respondents individually completed the distributed hard-copy questionnaires) and a self-administered online survey (in which respondents who formed part of Bateleur's millennial database were emailed and requested to participate in this study). These methods were deemed suitable because the population being studied (i.e., Millennials in South Africa) were presumed to be adequately literate. Thus, this assumption became a prerequisite that was applied to all respondents.

Several advantages were derived from using these data collection methods:

- They made it possible to analyse large datasets possible through the usage of computer technology or computer-based software;
- Compared to other methods, they proved to be relatively inexpensive and succinct, facilitating a quick completion of the data collection process;
- In line with the previous literature, it became apparent that these methods were effective in minimising researcher/interviewer bias, and hence the data was deemed mainly accurate in documenting the responses of the sampled population;

- They allowed for anonymous and truthful responses from respondents, which was one of the fundamentals for an ethical study, and
- These methods made it possible to minimise or even eradicate the missing values in the data set.

However, they were some notable shortcomings of using the survey research method. These drawbacks included:

- The likely low response rate and the susceptibility to significant response bias, the investigator's inability to control environments that accompanied the completion of the questionnaire;
- The inevitable circumstances of getting partially complete questionnaires;
- The investigator's failure to observe respondents' reactions towards the questions (in light of online surveys) and
- The researcher's failure, in some instances, to judge the appropriateness of the research setting.

In addition, the absence of the researcher, particularly for online surveys, made it impossible to provide clarity to questions that may have been confusing to respondents (Babbie & Mouton, 2012; Kerlinger & Lee, 2000). Finally, due to the assumption that survey studies employ statistical techniques, it became appropriate for the researcher to further elaborate on statistical modelling studies, and this will be done in one of the following sections (see chapter 5).

Although surveys offer a comprehensive outline of the phenomenon under study, they cannot effectively assess the theoretical models developed through reviewing the literature (except for surveys conducted through random sampling). Statistical modelling (e.g., path modelling) was aligned with this survey study to overcome this shortcoming. The data collected through this survey study was used to quantitatively confirm the theoretical model. It is widely accepted that a multivariate statistical analysis must be used to assess and validate the theoretical model (Babbie & Mouton, 2012). These multivariate analyses include, for example, multiple regression analysis, structural equation modelling, among others (Babbie & Mouton, 2012; Kerlinger & Lee, 2000; Khothari, 2004). In light of this study, structural equation modelling (which encapsulates most of these multivariate analyses) was employed and discussed later in the subsequent sections (see chapter 5).

Surveys, together with statistical modelling studies, were both based on the sampling design explicated below. Sampling design underscores the significance of electing a sample suitable for the survey regarding sample size, age, level of education, and other preconditions unique to a specific study to affirm sample representativeness. The prominence of sampling and the techniques that were utilised in this study are explained in the next section.

4.5.3. Sampling Design

As it is typically unfeasible to observe all the members of the population, sampling plays a fundamental part in statistics by providing an accurate representation of the population. To ensure that the subset of a population accurately reflected the characteristics of the larger group of Millennials, this study used a large enough sample so as to avoid skewing the results. Sample representativeness was facilitated by dispelling any sampling biases (e.g., flawed selection procedures) and encouraging high participation rates (i.e., keeping non-response bias at very low levels). Sampling design is the selection of some part of an aggregate or totality from a larger population to draw inferences from the sample to the entire group (Lohr, 2019; Teddlie & Yu, 2007). Information relating to the whole population is gathered by inspecting only a part of it (Klein & Meyskens, 2001), making it vital for the sample to represent the population. Reducing the number of respondents in this study from the entire population to a sample was ideal for reducing the cost and workload, owing to limited resources like time constraints. Therefore, it became necessary that the sampling design for this study was determined before any data being collected.

4.5.4. Target Population

Population refers to the entire group of interest for which the survey data is to be used to make inferences, i.e., the target population defines all the units for which the study findings are meant to generalise (Asiamah, Mensah & Oteng-Abayie, 2017; Klein & Meyskens, 2001). Therefore, this study sought to spell out all the eligible units to be surveyed by explicitly delineating the target population. Furthermore, all the individuals within the population had common and binding traits or characteristics. Therefore, consistent with the purpose of this research, the Millennials in South African urban cities formed part of the population of interest.

4.5.5. Sampling Unit

The population was divided into a fixed number of unique and identifiable units termed sampling units (Khothari, 2004). Therefore, a sampling unit is defined as a single element or set of components that will be subjected to selection in the sample (Zikmund, Babin, Carr & Griffin, 2013). Sampling units are a cluster of elements that are exhaustive and do not overlap. In light of this study, millennial respondents were chosen from the above-specified target population or sample, as they formed part of a sampling unit.

4.5.6. Sampling Frame / Source List

A sampling frame refers to a comprehensive and specific list of elements or correct list of elementary units, groups or clusters, source materials or devices from which a sample is drawn (Hair, Money, Samouel & Page, M, 2007; Yang, Wang & Su, 2006). A sampling frame became indispensable to identify everyone in the population who had an equal opportunity for selection as a subject (West, 2016). A database of potential respondents (i.e., Millennials in South Africa) with their email addresses was accessed from Bateleur, and these individuals were contacted and invited to participate in this study (i.e., email list became the actual sampling frame). Since this study was restricted to South Africa's urban cities, it is worth noting that Johannesburg, Pretoria, Durban and Cape Town became the sampling frame. However, there were overlaps in the sampling frame from the responses received from the online survey, partly because some individuals may have changed their area of residence by the time the data was collected.

4.5.7. Sample Size

After determining the sampling frame, the determination of a representative sample size became critical. Sample size refers to the number of items to be selected from the population to constitute a sample (Khothari, 2004). Large sample sizes generally help minimise sampling errors and improve external validity or generalisability of research findings; however, too large samples may result in an over-representative sample (Taherdoost, 2017; Yang et al., 2006). The millennial cohort represents nearly 16.3 million consumers or accounts for 27% of the South African market (which has an aggregate of 60.2 million people) (Worldometer, 2021). A Raosoft sample size calculator was used to determine the statistical adequacy of the sample size in light of the total population. Accordingly, the representative sample size for the study, at a 95% confidence level, effectively translated to **385** respondents.

4.5.8. Sampling Method

A sampling method is a procedure or 'tool' used in research to select sample members from the general population (Ghauri & Gronhaug, 2010). Extant literature maintains that there are two available methods of sampling, and they include:

- probability sampling (i.e., random sampling, cluster sampling, systematic sampling and stratified sampling), and
- non-probability sampling (i.e., convenience sampling, quota sampling, accidental sampling, snowball sampling and purposive sampling) (Babbie & Mouton, 2012, Etikan & Bala, 2017).

Although probability sampling (an optimal sampling method that accurately portrays the parameters of the entire population from which the respondents are selected) is the ultimate, it is not always practical or let alone attainable in societal research (Kohler, 2019). Therefore, non-probability sampling methods are frequently the most suitable alternative, even though using this type of sampling may significantly affect the generalisability of research findings. This study used non-probability convenience sampling to generate a fair sample, in light of the justifications indicated above. Since a convenient sample was utilised, this implied that this study could not assert firmly to have sampled a representative subset of Millennials in South Africa, and thus its findings will lack external validity.

4.5.8. i) Non-Probability Convenience Sampling

Non-probability sampling is a sampling method where the odds of any participant being selected in the sample cannot be determined and this sampling technique largely relies on the subjective judgement of the investigator (Valiant, Dever & Kreuter, 2018). Furthermore, non-probability sampling means that one person can, for example, have a 20% chance of being selected, while the other can have a 60% probability of participating in the study (Taherdoost, 2017). Etikan, Musa and Alkassim (2016) suggested that convenient or opportunity sampling involves collecting the data from a sample that is convenient to the researcher. Specifically, convenient sampling (through mall intercepts) and internet-based methods (like using respondents' readily available emails) were used in this study.

4.5.9. Questionnaire Design

Usually, a questionnaire is viewed as the heart of a survey operation (Khothari, 2004). While the items for the questionnaire of this study were adapted from previous studies, the researcher ensured that the necessary modifications were made for them to befit the study purpose while simultaneously making it possible to answer the questions that triggered this study.

A questionnaire measuring Social Identity, Social Representation, Social Influence, Perceived Value, Attitude, Consumer Innovativeness, and Adoption Behaviour was either distributed physically to respondents or made accessible as a composite online questionnaire through a link. At some point, its availability conveniently depended on the respondent's preference. The motives for the study were explicated on the cover letter – for both the hard copy and online surveys. On the same cover letter, due emphasis was directed towards the confidentiality and anonymity of responses. By clicking the "continue" button on the online cover letter and signing with an "X" or a tick on the pen and paper-based surveys, the participants confirmed that they accepted the conditions and agreed to participate voluntarily in the study.

The study's questionnaire was split into two distinct parts:

(i) Demographic profile information – This section sought to gather Millennials' information about their gender, age, marital status, qualification, income level, among others) and

(ii) Research variables or instruments (with their corresponding items)

Due to the sensitive nature of racial issues in South Africa, race (as a demographic variable) was removed after the University's designated ethics clearance committee deemed it irrelevant.

4.5.9. i) Likert Scaling Technique for Measuring Variables

Likert scaling technique is a method that assigns a scale value to each of the responses of the measuring variables, which can be either three, five, seven, and so forth. (Khothari, 2004). In light of this study, respondents were asked to indicate their level of agreement or disagreement with each statement contained within each instrument in terms of seven degrees of agreement or disagreement, that is, (i) = strongly disagree, (ii) = disagree (iii) = slightly disagree, (iv) = neutral or undecided (v) = slightly agree, (vi) = agree and (vii) = strongly agree. Every response was linked to a numerical score, specifying its favourableness or unfavourableness. Ultimately, the scores of the items in each construct were totalled to quantify the respondents' overall outlook.

4.5.9. ii) Measuring Instruments

Both the online and researcher administered questionnaires contained all the measures of Social Identity, Social Representation, Social Influence, Perceived Value, Attitude, Consumer Innovativeness and Adoption Behaviour. A similar survey questionnaire was utilised for both online and manual data collection processes. The measurement instruments and their items used in the questionnaire for this study were compiled by using existing and dependable variables generated and used in previous studies. The validity and reliability of the adapted items were tested by previous scholars and was further tested in this study, with the results detailed in the data analysis section.

Therefore, the following measuring instruments and their items were taken from the extant literature variables and became the constructs for this investigation.

The measure for Social Identity was adapted from prior literature on Social Identity (e.g., Bhattacharya & Sen, 2003; Mael & Ashforth, 1992). It had nine sample items which included, "When someone criticises organic consumers, it feels like a personal insult", "I experience a strong sense of belonging to organic consumers", and "When I talk about organic consumers, I usually say 'we' rather than 'they.'" The reliability for this scale was found to be = 0.96, while validity (AVE) was found to be = 0.71 (Du, Bartels, Reinders & Send, 2017). Hence, it was deemed a reliable and valid measure.

The original Social Representations scale developed by Bäckström et al. (2004) was used and applied consistent with the slight modifications suggested by Huotilainen et al. (2006). Only the dimensions relevant to organic food were applied, i.e., the two of the five dimensions of the scale of the Social Representation – i.e., adherence to technology and natural food. A total of 18 items were adopted in this study, and they included: "New foods are useful", "I believe in the potential of new food technology", and "I value naturalness in everything", among others. The original scale shows that these two dimensions of adherence to technology and dedication to natural food were deemed to be reliable, with Cronbach's alpha values of 0.80 and 0.81, respectively (Huotilainen et al., 2006). These dimensions also recorded a high validity value (i.e., 0.61 by Onwezen & Bartels, 2013), making them applicable to this study.

The variable Social Influence consisted of five items based on Han et al. (2010) and Kinard (2016). Items or statements included "I would buy organic food because I think others will approve it" and "I use social media sites to get ideas for my meals", among others. The

Cronbach's alpha value for this construct was 0.78 (social media) and 0.84 for social media usage (Hoogstins, 2017). These items were also valid, with AVE values above 0.5 (Hoogstins, 2017).

The Perceived Value construct measured whether respondents identify organic food as valuable or not in light of competing traditional foodstuffs. The items for this construct were adapted from De Toni et al. (2018), which were taken from Zielke (2010) and De Toni & Mazzon (2013). Items for this variable included, for example, "The money that I spend on organic food is well spent" and "I believe that organic foods have higher nutritional value", among others. The Cronbach's alpha was found to be 0.848 and composite reliability = 0.851, while AVE was found to be 0.59 (De Toni, 2018).

Attitude was measured through a 12-item scale adapted from Yi (2009). The items included, for example, "I trust organic foods", "Organics are supreme foods", and "Adoption of organic foods represents higher social status", among others. Cronbach's alpha values from previous researchers ranged from 0.77 to 0.85 (Lian, Safari & Mansori, 2016) and these items recorded an AVE value of >0.50 (Lian et al., 2016).

Domain-specific innovativeness was measured using a 6-item scale adapted from Goldsmith and Hofacker (1991). Sample items included: ''If I heard that a new organic food was available in my grocery store, I would be interested enough to buy it", and ''I know more about new organic food products than other people do". Scale reliability was good. Cronbach's alpha ranged from 0.76 to 0.82, while AVE values also met the minimum threshold of 0.5 (Ladeira, Santini, Araujo & Sampaio, 2016; Jeong et al., 2017).

Appendix I presents the participant information letter and consent form, while this study's questionnaire is available in Appendix II.

4.5.10. Ethical Considerations

Morality in scientific research entails the researcher's understanding of welfare (i.e., avoiding harm while endorsing good values) and consideration of the rights of participants. In the same manner, the veracity of the research process, together with the accountability of the investigator to the ethical conduct of the research process, is indispensable (Conroy & Smith, 2017; Kvale, 1996; Resnik, 2018). Ethical issues in an empirical investigation entail the assumption that participants uphold the integrity of the research process in addition to the researcher's accountability to the moral behaviour of the research practice (Burles & Bally, 2018; Kvale,

1996). Previous scholars identified four imperative ethical principles in research, which insists on informed consent, privacy and confidentiality while avoiding deception and causing harm to participants (Bryman & Bell, 2011).

In the conduct of this empirical inquiry, the four imperative ethical standards were strictly adhered to, and the ethical deliberations highlighted by Diener and Crandall (cited in Bryman & Bell, 2011). Also, the ethical procedures specified by the Wits Ethics Committee (Non-Medical) were strongly observed. The identity of research participants was protected by not requiring respondents to disclose any identifying information when completing the questionnaire. Research participants were requested to show their consent to participating through signing with an "X" or a tick, and after completing the questionnaire, the data received was treated with the utmost confidentiality. Also, respondents were informed of their rights to withdraw from partaking in the survey at any time with no fear of any penalties or prejudice (see participant information letter in Appendix I).

Before the commencement of data collection, institutional authorisation was obtained from Witwatersrand University Ethics Committee (Non-Medical). Approval was granted by the designated committee – Protocol Number: H18/09/19 (see Appendix III). This authorisation was a University requirement to safeguard participants, the researcher, and the University against any unethical conduct in the research process and the likely litigation in future.

4.6. Data Collection Procedure

Once the research instrument was ready, and the necessary authorisation from the ethics committee was granted, this study collected primary data. Raw data gathering on variables of interest was conducted in an established and systematic manner that drew this study closer to test hypotheses, evaluate outcomes and answer the stated research questions. All this was done to fulfil the primary purpose of this study.

Before respondents completed the electronic questionnaire, an email was sent requesting their participation in the study. This email had a link to the online questionnaire that was created and kept on Bateleur's web server. Participants were asked to click on the link, which then unlocked the web form of the questionnaire. When completing the necessary fields, respondents were asked to tick the relevant electronic box and move on to the next question. The electronic inquiry form was created so that participants were able to provide only one answer per item. Participants were supposed to respond to all the statements before moving to subsequent

sections until the end of the questionnaire. Therefore, the responses utilised in this study were from respondents who had successfully finished all the sections.

In light of pen and paper-based surveys, the researcher physically administered questionnaires to respondents in different malls around Gauteng, i.e., mall-intercept surveys. The researcher got authorisation from the mall management before distributing the questionnaires to potential respondents. Also, Covid 19 protocols were firmly adhered to avoid rendering this study useless (i.e., if the researcher was arrested for breaking Covid 19 rules).

Primary data was gathered through structured questionnaires that allowed for statistical manipulation. Upon concluding this process, 385 valid responses were collected and subjected to numerical analysis.

4.6.1. The Applicability to Internet-based Survey through Emailing

Sampling for Internet-based surveys through a list-based sampling frame was applied to this study because Millennials are presumed to be Internet-savvy and do most of their activities online – i.e., they have an 'Internet addiction' (Bolton, Parasuraman, Hoefnagels, Migchels, Kabadayi, Gruber, Loureiro, Solnet, 2013). In addition, distributing questionnaires through emails was deemed to be a convenient and less expensive way to administer the survey to potential respondents. Thus, this study maximised data accuracy while minimising costs and barriers to surveying the entire population by using the survey method (Ponto, 2015).

The online survey questionnaire was completed by 213 participants, whereas the remaining 172 responses were garnered through the pen and paper-based format. Raw data collected from the web survey was downloaded in Microsoft Excel format (already coded), while the pen and paper-based responses had to be individually edited and coded. Likert scales were used as pre-codes (codes ranged from 1-7), making the questionnaire to be already coded before distribution. The responses from the paper-based survey questionnaire were manually inputted on Microsoft Excel, after that, edited and merged with the online version of the survey responses.

4.6.2. Sampling Frame and Coverage Challenges

E-mail is valuable as a contact mode only if a list of e-mail addresses is available as such a list becomes the actual sampling frame from which the sample can be drawn (Mäkelä & Huhtanen, 2010). In light of the millennial database used, it was difficult for the researcher to confirm whether the list of e-mail addresses that existed was exhaustive, i.e., whether or not it was representative of the entire population. In terms of coverage, it is usually accepted that Internet-based surveys do not generalise to the population. Therefore, the population of inference is often quite restricted when using e-mail addresses as the list is generally the sampling frame itself (Mäkelä & Huhtanen, 2010). That is why this study supplemented the online survey method with the mall-intercept survey method to try to bridge this gap. Furthermore, although the Internet continues to penetrate other families, the penetration is far from widespread (compared to, for example, mobile phones) and varies widely across the country (Tourangeau, 2018). In addition to this problem, web surveys generally report relatively low to moderate response rates (Fricker, Galesic, Tourangeau & Yan, 2005).

Moreover, just because Bateleur keeps a list of e-mail addresses for Millennials does not necessarily mean that every Millennial on the list had equal access (hence non-probability sampling) and knows about organic food. This lack of equal access and lack of awareness about organic foodstuffs may have resulted in non-response biases. Also, web-based survey-recruitment issues may include, for example, distributing unsolicited survey emails as spam. Sometimes individuals who receive the solicitation e-mail censure researchers for sending out unsolicited e-mails and accuse them of "spamming" (Dillam, Smyth & Christian, 2009; Kulzy & Fricker, 2015). Finally, a generic challenge was that the target population was the assumption that computer-literate individuals have easy and regular access to the Internet to facilitate their response to the survey, and this supposition may have been absolutely true.

Notwithstanding the challenges detailed above, Couper (2000), however, referred to email surveys as 'list-based samples of high-coverage populations'. To improve response rates for this study's Internet-based survey, the researcher ensured that Bateleur set, at most, two automatic follow-up messages or reminders to ensure that the respondents saw and were reminded of the invitation. Therefore, regarding sampling for the Internet-based e-mail surveys, what was relevant to the researcher was that the sampling methodology was supposed to be driven by the contact mode and not the response mode.

4.6.3. Missing Values

More often than not, multivariate datasets have missing values, which may be due to the respondents' unwillingness to respond to a specific statement on the survey questionnaire (Curley, Krause, Feiock & Hawkins, 2019). In pen and paper-based surveys, the respondent may have unconsciously missed certain items, resulting in the submission of an incomplete questionnaire. Therefore, the issue of missing values is a widespread occurrence, predominantly when self-reporting instruments are used. Accordingly, this study was not immune from the problem of missing values. This necessitated that this problem was supposed to be addressed before continuing with any analysis (Lin & Tsai, 2020).

Choosing the most appropriate way of handling missing values is never an easy task, as different approaches necessitate certain assumptions about the nature of the data (Pigott, 2001). The other problem is that when conducting pen and paper-based surveys, the reasons for the omitted values are not openly observable throughout the data collection phase. Therefore, the customary way of dealing with missing values is through list-wise deletion to create a dataset containing only the complete datasets (Kellermann, 2018; Spangenberg & Theron, 2004). However, the difficulty surrounding this approach is that, owing to the extent of the research problem and the length of the survey, the sample size may have ended up being significantly reduced, making it impossible to generate meaningful statistical analysis.

This study explored (and applied with caution) the possibility of using imputation to circumvent or solve the problem of having a diminished dataset due to the effect of missing values (Grund, Ludtke & Robitzsch, 2016). Imputation was done (by assigning values to the missing items, as suggested by Lohr (1999) and Little and Rubin (2000). These substitute values were derived from one or more other cases that had the same response pattern over a set of identical constructs (Jöreskog & Sörbom, 1996). Multiple imputations were used as they reflected the uncertainty of estimates while at the same time providing plausible values. According to Jöreskog and Sörbom (1996), the PRELIS software must be used to impute missing values as this proved to be an effective solution. However, this study did not utilise this software but instead used manual imputation. By conducting several imputations for missing values, the researcher arguably managed to correct bias (Raghunathan, 2004). However, this meant that even though this imputation method was considered reasonably robust, the model used to make these imputations became approximately true (Schafer, 1999). Finally, it is worth noting that the issue of missing values only applied to pen and paper-based

surveys as the online surveys restricted respondents from going onto the following statement before responding to the current one. This means that imputation only applied to surveys that the researcher physically administered through mall-intercepts.

After combining the online (self-administered) and the pen and paper-based (researcher-administered) responses as well as accounting for the missing values and making other necessary edits, the data was ready to be first imported to SPSS 27 (for descriptive analysis) and finally to Amos 27 (for inferential analysis).

4.7. Chapter Summary

This chapter provided an outline and rationalisation of the methodology that was adopted in this study. First, an overview of the philosophical underpinning of this study was provided. Objective ontology and positivist epistemology were philosophical assumptions that underpinned this study, resulting in this study choosing a quantitative approach. A discussion on the rationale for the research design was also provided. This chapter further justified why a survey method was adopted in light of the chosen sampling method. Ethical issues relating to this study were exposed, and the chapter concluded by providing an overview of the data collection methods that were used.

The following section discusses the analytic procedure used to systematically and logically apply the statistical techniques to describe, illustrate, condense, and evaluate the raw data. `

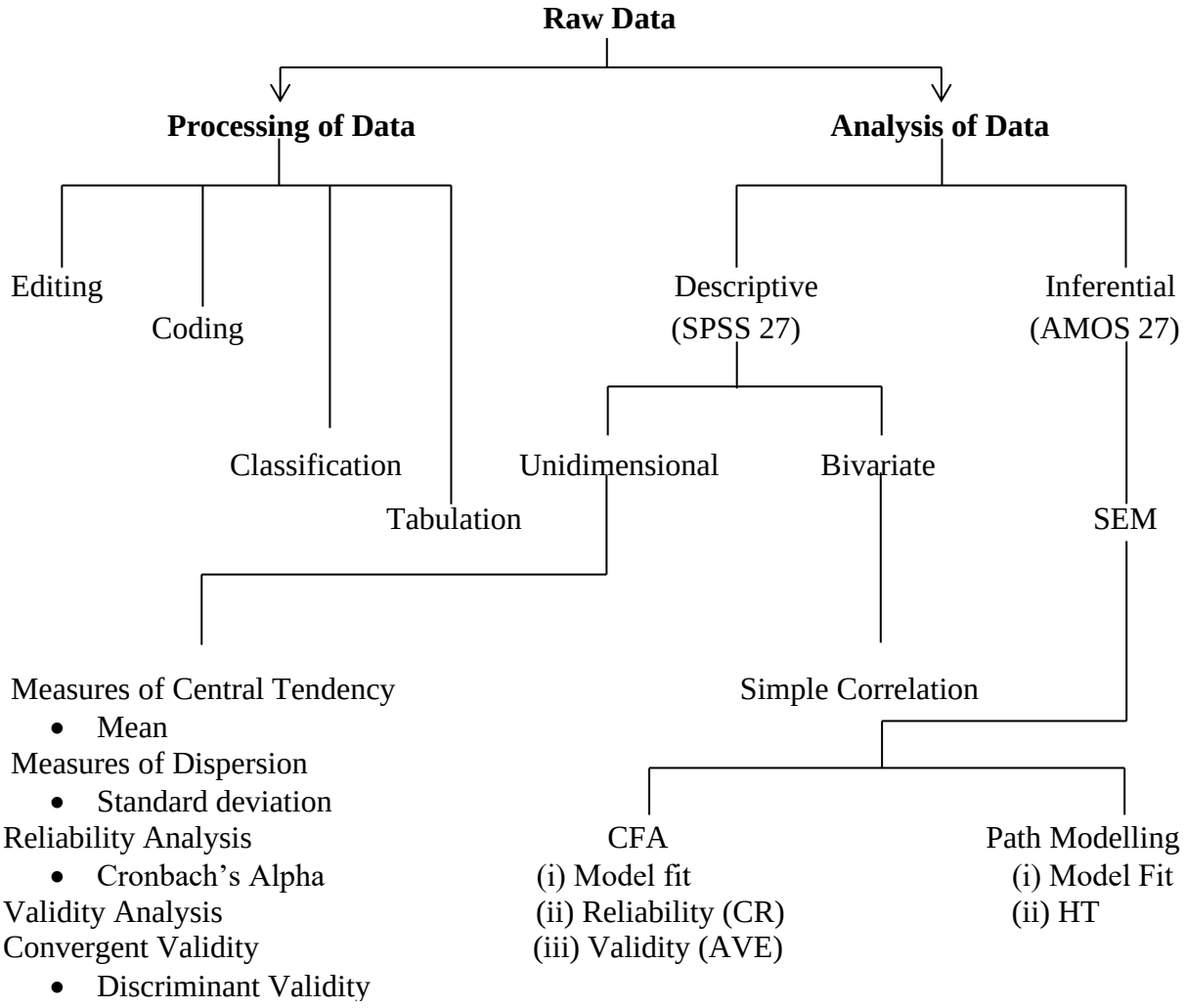
CHAPTER 5

DATA ANALYSIS PROCEDURE

5.0. Introduction

The chosen data analysis technique largely dependent on the research questions this study sought to answer. Consistent with Hair, Black, Babin, Anderson and Tatham (2010), data analysis methods should centre on relationships, significance, and structure. Furthermore, data analysis is a statistical procedure that reduces large amounts of collected data to eventually make sense of that data (Singh & Singh, 2015). Moreover, it includes applying reasoning to comprehend and construe the collected data (Zikmund et al., 2010). Hitherto, it was stated that the research questions guided tseveral hypotheses, with each supposition focussing on a particular purpose related to scientific research. Thus the primary data that was gathered in this study was analysed through off-the-field quantitative techniques. The subsequent sections explicate the different data analysis methods that were used for several tests. These computations included, among others, item analysis, Pearson correlation analysis, and structural equation modelling, through maximum likelihood estimation, e.g., Path Modelling.

Figure 5.1: Processing and Analysis of Gathered Data



*Note: SEM = Structural Equation Modelling; CFA = Confirmatory Factor Analysis; CR = Composite Reliability; AVE = Average Variance Extracted; HT = Hypotheses Testing

After the raw data was collected, it was first processed and then analysed according to the outline laid down in the research plan. Data processing entailed the following: editing, coding, classification and tabulation of raw data. This process collapsed the haphazard data into homogenous groups, preparing it for further analysis (Khothari, 2004). The coded and edited data was first imported to SPSS 27 statistical software for descriptive analysis before being imported to Amos 27 for further inferential analysis – i.e., for Structural Equation Modelling. Descriptive statistics entailed the computation of the mean and standard deviation, reliability (Cronbach's alpha) and validity (discriminant validity) and the correlation matrix, while inferential statistics included modelling the structural paths of the hypothesised model. Under Structural Equation Modelling, Confirmatory Factor Analysis was the initial step (whereby model fit, Composite Reliability and Average Variance Extracted values for each construct were computed). Path modelling became the final step of the analyses, resulting in either rejecting or failing to reject (i.e., accepting) the previously stated hypotheses (see chapter 3).

5.1. Descriptive Statistics

In this study, descriptive statistics were used to describe the elementary features of the data. Through descriptive statistics, the large amounts of data were simplified or summarised in a sensible way (Theron, Spangenberg & Henning, 2004).

5.1.1. Item Analysis

Item analysis was done to determine measurement reliability and ascertain items within scales that did not sufficiently represent a specific latent variable (Theron et al., 2004). Item-to-total analysis helped identify 'poor' items that failed to distinguish between different states of the latent variable. Consistent with Theron et al. (2004), the removal of poor items was then considered.

5.1.2. Reliability

The computation of coefficient alphas was done to determine the reliability of measuring scales based on their internal consistency. Nunnally (1978) indicated that a measurement instrument is reliable to the extent that it consistently provides similar results, irrespective of any prospects for variation that may happen. This study calculated coefficient alphas to determine the reliability of these scales based on their internal consistency.

5.1.2 i) Cronbach's Alpha (α)

A good study should engender reliable results. Cronbach's α, as an index of reliability, is a traditional measure of internal consistency for constructs or measurement instruments (Tavakol & Dennick, 2011). The size of the reliability coefficient was based on both the number of items and the average correlation between them, i.e., internal consistency (Nunnally, 1978). Cronbach's alpha values range from 0 – 1, and the proximity these values are to 1, the greater the internal consistency of the items in the scale. However, according to Byrne (2006), Cronbach (1951), as well as Hair et al. (2007), items with a Cronbach alpha of 0.7 are acceptable. Therefore, every scale underwent an item analysis to identify and perhaps remove the poor items that did not adequately contribute to the internal consistency of items. Thus, the item-to-total correlations of all scales was determined to ensure that all the measuring instruments were internally consistent. Nunnally (1978) suggested that 0.20 is satisfactory; thus, the items that contributed less than 0.20 to the internal consistency of the construct qualified for possible elimination.

The following guidelines, as put forward by Streiner (2003) and later supported by Tavakol and Dennick (2011), were applied in this study when interpreting reliability coefficients:

$\alpha > 0.9$ = Excellent
$0.7 \leq \alpha < 0.9$ = Acceptable
$0.6 \leq \alpha < 0.7$ = Marginally Acceptable
$0.5 \leq \alpha < 0.6$ = Poor
$\alpha < 0.5$ = Unacceptable
} Could have limited applicability

5.1.3. Validity

As the literature suggests, reliability and validity are closely related but have different meanings. A measure can be reliable without being valid; however, a valid measurement is usually also reliable (Tavakol & Dennick, 2011), and hence it became necessary for this study to test validity separately. While reliability is about the consistency of the measure, validity is about the accuracy of the measure. Validity is a fundamental criterion that specifies the degree to which an instrument measures what it is supposed to measure (Hair et al., 1998). There are different typologies of the computing validity of a measure, but this study only concentrated on discriminant and convergent validity.

5.1.3. i) Divergent or Discriminant Validity

Discriminant validity implies the uniqueness of different constructs (Guo, Aveyard, Fielding & Sutton, 2008). Explicitly, discriminant validity is the extent to which measures of other variables diverge or minimally correlate with one another (Guo et al., 2008). Under descriptive statistics, discriminant validity was established by observing the coefficients in the correlation matrix and through the comparison method.

5.1.3 ii) Bivariate Correlation: The Magnitude of the Relationship among Variables

Pearson correlation coefficients (r) were calculated to measure how the direct (i.e., bivariate) relationships correlated with other constructs. Coefficients of determination (r^2) were also computed if the correlation coefficient was deemed to be significant. Coefficients of determination specify the proportion of shared variance between the different variables that correlate with each other (Tabachnic & Fidell, 2001). In light of this study, the correlations were construed in respect of the actual size of Pearson's r and the amount of shared variance between variables. Moreover, correlation coefficients were evaluated regarding their 'effect size' or practical significance instead of their statistical significance (Bosco, Aguinis, Singh, Field & Pierce, 2015). As it was implausible to draw inferences from the findings of this study, since a non-probability sampling procedure was applied (Steyn, 2002), effect sizes became an alternative option. In light of this study, a minimum cut-off point of 0.30, previously termed as a medium effect by Cohen, 1988, was established for the practical significance of correlation coefficients. This figure was slightly higher than the 0.20 recommended by Guilford (as cited in Tredoux & Durrheim, 2002). The following thresholds were used as a helpful guide when interpreting the strength of the correlations between the study variables.

Table 5.1: Guilford's Interpretations of the Magnitude of Correlations

Value of r (+ or -)	Interpretation
< 0.2	Slight; virtually no relationship
0.2 – 0.4	Low correlation; definite but minor relationship
0.4 – 0.7	Moderate correlation; substantial relationship
0.7 – 0.9	High correlation; strong relationship
0.9 – 1.0	Very high correlation; can indicate the problem of multicollinearity

Source: Tredoux & Durrheim (2002) Hair et al. (2007)

5.2. Inferential Statistics: Measuring the Structural Element of SEM through AMOS

Data analysis also used statistical inference to deduce properties of the underlying probability distributions (Dangi, Kaur & Jham, 2019). For example, statistical inference was depicted in this study through testing hypotheses and deriving estimates. Structural Equation Modelling was used to evaluate the structural model, though the 'hard' modelling approach to SEM. This complex modelling approach to SEM involves the use of the Maximum Likelihood Estimation (MLE) on Amos 27 while the soft modelling approach makes use of Partial Least Squares (PLS) (Henseler, Ringle & Sinkovics, 2009). The justification for choosing the MLE approach to SEM is explicated in section 5.4 below. This study followed the two-step process suggested by Anderson and Gerbing (1988), i.e., by first conducting Confirmatory Factor Analysis (computing Composite Reliability values, Average Variance Extracted figures, model fit values) before landing on the final step – Path Modelling results (rechecking model fit and finally testing the hypothesized relationships).

5.3. Structural Equation Modelling

SEM or covariance structure modelling is a powerful and versatile multivariate statistical technique that combines factor analysis and regression or path models with latent variables (Anderson & Gerbing, 1988; Dangi et al., 2019; Hox & Bechger, 1998). The structural equation model denotes a structure for the covariances between the observed variables (Ullman & Bentler, 2003; Mueller & Hancock, 2018). However, the model can be extended to include other observed variables or factors, making covariance structure modelling a less accurate name. A graphical path diagram often visualises structural equation models. Using SEM allowed the researcher to specify confirmatory factor analysis, regression, and intricate path models simultaneously. The latent factors represented theoretical constructs, while regression or path coefficients represented the links between the theoretical constructs (Marcoulides & Schumacker, 1996). Nowadays, structural equation models need not be linear, and the likelihoods of SEM extending well beyond the original Lisrel program suggested by Jöreskog (1969) became evident, with Browne (1993), for instance, the discussion on the possibility to fit nonlinear curves. Hence, instead of Lisrel, Amos 27 software was used to compute the necessary values, like the standardized regression weights or simply estimates.

As SEM was used, the covariance matrix was analysed and not the correlation matrix (Bollen, 1989, Loehlin, 1998). Amos 27 software produced standardized estimates, which were used for interpretation. The capacity of SEM to generate a meaningful identification of the correlations between factors was its key strength.

5.4. Motivation for Using MLE Modelling

The likelihood function is a method that quantifies the discrepancies between observed and model-implied parameters while assuming normal distribution (Datsiou & Overend, 2018). The Maximum Likelihood Estimation method constitutes a principle of estimation that can be applied to several statistical problems and used to measure the adequacy of a structural equation model. When the assumptions (on which this method is based) are fulfilled, estimates tend to have optimal properties. As mentioned above, the most commonly used method to estimate parameters in Confirmatory Factor Analysis is the MLE method because it has attractive statistical properties like normality, asymptotic unbiasedness, consistency and maximal efficiency (Jöreskog, 1969). Maximum likelihood estimation through Amos 27 was chosen because it tends to produce reasonable estimates in most cases (Chou & Bentler, 1995; Etz, 2018; Jöreskog, 1969), but larger sample sizes are needed typically at least 250 cases.

5.4.1. Confirmatory Factor Analysis

Confirmatory Factor Analysis is a measurement model used for evaluating the associations between manifest and latent variables (Boichat, Eccleston & Keogh, 2018; Teo & Khine, 2009). In addition, confirmatory factor analysis was used in this study to assess the measurement component of the projected structural model. It became the first phase of SEM, and it included the computation of model fit, reliability (CR values) and validity (AVE values). Under Confirmatory Factor Analysis, CR and AVE values were calculated using standardized regression weights or estimated by applying the formula below that was put forward by Fornell and Larcker (1981). All the estimates used to calculate CR and AVE must converge well with each other, i.e., they must be 0.5 or higher as suggested by Fornell and Larcker (1981).

5.4.1 i) Reliability

A study's measurement model must be evaluated regarding reliability and validity (Henseler, Ringle & Sinkovics, 2009). In most cases, the first criterion to be determined is the internal consistency or reliability coefficients. The usual criterion for internal consistency under descriptive statistics is Cronbach's Alpha, which estimates reliability based on the inter-correlations (Cronbach, 1951). While alpha coefficients presupposes that all indicators are equally reliable, the MLE method prioritises indicators based on their reliability, thus yielding a more reliable composite (Jöreskog & Sörbom, 1996). Moreover, composite reliability considers indicators with different loadings and can be construed similarly as Cronbach's alpha. Regardless of which specific reliability coefficient is utilised, the acceptable internal consistency or reliability value must be at least 0.70 (Nunnally & Bernstein, 1994).

The following formula, suggested by Fornell and Larcker (1981), was applied to calculate the CR values:

$$CR\eta = (\Sigma\lambda yi)^2 / [(\Sigma\lambda yi)^2 + (\Sigma\varepsilon i)]$$

Where $CR\eta$ = Composite reliability,

$(\Sigma\lambda yi)^2$ = Square of the sum of the standardized regression weights,

$(\Sigma\varepsilon i)$ = Sum of error variances.

The following section explains how the study constructs accurately measured what they were supposed to measure. Thus, the high validity of constructs meant that these constructs corresponded well to their real properties, characteristics, as well as variations that exist in the physical world.

5.4.1 ii) Validity

This study's endogenous and exogenous constructs were validated through confirmatory factor analysis (i.e., using estimates to calculate AVE values by applying Fornell & Larcker (1981)'s formula). Validity was established through the computation of convergent validity, which , measures the degree to which the studied constructs were theoretically related (Henseler et al., 2009; Kline, 2011). As above-mentioned, this study used AVE values as a convergent validity criterion (Fornell & Larcker, 1981). An AVE value of at least 0.50 showed sufficient convergent validity, implying that, on average, the latent variable explained more than half of

the variance of its indicators (Götz, Liehr-Gobbers, & Krafft, 2010). The following formula was used to compute the AVE values (as suggested by Fornell & Larcker, 1981):

$$V\eta=\Sigma\lambda yi2/(\Sigma\lambda yi2+\Sigma\varepsilon i)$$

where:

$V\eta$ = Average Variance Extracted (AVE),

$\Sigma\lambda yi^2$ = Sum of the squared correlation coefficients,

$\Sigma\varepsilon i$ = Sum of error variances.

After the CR and AVE values were computed, the following thresholds were applied when assessing the existence of reliability and validity for the study's constructs:

Table 5.2: Criterions and their Thresholds

Criterion	**Threshold**
Composite Reliability (CR)	CR is a reliability measure and must be at least 0.7
Average Variance Extracted (AVE)	AVE is a validity measure and must be higher than 0.50

Source: This study - thresholds adapted from Fornell and Larcker (1981)

5.4.1. iii) Model Fit Indices

Modern SEM software computes an array of model fit indices. Statistical tests for model fit have an issue in that their power is largely dependent on the sample size. These tests tend to be significant if the sample is large enough (Hooper, Coughlan & Mullen, 2008). However, the problem is that the model can be rejected, even if it actually describes or fit the data very well.

Model fitting involves determining how well the data fits the conceptualised model (Khine et al., 2013). According to Hair et al. (2006), these fit indices relate to the validity of the measurement model. Model fit also entails making a comparison between the hypothesised covariance model (i.e., from the specified model) with the sample covariance matrix (i.e., from the obtained data) (Khine et al., 2013; Kline, 1998). Thus, the overall model valuation sought to warrant that the model was an acceptable exemplification of the broad set of casual interactions and the gathered raw or primary data, i.e., the model must fit the collected data.

This study used the following indices and their thresholds for overall model valuation:

- Chi-square value (<3)
- Comparative Fit Index (CFI): (> 0.900)
- Goodness of Fit Index (GFI): (> 0.900)
- Incremental Fit Index (IFI): (> 0.900)
- Normed Fit Index (NFI): (> 0.900)
- Tucker Lewis Index (TLI): (> 0.900)
- Root Measure of Standard Error Approximation (RMSEA): (< 0.08)

5.4.1 iv) Modification Indices

If the model provides an inadequate fit, it has become a practice to adjust it by removing non-significant parameters and, at times, adding parameters that eventually improve the fit. Amos 27 statistical software made it possible to use modification indices to improve the overall model fit for each fixed parameter (Kang & Ahn, 2020; Karakaya-Ozyer & Aksu-Dunya, 2018). Since there is a theoretical justification for applying modification indices to improve model fit, this study used these indices to effectively make the collected data fit the conceptualised model

After establishing that the model well-fitted the data and the constructs were reliable and valid, path modelling was then performed to conclude SEM's two-step analysis process.

5.4.2. Path Modelling

Path analysis applies structural equation modelling without the latent variables by including causal relationships between variables in one structural model (Mueller & Hancock, 2019). The hypothetical model in path analysis involves observable or manifest (dependent or endogenous) variables and unobservable or latent (independent or exogenous) variables (Martynova, West & Liu, 2018). Path analysis seeks to understand the regressions predicting well-articulated hypotheses. while explaining the variation within the specified structural model (Khine et al., 2013). The focus in path analysis is often on the decision about the entire model, i.e., whether to reject, modify or fail to reject the model.

5.4.2 i) Model Fit

Model fit was re-calculated (the same way as above but using estimates from path modelling analysis output), and results were checked against those found under CFA. Hypothesis testing became the final analysis step once the researcher confirmed that the model indeed fitted the data.

5.4.2. ii) Hypotheses Testing

In the interest of providing answers to the research questions developed specifically for this study, eight hypotheses were formulated and were subjected to statistical testing in the next chapter. In addition to these eight main hypotheses, two more hypotheses sought to establish the relationships on the role of the moderating variable, while two more hypotheses tested the moderated mediation effect. Therefore, in total, this study sought to test twelve hypotheses. As suggested by Viswanathan, Kayande, Baggozzi, Rieithmuller and Cheung (2017), the hypotheses of this study were:

- the operational instruments of theory,
- to be verified and presented as perhaps true or false, and
- great tools for knowledge advancement

Extant literature (i.e., Kerlinger & Lee, 2000) suggests that there are two primary criterions for good hypotheses:

(i) proposition statements relating to the associations between variables, and
(ii) statements that carry rich implications with a proper justification for testing

It was only after path modelling (i.e., after hypotheses testing) was completed that it became possible to either reject or fail to reject the proposed hypotheses. Therefore, hypothesis testing was used to determine whether the previously stated claims were supported (i.e., fail to reject) or were not supported (i.e., reject) (Khothari, 2004). Modifications were also made to the conceptual framework (in light of the study findings), thus presenting the final best-fit and verified conceptual model.

5.4.2 iii) The Level of Significance

In light of this study and consistent with the outputs from Amos 27 statistical software, α levels (i.e. p-values) were represented in terms of stars as follows:

******* = 99% confidence level (or 1% level of significance)

****** = 95% confidence level (or 5% level of significance)

***** = 90% confidence level (or 10% level of significance)

No star = Non-significant

5.5. Critiques on SEM

Most critiques that have been raised against the use of SEM revolve around two issues.

i). the prominence of statistical assumptions, e.g., normality assumption that requires vast sample sizes

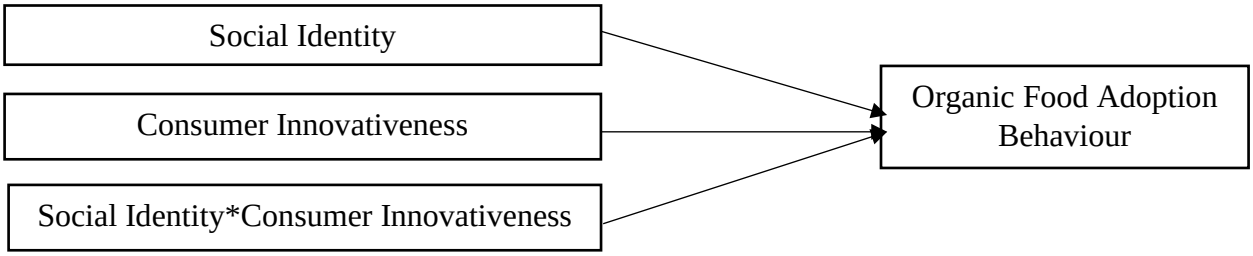
ii). the issue of causal interpretation, i.e., the assumption that the phenomenon is explained by finding the cause of a phenomenon (Dangi et al., 2019).

Even though many SEM applications interpret the final model as a causal model, there is, however, nothing in structural equation modelling that alters correlational data into causal conclusions (Dangi et al., 2019; Dolan, Bechger & Molenaar, 1999; Hox & Bechger, 1998 Tomarken & Waller, 2005). This is because Cliff (1983) submitted that some fallacies result from the causal interpretation of correlational data. Cliff (1983) further argued that even though the SEM model might fit the data, this does not automatically prove that such a model is valid.

5.6. Moderation Analysis

The impact of the independent variable on the dependent variable was also established in the presence of the moderation variable. Therefore, an interaction variable was added to account for the moderation effect (i.e., Social Identity*Consumer Innovativeness in Figure 5.2 below). Social IdentityConsumer Innovativeness This study used Hayes' PROCESS Procedure for SPSS Version 4.0 to compute moderation effects.

Figure 5.2: Interaction Variable



*Note: *Moderated mediation analysis will follow a similar process. The difference will be the addition of the mediating effect (both as a variable and interaction factor)*

This study used the following checklist to determine how the moderating variable was able to moderate between the independent and the dependent variable:

Table 5.3: Moderation Analysis

Independent Variable	Moderation Variable	Interaction Variable	Moderation Effect
Significant	Significant	Significant	Moderation Effect Exists
Significant	Significant	Non-significant	No Moderation Effect
Significant	Non-significant	Non-significant	No Moderation Effect
Non-significant	Significant	Significant	Moderation Effect Exists

Source: Arbuckle and Wothke (2004).

In light of Table 5.3 above, the moderation effect would only exist if the independent moderation and interaction yield significant results. But, again, the moderation effect will only exist if the moderation and interaction variable deliver significant results. Therefore, where the interaction variable is non-significant or if the moderation and interaction variables are non-significant, this study will conclude that the moderation effect does not exist (Aguinis et al., 2016; Farooq & Vij, 2017).

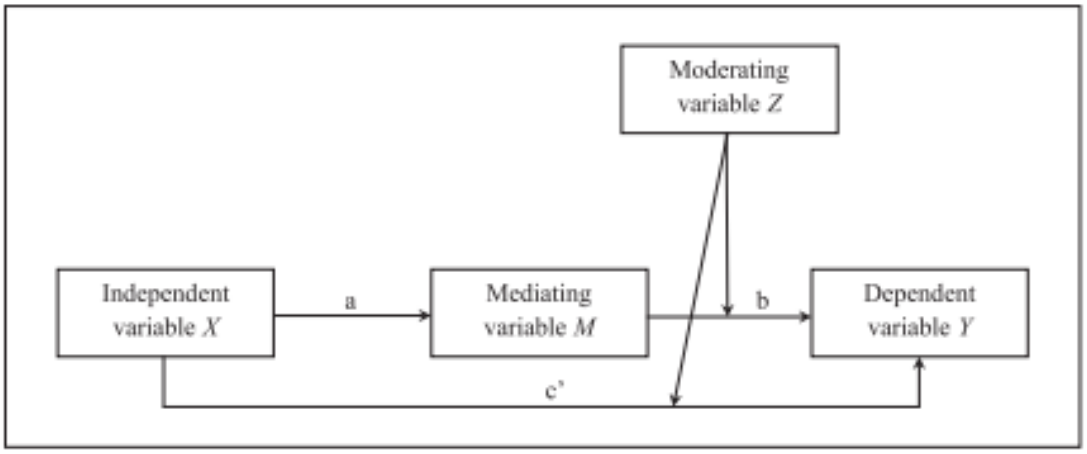
5.7. Moderated Mediation Analysis

The methodological style used to test the multiple effects of the moderated mediation effects (conditional indirect effects) indicated the presence, in a single structural model, the presence of both mediating and moderating (Borau, El-Akremi, Elgaaied-Gambier, Hamdi-Kidar & Ranchoux, 2015; Hayes & Preacher, 2013). This meant that the moderating effect of Consumer Innovativeness was transmitted via the mediating variable of Perceived Value. Thus, moderated mediation analysis was essentially an addition of the mediating variable to the moderation analysismodel.

Figure 5.3 below depicts a sample model that displays the moderated mediation relationships.

Note: The analysis of moderated mediation was conducted interpreted the same way as the moderation analysis and interpretation (see section 5.6 above).

Figure 5.3: A Sample Model of Moderated Mediation



Source Borau et al (2015)

In light of Figure 5.3, the independent variable (e.g., Social Influence) will be modelled against the mediating variable (Perceived Value) in predicting the outcome variable (Adoption Behaviour) through the presence of the moderating variable (Consumer Innovativeness).

5.8. Chapter Summary

This chapter discussed the methods that were employed for data analysis, and it explicitly stated that the analysis procedure was divided into two distinct parts, i.e., descriptive and inferential analyses. Descriptive statistics were analysed primarily through the utilisation of SPSS 27 to compute aspects like the mean, standard deviation, alpha coefficents, and the correlation matrix, among others. This chapter further explained how reliability and validity were computed and discussed the techniques used in evaluating the theoretical model that portrayed the associations between the study constructs, i.e., SEM through Amos 27 and, in particular, the Maximum Likelihood Estimation. SEM in this study was divided into two distinct parts, i.e., Confirmatory Factor Analysis (computation of Composite Reliability, Average Variance Extracted and model fit) and Path Modelling (computation of Model fit and finally hypotheses testing).

The next chapter presents the results from data analyses conducted by applying the procedure explicated in this chapter. More emphasis was placed on:

- presenting the factor structure of each of the measured variables,
- mathematically recounting and presenting the relationships between the measured variables (with particular emphasis being placed on Pearson's correlation),
- presenting the statistically modelled relationships between the variables under study (i.e. SEM, through Amos 27 via the MLE approach).
- presenting statisctial results for moderation and moderated mediation through Hayes' PROCESS Procedure for SPSS Version 4.0.

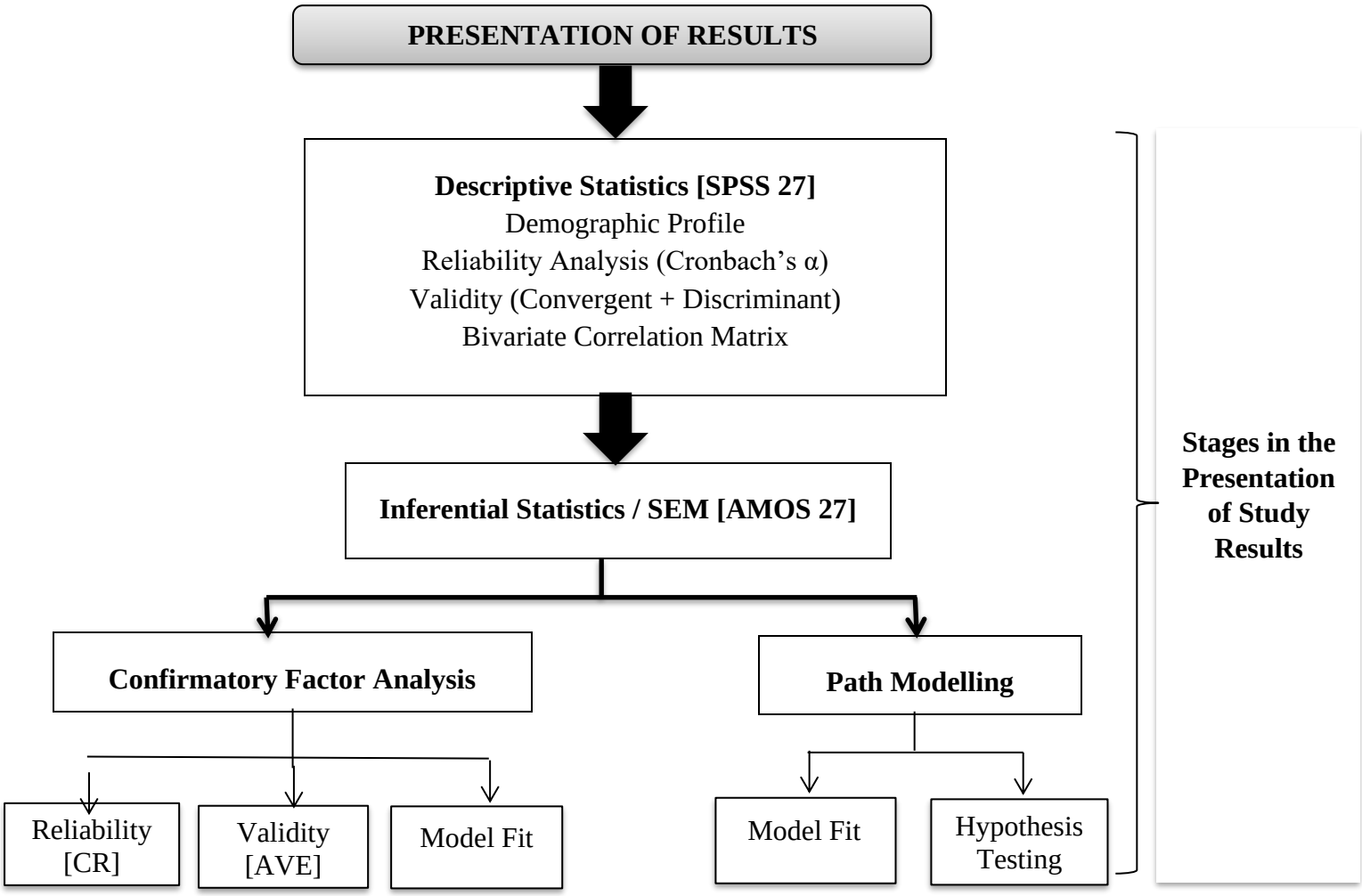
CHAPTER 6

PRESENTATION OF STUDY RESULTS

6.0. Introduction

This chapter presents the study findings from statistical analyses (both descriptive and inferential statistics). Descriptive analysis results will be presented before the findings from the inferential analysis. Results from descriptive statistics through SPSS 27 formed part of the initial presentation stage (i.e., demographic profile results, mean, standard deviation, Cronbach's alpha coefficients and the bivariate correlation matrix results). Then, a two-step process suggested by Anderson and Gerbing (1988) was introduced by presenting the results from Confirmatory Factor Analysis (i.e., Composite Reliability, Average Variance Extracted and model fit) while the last step presented Path Modelling results (i.e., model fit and hypothesis testing). The following figure provides a vivid outline of this chapter.

Figure 6.1: Format for the Presentation and Discussion of Results



Source: This Study

6.1. Descriptive Analysis

The raw data gathered through a survey questionnaire (i.e., online and mall-intercept data collection methods) was quantitatively analysed using appropriate statistical tools. Descriptive analysis inevitably became the preliminary translation stage of raw data into summary statistics by computing the response rate, frequencies, mean and standard deviation (Zikmund *et al.*, 2010). Therefore, in this study, descriptive statistics were used to summarise raw data into meaningful information.

6.1.1. Response Rate

The quality of the survey was determined through the computation of the response rate. Owing to a satisfactory participation rate, the response rate for this study was expected to be reasonable. From the total number of the participants that were approached or emailed (i.e., 587 potential respondents), 463 of them participated in this study. In terms of the online survey, 93 respondents did not respond, while 31 respondents from mall intercepts refused to participate. Therefore, this translated to a response rate of 78.9%. This value was deemed satisfactory as it was consistent with the suggestion by Sturgis, Smith and Hughes (2006) that response rates above 60% are reasonable to assume sample representativeness and quality in cross-sectional studies. From the 463 responses gathered, 78 were discarded due to incomplete responses, non-response – i.e., the grossly incomplete questionnaires were treated as defective. Imputation was not used in cases where there was a lot of missing data. Ultimately, a total of 385 valid responses were used for the final analysis. Thus, at 95% confidence level and in line with the figure from the Raosoft sample size calculator (see section 4.5.7), achieving 385 valid responses highlighted that this study used a representative sample to derive its findings.

6.1.2. Missing Values

The problem of missing data is a frequent occurrence, mainly when a survey uses self-reporting instruments and is also cross-sectional in nature (Bryman & Bell, 2011). This study addressed this problem through multiple imputations, as suggested by Jöreskog and Sörbom (2006). The benefit of adopting the multiple imputation method was that approximations of missing values were derived for all cases in the sample (Du Toit & Du Toit, 2001). Conducting these approximations meant that missing data was imputed. In cases where there were many missing values, the excessively incomplete responses were discarded altogether.

6.1.3. Demographic Profile of Respondents

The respondents' demographic profile analysis in Table 6.1 reveals that most of the participants were female (i.e., 72.2%) while the rest were male (i.e., 26.8%). The fact that the number of female participants was significantly greater than that of the male respondents can be explained that women do most food shopping (Rimal, Moon & Balasubramanian, 2005). This phenomenon was also observed when mall-intercept surveys were conducted. The summary statistics also show that most respondents were between the ages of 36 to 41 years (i.e., 36.1%). Approximately 35.8% of the participants were aged between 30 to 35 years. Furthermore, 20% of the participants were aged between 24 and 29 years, while 4.7% were 18 to 23 years old. The remainder of the respondents (3.4%) were between 42 to 43 years. No participants were below the age of 18, and therefore, there were no minors that partook in this study.

Under marital status, most of the respondents (i.e., 42.3%) were married, while 35.8% of the participants identified themselves as single. A typical marital status in South Africa is cohabitation or *umasihlalisan*Posel & Rudwick, 2014), and 16.9% of the total number of respondents declared themselves as cohabitees. Budlender, Chobokoane and Simelane (2004) argued that couples in South Africa increasingly favour cohabitation to marriage. Although a number of the cohabitees previously tended to identify themselves as either single or married because of the stigma attached to this 'deplorable' type of this relationship, nowadays, most couples are not ashamed of declaring their cohabitation status. The rest of the respondents (i.e., 24.9%) reported themselves as either divorced, widowed or preferred not to identify with any marital groupings stated above.

South Africa is a country that is recognised for its linguistic diversity. Black people are the majority in the country (i.e., they constitute approximately 81% of South Africa's population) (South African Government, 2021); however, their majority status did not come through in this study. This is because most respondents (43.9%) identified themselves as English speakers and not as, for example, Zulu, Xhosa, or Sotho speakers. Surprisingly, the Afrikaans language came second (i.e., at 20.3%). Of all the respondents, 10.9% identified as Zulu speakers, while 5.7% were Xhosa speakers. Furthermore, 4.9% were Tswana speakers, which marginally surpassed Pedi speakers by 0.2%. The rest was split between the other country's official languages, i.e., Sotho 2.3%, Tsonga 2.1%, Venda 1.3%, Swati 1%, Ndebele 1% and other languages accounted for 18%. In general, English was the prevalent language as most of the participants identified themselves as English speakers. This prevalence of English can be

explained by the fact that many non-South African nationals and some locals, for example, Indians, Chinese and Japanese, among others, are usually hesitant to state their home language and thus tend to categorise themselves as English speakers. Likewise, some Afrikaans speaking people (e.g., Coloureds) like to identify themselves as English speakers (Giliomee & Mbenga, 2007). However, this argument may no longer be valid, because nowadays many South Africans pride themselves in their heritage and home language (Oliver & Oliver, 2017) and accordingly avoid identifying themselves with other ethnicities. This is despite some individuals adopting the westernised culture, which is strongly associated with English – thus shying away from their own language and culture (Giliomee & Mbenga, 2007).

Regarding the current city of residence, 42.1% of the respondents said they reside in Johannesburg. Approximately 22.1% of the respondents were Capetonians. Pretoria residents accounted for 15.6%, which was 3.4% higher than those residing in Durban. The remainder of the respondents (i.e., approximately 8%) stayed in other parts of South Africa. The results further show that Gauteng residents accounted for a majority (i.e., 59.8%) of the participants in this study. This explains that the database used was not restricted to the top four cities in the country; however, its expansiveness helped bring a holistic and country-specific picture.

Results on the occupation demonstrated that most of the surveyed respondents (i.e., 77.7%) were employed full time. A further 10.9% of the respondents were unemployed, with 8.1% being employed part-time, while a total of 3.4% of the surveyed respondents were still studying. Closely linked to individuals' occupations is their income. In light of this study, most of the participants (i.e., 28.1%) earned between R10 001 to R20 000. Moreover, 23.9% of the surveyed individuals made less than R10 000, while 22.9% professed that they earn between R20 001 and R30 000. The results also show that 13% of the respondents declared that they make between R30 001 and R40 000 while the least number of participants (i.e., 12.2%) stated that they earn above R40 000. The fact that most of the surveyed respondents earn less than R40 000 further shows that Millennials are young people who are either studying or occupying junior to middle-level positions at work. Most of the respondents (i.e., 91.4%) declared that they receive their income every month, while 6.4% stated no fixed revenue period. The rest indicated that they receive their income weekly (i.e., 1.3%) or fortnightly, i.e., 0.5%).

Table 6.1: Sample Profile Characteristics

RESULTS FOR DEMOGRAPHIC CHARACTERISTICS					
Gender	**Frequency**	**Percentage (%)**	**Age**	**Frequency**	**Percentage (%)**
Male	103	26.8	18 to 23 years	18	4.7
Female	282	72.2	24 to 29 years	77	20.0
			30 to 35 years	138	35.8
			36 to 41 years	139	36.1
			42 to 43 years	13	3.4
Total	**385**	**100.0**	**Total**	**385**	**100.0**
Home Language	**Frequency**	**Percentage (%)**	**Marital Status**	**Frequency**	**Percentage (%)**
Afrikaans	78	20.3	Married	163	42.3
English	169	43.9	Cohabitation	65	16.9
IsiNdebele	4	1.0	Single	138	35.8
SePedi	18	4.7	Divorced	10	2.6
SeSotho	9	2.3	Widowed	2	0.5
XiTsonga	8	2.1	Other - Prefer not to say	7	1.8
SeTswana	19	4.9			
TshiVenda	5	1.3			
IsiXhosa	22	5.7			
IsiZulu	42	10.9			
IsiSwati	4	1.0			
Other	7	1.8			
Total	**385**	**100.0**	**Total**	**385**	**100.0**

City	Frequency	Percentage (%)	Occupation	Frequency	Percentage (%)
Johannesburg	162	42.1	Student	13	3.4
Pretoria	60	15.6	Employed - Part-Time	31	8.1
Other - Gauteng	8	2.1	Employed – Full-Time	299	77.7
Durban	47	12.2	Unemployed	42	10.9
Pietermaritzburg	2	0.5			
Other - KZN	3	0.8			
Cape Town	86	22.3	**Total**	**385**	**100.0**
Other - WC	3	0.8			
Port Elizabeth	1	0.3	**Preferred Social Media**	**Frequency**	**Percentage (%)**
Other - EC	2	0.5	Facebook	283	73.5
Other - Free State	3	0.8	Instagram	35	9.1
Polokwane	1	0.3	Skype	5	1.3
Other - Limpopo	1	0.3	Twitter	9	2.3
Other - MP	4	1.0	Whatsapp	52	13.5
Klerksdorp	1	0.3	Youtube	1	0.3
Other NC	1	0.3	**Total**	**385**	**100.0**
Total	**385**	**100.0**			
Income	**Frequency**	**Percentage (%)**	**Frequency of Income**	**Frequency**	**Percentage (%)**
< R10 000	92	23.9	Monthly	352	91.4
R10 001-R20 000	108	28.1	Fortnightly	2	0.5
R20 001-R30 000	88	22.9	Weekly	5	1.3
R30 001-R40 000	50	13.0	Other	26	6.8
+R40 000	47	12.2			
Total	**385**	**100.0**	**Total**	**385**	**100.0**

Source: This Study

Regarding the preferred social media, which usually influences Millennials' Adoption Behaviour, most of them (i.e., 73.5%) attested to using Facebook more than any other social network platform. Moreover, 13.5% of the respondents stated that they use Whatsapp more than the other social media platforms, while others used more of, for example, Instagram 9.1%, Twitter 2.3%, Skype 1.3%, and YouTube 0.3%. Table 6.1 above shows the summary statistics for the demographic profile of respondents that participated in this study. In addition, pie charts for this demographic information can be obtained in Appendix IV of this thesis.

The following section delves on and presents the results of the summary statics, i.e., primarily results on the mean (i.e., a measure of central tendency), standard deviation (i.e., a measure of dispersion).

6.1.4. Mean and Standard Deviation

The variables of this study employed several items in which participants were expected to indicate their level of agreement or disagreement with these statements by ticking an appropriate box for each question. A 7 point Likert-type scale was applied to this study. Values above 4 meant that participants agreed with the statements, while those below 4 showed that they disagreed with the listed statements. If values were approximately 4, this meant that participants were neither agreeing nor disagreeing with the statements (i.e., they were neutral).

6.1.4. (i) Arithmetic Mean

As a measure of central tendency, the utility of the mean lay primarily on its capacity to offer an indication of where the data clustered around (Hair *et al.*, 2007). The study items assessing a similar instrument were transformed into a variable index by computing the average values for the responses to determine the clustering of the data. The sum of the scores or mean values for items that measured the constructs of this study ranged between 3.59 and 5.22. By and large, this meant that, on average, most of the participants agreed to statements that were used to measure specific variables.

6.1.4. (ii) Standard Deviation

As a measure of dispersion, the standard deviation measured variability and depicted how concentrated the data was around the mean (Khothari, 2004). Generally, a large standard deviation figure suggests that the response distributions values in the data set fall far away from the mean distribution, while the more robust the data are around the mean, the smaller the standard deviation (Hair *et al.*, 2007). The study results show a small to medium amount of variation in the sample group that was studied. By and large, response distributions with sigma values below 1 were thought to be consistent, whereas those with sigma values above 1 were regarded as inconsistent (Rhodes, Turner & Higgins, 2016). This study submits that the response distributions were consistent (i.e., 0.829 to 0.942) because the standard deviation figures lay closer to the mean. This also suggested that the mean had no gross outliers that might have stretched or skewed the variability of sample data.

The total mean and standard deviation values for the variables of this study are shown in Table 6.2 below:

Table 6.2: Mean and Standard Deviation Values for the Study Variables

Study Variables	Mean $\bar{x} = \frac{\sum x}{n}$	Standard Deviation $s = \sqrt{\frac{\sum(X - \bar{X})^2}{n-1}}$
Social Identity	4.27	0.930
Social Representation	4.94	0.931
Social Influence	3.59	0.829
Perceived Value	5.22	0.928
Attitude	5.08	0.942
Consumer Innovativeness	4.66	0.906
Adoption Behaviour	4.90	0.938

**Note: Valid n (Listwise) = 385*

** Scores: 1 – Strongly Disagree; 4 – Neutral; 7 – Strongly Agree*

6.2. Reliability and Validity of the Study Variables

Reliability is one of the vital elements used in research to evaluate the internal consistency of items and the overall measuring instrument. This study's reliability involved quantitatively evaluating every instrument's ability to engender consistent results (Tavakol & Dennick, 2011). On the other hand, construct validation entailed assessing how accurately each instrument measured what it was intended to measure (Westen & Rosenthal, 2003). Instrument reliability was evaluated before checking validity because, according to Nunnally and Bernstein (1994), an instrument cannot be valid unless it is reliable. It is also important to note that instrument reliability does not depend on its validity (Tavakol & Dennick, 2011).

6.2.1 Internal Consistency or Reliability

6.2.1. (i) Cronbach's Alpha

Cronbach's alpha is understood to be the average of the inter-item correlations (Tavakol & Dennick, 2011). In light of this study, the reliability of instruments defined the degree to which all the items measured the same variable, confirming their inter-connection. This study also used Cronbach's alpha values to provide the proportion of total deviation of the scale scores that did not characterise the random error (Bindak, 2013). Alpha coefficients were computed for every studied construct, and Table 6.3 shows the Cronbach's alpha values that resulted from testing the reliability of the research constructs.

Previous scholars have recommended several thresholds about the acceptable alpha coefficient values, but most of them suggest that these values must be no less than 0.70 (e.g., Cronbach, 1951; De Vellis, 2003; Nunnally & Bernstein, 1994). Streiner (2003) suggested that the maximum alpha coefficient should be 0.95 because alpha coefficients that are too high (i.e., values >0.95) can probably indicate that some items are redundant and might be assessing the same issue but in a different guise. In light of the results of this study in Table 6.3, alpha coefficient values ranged from 0.804 and 0.940. These Cronbach's alpha values signalled that an excellent reliability threshold was achieved as all the study instruments met the threshold of above 0.7 suggested by Cronbach (1951) and remained within the confines specified by Streiner (2003) since no instruments were found to be 'redundant'.

Table 6.3: Testing the Reliability of Variables

Research Constructs	Research Items Used	Mean for Each Item	Standard Deviation for Each Item	Corrected Item to Total	Cronbach α Value
Social Identity (SI)	SI1	4.79	1.603	0.752	**0.940**
	SI2	4.01	1.799	0.734	
	SI3	4.38	1.679	0.816	
	SI4	3.63	1.83	0.745	
	SI5	4.17	1.754	0.638	
	SI6	3.99	1.751	0.788	
	SI7	5.09	1.483	0.752	
	SI8	4.09	1.782	0.814	
	SI9	4.30	1.713	0.809	
Social Representation (SR)	SR1	5.86	1.163	0.530	**0.804**
	SR2	5.34	1.229	0.527	
	SR3	4.11	1.488	0.534	
	SR4	4.95	1.541	0.572	
	SR5	3.78	1.813	0.649	
	SR6	4.31	1.538	0.538	
	SR7	4.92	1.451	0.536	
	SR8	5.25	1.484	0.562	
	SR9	5.23	1.271	0.535	
	SR10	4.73	1.594	0.541	
	SR11	5.35	1.326	0.633	
	SR12	5.49	1.356	0.601	
	SR13	3.59	1.86	0.572	
	SR14	5.82	1.203	0.587	
	SR15	5.32	1.500	0.507	
	SR16	5.56	1.265	0.508	
	SR17	4.32	1.491	0.545	
Social Influence (SIN)	SIN1	3.53	1.861	0.611	**0.930**
	SIN2	3.32	1.755	0.718	
	SIN3	3.21	1.776	0.730	
	SIN4	3.08	1.751	0.730	
	SIN5	3.6	1.847	0.658	
	SIN6	3.29	1.76	0.775	
	SIN7	3.54	1.741	0.630	
	SIN8	3.44	1.819	0.670	
	SIN9	3.36	1.756	0.700	
	SIN10	3.46	1.750	0.755	
	SIN11	3.11	1.914	0.742	
	SIN12	4.47	1.954	0.502	
	SIN13	3.66	1.909	0.664	
	SIN14	3.96	1.933	0.587	
	SIN15	4.82	1.840	0.547	

Perceived Value (PV)	PV1	5.01	1.555	0.818	**0.915**
	PV2	5.01	1.564	0.778	
	PV3	4.95	1.519	0.806	
	PV4	5.17	1.597	0.667	
	PV5	5.49	1.511	0.734	
	PV6	5.67	1.425	0.766	
Attitude (ATT)	ATT1	5.56	1.439	0.791	**0.920**
	ATT2	5.45	1.426	0.834	
	ATT3	5.49	1.387	0.784	
	ATT4	5.73	1.313	0.784	
	ATT5	5.25	1.428	0.762	
	ATT6	5.61	1.350	0.831	
	ATT7	3.31	1.759	0.541	
	ATT8	5.25	1.475	0.826	
	ATT9	3.79	1.906	0.531	
	ATT10	4.69	1.596	0.533	
	ATT11	5.31	1.387	0.790	
	ATT12	5.52	1.340	0.774	
Consumer Innovativeness (CI)	CI1	5.32	1.423	0.522	**0.828**
	CI2	3.9	1.633	0.547	
	CI3	4.55	1.736	0.592	
	CI4	4.14	1.533	0.706	
	CI5	4.34	1.553	0.710	
	CI6	5.98	1.002	0.534	
	CI7	4.38	1.673	0.669	
Adoption Behaviour (AB)	AB1	5.29	1.421	0.800	**0.937**
	AB2	4.82	1.640	0.788	
	AB3	4.88	1.588	0.787	
	AB4	4.52	1.620	0.814	
	AB5	5.06	1.453	0.759	
	AB6	4.8	1.662	0.789	
	AB7	5.06	1.623	0.787	
	AB8	5.08	1.621	0.786	
	AB9	4.99	1.570	0.798	
	AN10	5.19	1.551	0.762	
	AB11	4.22	1.736	0.695	

Source: This Study

6.2.1. (ii) Corrected Item-to-Total Value

An internally consistent scale has items that correlate well with the total, and the researcher removed items with low correlations (Nunnally, 1978). Item-to-total statistics were used to determine scale homogeneity by highlighting items that were a bad measure. These item-to-total statistics helped the researcher to identify items that were to be considered for amendment or removal altogether. According to Cristobal, Flavián and Guinalíu (2007), the items that have corrected item-total correlation less than 0.30 are not acceptable. Other scholars suggested that corrected item-total correlations should meet the following thresholds for them to be retained:

i). the item-total correlation score should be at least 0.50,
ii). the item must not trigger a considerable drop (i.e., 10% or more) in the scale's alpha coefficient score and finally,
iii). the items must not be highly correlated with each other, i.e., *r* value must not be greater than 0.85 to signal the problem of multicollinearity (Nunnally, 1978; Nunnally & Bernstein, 1994).

After all the calculations were completed (see Table 6.3), all the corrected item-to-total correlation values surpassed the suggested cut-off of at least 0.50. Again, none of the items caused a substantial drop in Cronbach's alpha value. Finally, there were no items that were highly correlated with each other in a way that would have suggested the problem of multicollinearity.

6.2.1. (iii) Composite Reliability (CR)

Once all the alpha coefficients were significantly above the suggested threshold of 0.70 (Cronbach, 1951), the next stage involved establishing internal consistency by computing CR values. Estimates or the standardised regression weights from Confirmatory Factor Analysis were used to calculate the Composite Reliability values. Table 5.5 displays the CR values, which depict that they ranged from 0.79 to 0.87. The fact that the CR values exceeded the suggested threshold of 0.7 (Hair et al., 1998; Hulland, 1999) indicated that all the study variables had a statistically acceptable score, as they met the recommended threshold.

The next section presents the results on how accurately the instruments of this study measured what they professed to be measuring.

6.2.2. Validity of Measurement Instruments

This study determined the validity of measurement instruments by assessing the relationships between the construct and other measures that were purportedly related to it (i.e., convergent validity) or varied independently of it (i.e., discriminant validity) (Ghauri & Grenhoug, 2010). Thus, to measure the validity of the variables, this study demonstrated the extent to which the manifest pattern of relationships in a convergent-discriminant validity matrix corresponded with the theoretically predicted pattern of correlations. The convergent-discriminant association offered an approximation of the extent to which variance in the measure replicated the variance in the core variable (Nunnally, 1978). The convergent and divergence or discriminant validity between the study constructs was determined using the following ways:

6.2.2. (i) Correlation Matrix

This study used the correlation matrix to provide inter-construct evidence of validity. The correlation matrix delivered preliminary evidence regarding the extent to which items in each instrument diverged or converged well. This evidence made it possible for the researcher to correctly predict the pattern of the study results within the convergent-discriminant validity evaluation matrix (Ghauri & Grenhoug, 2010). High correlations between measures meant that they were hypothetically related, while low correlations meant that the relations between measures were theoretically different (Nunnally, 1978). These findings justified the existence of convergent and discriminant validity, respectively (Westen & Rosenthal, 2003). Table 6.4 below demonstrates that there were no extremely high inter-variable cross-loadings (i.e., >0.85) to justify the existence of the multicollinearity problem. Therefore, all the study items converged well with the constructs they were purporting to be measuring.

Table 6.4: Inter-Construct Correlation Matrix

Research Constructs	SI	SR	SIN	PV	ATT	CI	AB
SI	0.8^						
SR	0.646**	0.71^					
SIN	0.535**	0.565**	0.73^				
PV	0.646**	0.682**	0.432**	0.79^			
ATT	0.685**	0.697**	0.508**	0.638**	0.86^		
CI	0.488**	0.560**	0.504**	0.477**	0.472**	0.71^	
AB	0.651**	0.695**	0.523**	0.677**	0.685**	0.590**	0.85^
	385	385	385	385	385	385	385

Note: Correlation is significant at the 0.01 level (2-tailed); ^ = Square Root of AVE
SI = Social Identity; SR = Social Representation; SIN = Social Influence; PV = Perceived Value
ATT = Attitude; CI = Consumer Innovativeness; AB = Adoption Behaviour

6.2.2. (ii) Convergent Validity

When justifying the presence of convergent validity, this study utilised coefficient alpha values. Consistent with Nunnally (1978), Cronbach's alpha values should be above 0.7 to exhibit item convergence. In light of this study, alpha coefficient values ranged from 0.804 to 0.937, and thus the threshold suggested by Nunnally (1978) was successfully met. The present study also used the corrected item-to-total correlations for the constructs to determine the existence of convergent validity. Past scholars suggested that item correlations greater than 0.5 indicate that convergent validity exists (e.g., Carlson & Herdman, 2012; Fornell & Larcker, 1981; Nunnally, 1978) while unstandardised regression weights above 0.6 are considered to have high convergent validity (Hair et al., 2010). As presented in Table 6.3, the corrected item-to-total correlations ranged from 0.502 to 0.834. Thus, all the constructs surpassed the established threshold of 0.50, implying that convergent validity exists between constructs. Composite Reliability (CR) values were further used to verify the presence of convergent validity. Consistent with Bagozzi and Yi (1988), CR values must be above 0.6 for the study to validate item convergence. In light of this study, the CR values ranged from 0.79 to 0.87. This result meant that the recommended threshold of ≥0.6 was successfully met, and the existence of convergent validity can be confirmed.

Convergent validity was also determined through checking the estimates or standardised regression weights during Confirmatory Factor Analysis (CFA) stage. The CFA results showed that estimates for the study constructs ranged from 0.508 to 0.901, and consequently, this meant that the recommended threshold of 0.5 was met (Anderson & Gerbing, 1988). Evidence of the existence of convergent validity was further established by checking the values from the Average Variance Extracted (AVE) results. According to Anderson and Gerbing (1988), AVE values above 0.5 prove that convergent validity exists. Furthermore, the AVE values ranged between 0.50 and 0.74, thus further suggesting the existence of convergent validity. Table 5.5 provides an exhibit of individual estimates or the standardized regression weights for the study variables.

After establishing convergent validity, the next stage was to verify the presence of discriminant validity in order to ultimately confirm overall construct validity.

6.2.2. (iii) Discriminant Validity

The main characteristic of discriminant validity entails differentiating between unrelated constructs (Carlson & Herdman, 2012). This study also used an inter-construct correlation matrix to confirm the existence of discriminant validity. Discriminant validity exists if constructs do not correlate highly with each other (i.e., <0.85) or if there is no perfect correlation between variables under study (i.e., 100% correlation) (Fraering & Minor 2006). The results from the correlation matrix show that the problem of multicollinearity did not exist, and there was no perfect correlation between the study variables. Furthermore, past scholars argued that the lesser the correlation coefficient value, the more distinct or unique the variables are from each other (Nunnally, 1978), for example, the correlation value of 0.432** between Social Influence and Perceived Value. Although, according to some scholars, the ideal coefficient to justify discriminant validity is <0.5, the correlation matrix in Table 6.4 shows no problem of multicollinearity or perfect correlation, as suggested by Fraering and Minor (2006).

Overall, the results of this study provided evidence for acceptable to excellent levels of research scale reliability and also confirmed both convergent and discriminant validity of the study instruments.

The following section provides the dual-process suggested by Anderson and Gerbing (1988) by validating the conceptual model first and then testing the structural paths of the hypothesised model.

6.3. Inferential Statistics

The initial stage of inferential statistics (i.e., Confirmatory Factor Analysis) entailed the verification of the measurement model by re-checking the reliability (i.e., CR values) and validity (i.e., AVE values) of the study constructs in addition to testing whether the gathered data was in line with the postulated model (i.e., model fit checks). After that, the final stage of inferential statistics (i.e., Path Modelling) was begun by re-checking model fit and ultimately, testing the hypothesised relationships. AMOS 27 was used for Structural Equation Modelling, and it employed the Maximum Likelihood Estimation technique, owing to its desirable asymptotic properties such as minimum variance and lack of statistical bias.

6.3.1. Confirmatory Factor Analysis or Measurement Model Analysis

CFA results reveled that all the estimates for model assessment were significant as they were between 0.508 and 0.901. The non-significant variables or variables that had item factor loadings below 0.50 were removed (i.e., the items) to keep in line with Nunnally (1978)'s suggestions relating to the requirements for convergent validity. This study upholds the notion that alculating Cronbach's alpha values was a necessary but insufficient condition to verify the reliability of instruments. Therefore, the computation of CR values became the next best alternative. This study used the estimates that had displayed congence validity from CFA analyse and employed the formula submitted by Fornell and Lacker (1981) to calculate CR and AVE values. The CR and AVE results are shown in Table 6.5. CR values were between 0.79 and 0.87. Thus, al of them surpassed the recommended value of 0.70 (Hulland, 1999). Consistent with Nunnally and Bernstein (1994), AVE values for this study were to be at least 0.50 (Fraering & Minor, 2006). Therefore, the AVE values displayed in Table 6.5 confirm that all the variables converged well with each other.

Overall, this study submitted sufficient reliability (alpha coefficients and CR values and validity (convergent and discriminant) scores, thus the next stage was to determine model fit.

Table 6.5: CR and AVE Scores

Research Constructs		Estimates (λ)	CR Value $(\Sigma\lambda yi)^2 / [(\Sigma\lambda yi)^2 + (\Sigma\varepsilon i)]$	AVE Value $\Sigma\lambda yi^2/(\Sigma\lambda yi^2+\Sigma\varepsilon i)$
SI	SI1	0.768	**0.84**	**0.64**
	SI2	0.758		
	SI3	0.833		
	SI4	0.751		
	SI5	0.669		
	SI6	0.901		
	SI7	0.791		
	SI8	0.829		
	SI9	0.855		
SR	SR4	0.774	**0.79**	**0.50**
	SR8	0.679		
	SR9	0.569		
	SR11	0.779		
	SR12	0.807		
	SR14	0.758		
	SR15	0.687		
	SR16	0.571		
SIN	SIN1	0.585	**0.83**	**0.54**
	SIN2	0.772		
	SIN3	0.798		
	SIN4	0.832		
	SIN5	0.767		
	SIN6	0.866		
	SIN7	0.716		
	SIN8	0.699		
	SIN9	0.73		
	SIN10	0.785		
	SIN11	0.667		
	SIN13	0.508		
PV	PV1	0.809	**0.81**	**0.62**
	PV2	0.756		
	PV3	0.853		
	PV4	0.657		
	PV5	0.814		
	PV6	0.833		
ATT	ATT1	0.851	**0.86**	**0.74**
	ATT2	0.888		
	ATT3	0.792		
	ATT4	0.822		
	ATT5	0.800		

	ATT6	0.878		
	ATT8	0.875		
	ATT11	0.815		
	ATT12	0.801		
CI	CI1	0.510	**0.85**	**0.51**
	CI2	0.602		
	CI3	0.650		
	CI4	0.807		
	CI5	0.859		
	CI7	0.722		
AB	AB1	0.829	**0.87**	**0.73**
	AB2	0.786		
	AB3	0.774		
	AB4	0.808		
	AB5	0.755		
	AB6	0.814		
	AB7	0.893		
	AB8	0.788		
	AB9	0.790		
	AB10	0.788		
	AB11	0.704		

Scales: 1 – Strongly Disagree; 4 – Neutral; 7 – Strongly Agree
**Note: SI – Social Identity; SR = Social Representation; SIN = Social Influence; PV = Perceived Value; ATT = Attitude; CI = Consumer Innovativeness; AB = Adoption Behaviour*

6.3.2. Model Fit

Besides confirming reliability and validity, CFA also provided the first stage of model fit assessment. Past scholars submitted many indices that can be used to justify model fit (e.g., Arbuckle & Wothke, 2004; Bentler & Bonnett, 1980; Bollen & Long, 1993; Jöreskog, 1969; Jöreskog & Sorbom, 1984; Karakaya-Ozyer & Aksu-Dunya, 2018). This study utilised some of these indices to confirm fit for both measurement (CFA) model and structural (path) model. Even though there exist many incongruities regarding the acceptable thresholds or cut-off points for the different indices as well as which indices to report on, this study employed the thresholds suggested by Arbuckle and Wothke (2004), Hair *et al.* (2006) and Joreskog and Sorbom (1984) (see section 5.4.1. iii).

This study used the three most widely-cited empirical standards for checking model fit:

i). testing the null hypothesis (i.e., through the conventional chi-squared statistic (χ^2/(df)) to assume multivariate normality of the data (Henson, 1999),

ii). tests of absolute fit (i.e., Goodness of fit index (GFI) and adjusted goodness of fit index (AGFI)), and tests of incremental fit (Comparative Fit Index (CFI), Normed Fit Index (NFI), and

iii). The relatively new Root Mean Square Error of Approximation (RMSEA)).

Other fit indices utilised in this study include, for example, Incremental Fit Index (IFI) and Tucker Lewis Index (TLI).

- **Testing the Null Hypotheses: Chi-squared**

  The chi-squared test (i.e., χ2/(df)) is widely regarded as an index for assessing overall model fit (Smith & McMillan, 2001). This study used the chi-squared test to determine the magnitude of inconsistency between the sample and the fitted covariance matrices, i.e., through the covariance structure analysis or analysis of covariance matrix structures as suggested by La Du and Tanaka (1995). As the chi-squared analysis was conducted through a t statistic, this implied that the significant t statistic (for example, 4580), relative to the degrees of freedom linked to the model (i.e., 1730), indicated that the model might not be a good fit for the data. In line with previous scholars, the findings of this study show χ2/(df) met the suggested threshold of <3 both under CFA and Path Modelling as the results were 2.647 and 2.813, respectively (Karakaya-Ozyer & Aksu-Dunya, 2018).

Research suggests that if small samples are used, the chi-squared test tends to be unable to discriminate poor models from satisfactory ones while larger sample sizes bring about trivial differences between the implied and tested models, which tends to result in the rejection of an adequate model (Karakaya-Ozyer & Aksu-Dunya, 2018). Furthermore, since chi-squared statistics is a statistical significance test, it is heavily impacted by or is susceptible to sample size fluctuations and thus may not be a good enough guide to model adequacy. This is because a statistically significant chi-squared value can be the outcome of model misspecification (Smith & McMillan, 2001).

As the overall model test that is characterised by the chi-squared statistic has several problems linked with it (for example, the sample size problem mentioned above), this study further used other means of assessing model fit, as explicated below.

- **Goodness of Fit (GFI) and Adjusted Goodness of Fit (AGFI)**

  Alternative fit indices of the goodness of fit (GFI) and adjusted goodness of fit (AGFI) were developed by Joreskog and Sorbom (1984) as sample sizes do not have a detrimental impact upon these indices to address the shortcomings presented by the chi-squared test. Many scholars have established 0.9 as a suitable cut-off for determining adequate model fit, with 0.8 representing a marginally acceptable threshold (e.g., Hair et al., 2006; Khine et al., 2013; Joreskog and Sorbom, 1984). However, researchers Bollen & Long, 1993 specified that 0.92 or 0.95 are more adequate cut-offs for GF1 and AGFI. Furthermore, the GFI and AGFI under CFA were 0.844 and 0.817, respectively, while under path modelling, the GFI and AGFI were 00.834 and 0.806, respectively. This meant that this study met the marginally acceptable threshold (of at least 0.8) that previous scholars suggested (e.g., Khine et al., 2013).

- **Normed Fit Index NFI**

  As an incremental fit index, NFI was used in this study to further assess fit by comparing the tested model with a more constrained null model, where all the manifest variables were presumed to be uncorrelated (Bentler & Bonnett, 1980). The value of NFI hinged on the fact that it is less affected by problems inherent in chi-squared analyses and absolute fit indices. An index value of 0.9 or above has been conventionally considered an excellent fit, while 0.8 has traditionally been regarded as a good or marginally acceptable fit (Bentler & Bonnet, 1980). This study shows that an acceptable fit was achieved for both CFA (i.e., 0.918) and Path Modelling (i.e., 0.900).

- **Comparative Fit Index (CFI)**

  As an alternative to NFI, CFI was created by Bentler (1993) as another incremental fit index. According to Goffin (1993), CFI remains one of the best incremental fit indices owing to its efficiency. Previous scholars suggested that CFI values greater than 0.9 are mostly considered to show acceptable levels of model fit while 0.8 signals a marginally acceptable value (Bentler, 1993; Karakaya-Ozyer & Aksu-Dunya, 2018). In light of this study, an acceptable fit level was realised, as CFA recorded a CFI index of 0.930, while 0.923 was found under Path Modelling.

- **Root Measure of Standard Error Approximation (RMSEA)**

The existing literature further suggests that RMSEA is less affected by sample size fluctuations when compared to the chi-squared test and has a better descriptive value than chi-squared through various sample sizes (Steiger & Lind, 1980). Also, RMSEA has been regarded as a better indicator of fit than Root Mean Square Residual (RMR), and its greatest strength lies in its ability to shape a confidence interval around its computed value (Xijuan & Savalei, 2020). This means that assessing the null hypothesis can be done more precisely by using confidence intervals shaped by RMSEA, thus making it possible to use RMSEA to assess the null hypothesis that a model exactly fits the data. The CFA and Path Modelling results suggested that the threshold for determining RMSEA (i.e., < 0.08) was achieved, as 0.06 was found in both instances.

- **Other Fit Indices**

This study also referred to other fit indices to establish and confirm the existence of model fit. These indices included Incremental Fit Index (IFI) and Tucker Lewis Index (TLI). For these indices to reach an acceptable level, they must also yield a value that is at least 0.9. However, 0.8 is also regarded as marginally acceptable (Xijuan & Savalei, 2020). Both IFI and TLI yielded acceptable results, i.e., IFI: 0.929 (under CFA) and 0.913 (under Path Modelling), while TLI yielded a value of 0.927 (under CFA) and 0.916 (under Path Modelling).

- **Parsimony Fit (PRATIO)**

This study also referred to the Pratio value, which is essentially about Parsimony fit (simpler models that produce better overall fit) or the explanation of data by using the minimum number of parameters or predictor variables to determine its predictive abilities. The acceptable threshold is that the calculated value should be closer to 1 (Zhang, Zou, Liang & Carroll, 2020). The results of this show that a parsimony fit was achieved as the CFA Pratio value was 0.946 while 0.941 was achieved under Path Modelling. As the parsimonious fit was realised, this meant a good fit and that the model has great explanatory and predictive power.

The results above show that all the relevant indices that were used determine model fit show an acceptable fit between the hypothesised model and the sample data. Therefore, the indices presented in Table 6.6 depict a good model-data fit, as suggested by Wang, Wang and Yang (2005).

6.3.3. Post Hoc Model Modifications

Although this study recorded acceptable or marginally acceptable model fit values, this was attained after addressing issues relating to model misspecification. The extant literature provides different ways to address this problem (Smith & McMillan, 2001). During both CFA and Path Modelling analyses, statistically nonsignificant parameters were deleted to increase degrees of freedom in a bid to achieve a more parsimonious model. In addition, modification indices (MI) were also used to determine if further 'alteration' of the specified model resulted in a better overall model fit. This alteration meant that error terms that correlated highly with each other were linked in a way that led to the improvement of model-to-data fit. However, this was done prudently in a way that did not eventually upset the overall model fit.

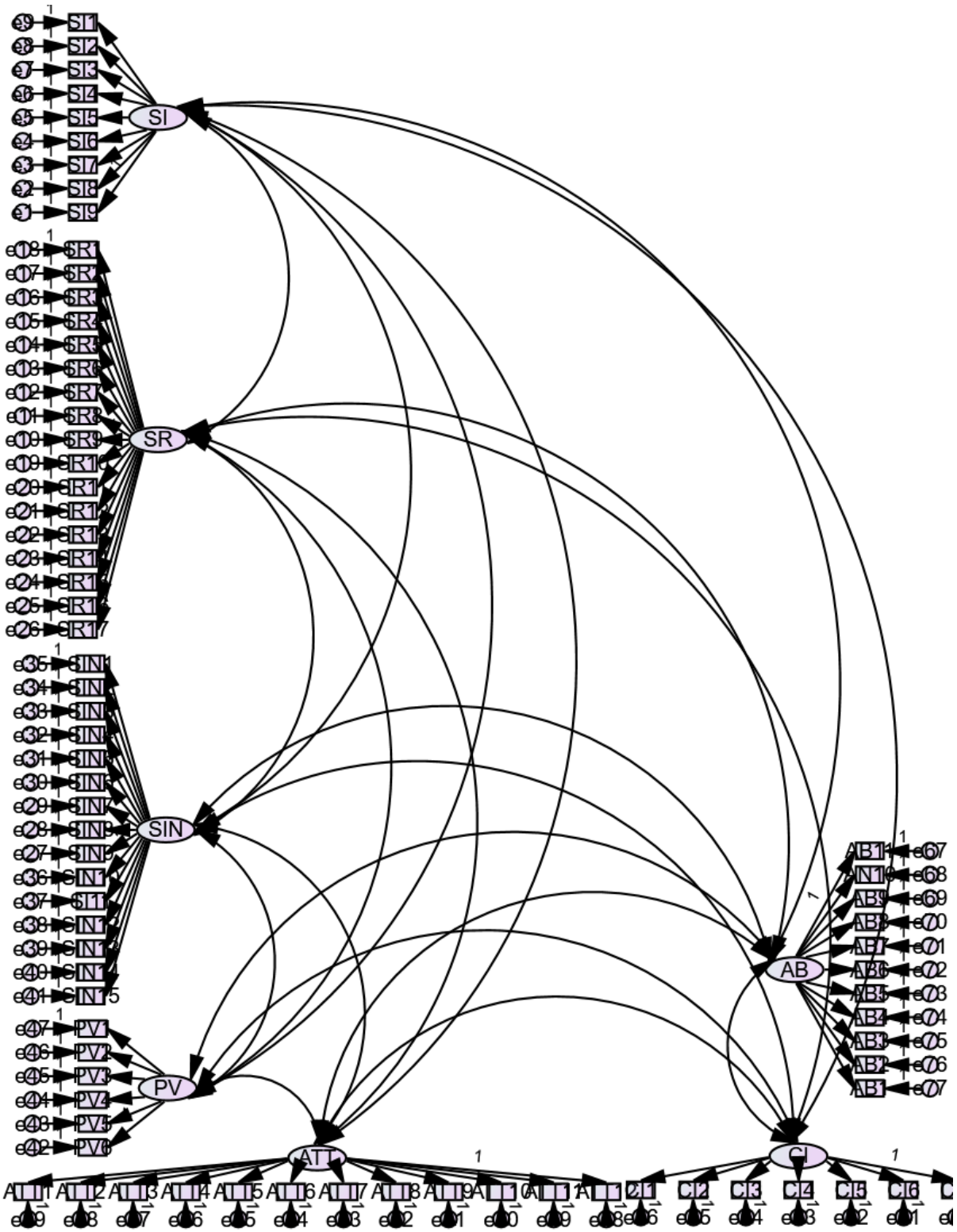
Table 6.6: Model Fit Summary

Standards for Checking Model Fit	Model Fit Indices	Acceptable Threshold	CFA Results	Path Modelling Results	Acceptable / Unacceptable
Testing the Null Hypothesis	Chi-Square Value: χ^2/(df)	<3	2.647	2.813	Acceptable
	CMIN/DF		*4580/1730*	*3952/1405*	
Tests of Absolute Fit	Goodness of Fit Index (GFI)	> 0.900	0.844	0.834	*Acceptable
	Adjusted Goodness of Fit (AGFI)	> 0.900	0.817	0.806	*Acceptable
Tests of Incremental Fit	Normed Fit Index (NFI)	> 0.900	0.918	0.900	Acceptable
	Comparative Fit Index (CFI)	- > 0.900	0.930	0.923	Acceptable
	RMSEA	< 0.08	0.06	0.06	Acceptable
Other Fit	Incremental Fit Index (IFI)	> 0.900	0.929	0.913	Acceptable
	Tucker Lewis Index (TLI)	> 0.900	0.927	0.916	Acceptable
	Parsimony Fit (PRATIO)	Close to 1	0.946	0.941	Acceptable

Source: This Study

*Note: *Acceptable = Marginally Acceptable; RMSEA = Root Measure of Standard Error Approximation*

Figure 6.2: CFA Model



Source: This Study

As reliability, validity, and model fit were confirmed under the initial stage of SEM (i.e., CFA), the next step necessitated testing the structural paths of the postulated model.

6.4. Path Modelling Analysis or Structural Model Analysis

The ultimate step of SEM involved model causality testing or testing the structural model. Thus, path modelling was used to approximate the causal relationships between the study constructs. As a form of multiple regression statistical analysis, this study used path analysis to evaluate the causal model by examining the connections between a predictor, mediator, moderator and outcome variables. Using this method made it possible to estimate both the magnitude and significance of causal relationships between variables (Dijkstra & Henseler, 2015). Before significance testing was conducted, model fit was re-checked.

6.4.1. Model Fit

Path Modelling also necessitated the reassessment of model fit in advance of testing the structural paths of the hypothesised model (Lei & Wu, 2007). This requisite aligns with Hoyle (1995), who posited that testing model fit is one of the essential steps before fitting the path model. The calculation of model fit under Path Modelling was conducted in the same way as under the CFA section. Table 6.6 reveals that the model portrays an acceptable representation of the gathered data. When equated with the CFA findings, the Path Modelling results show a trivial difference in the model's ability to represent the gathered data. Post hoc modifications or model trimming was not done as all the previous adjustments under CFA were carried over to the Path Modelling stage. Once structural model fit analysis was established, the remaining step entailed testing the structural paths of the postulated model.

6.4.2. Hypothesis Testing / Significance Testing

After establishing that the structural model fit assessment yielded acceptable results, the final stage involved testing the structural paths of the hypothesised research model. Causal paths for the hypothesised relationships were modelled against this study's predictor, mediator, moderator and outcome variables. Single-directional arrows were used to graphically indicate these relationships on AMOS 27, as displayed in Figure 6.3. Therefore, SEM through AMOS 27 was used to approximate the statistical significance of the path coefficients for the structural model that was estimated through the MLE method. Finally, the estimates or standardised regression weights were used to establish if the manifest variables measured their modelled

latent variables. A significant coefficient at a particular alpha level (i.e., p = ***) indicated a significant correlation between the manifest and latent variables.

The findings from significance testing are reported in Table 6.7 below.

Table 6.7: Results from Testing the Structural Model

Proposed Hypotheses	Hypothesis	Unstandardised Regression Weights	P	Rejected / Supported
SI → PV	+H1	0.188	***	Supported
SR → PV	+H2	0.876	***	Supported
SIN → PV	+H3	0.117	***	Supported
PV → ATT	+H4	0.939	***	Supported
SI → AB	+H5	0.275	***	Supported
SIN → AB	+H6	0.084		Supported
PV → AB	+H7	0.860	***	Supported
ATT → AB	+H8	-0.087		Rejected

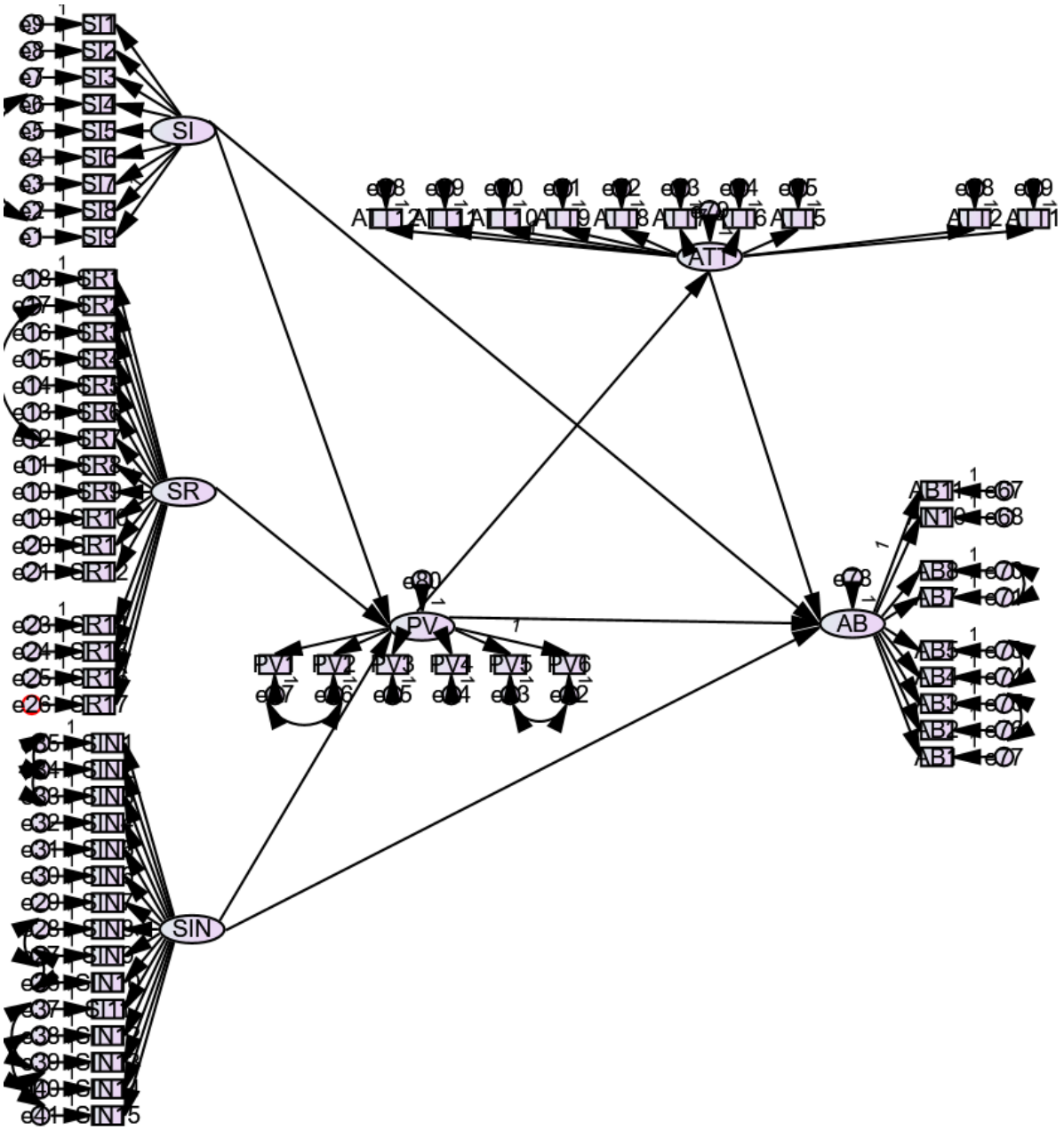
****p<0.01; p**<0.05; *p<0.1*

**Note: SI – Social Identity; SR = Social Representation; SIN = Social Influence; PV = Perceived Value; ATT = Attitude; CI = Consumer Innovativeness; AB = Adoption Behaviour*

The hypothesised relationships between variables were described through their corresponding structural paths (as shown in Table 6.7 and Figure 6.3). Hypotheses testing was established through the assessment of the directionality between these path coefficients. Table 6.7 shows that the results of this study provided support for seven out of the eight hypotheses, while the eighth hypothesis was rejected after yielding an inverse relationship between the two variables. The statistical significance of the path coefficients (defined by *** ~ p <0.01) helped determine the hypotheses that were supported significantly. Six path coefficients above 0.1 generated significant and positive results, while the rest were less than 0.1 and yielded non-significant results. This study hypothesised that Attitude positively influences Adoption Behaviour, but the study results confirmed that although the relationship between the two variables is weak, it is actually negative. In line with the previously hypothesised relationship, the results of this study necessitated the rejection of H8, as its findings did not support it. Overall, most of the hypothesised relationships yielded statistically significant and positive results, thus they were supported in this study.

Figure 6.3 shows the path model diagram that embodied the causal relationships between this study's manifest and latent variables.

Figure 6.3: Path Model



Source: This Study

6.5. Analysing the Moderation Effect

The objective of moderation analysis was to "measure and test the differential effects of the independent variables on the dependent variable as a function of the moderator" (Baron & Kenny, 1986: 1174). Consumer Innovativeness moderated the relationship between the study's dependent variables (i.e., Social Identity and Social Influence) on the dependent variable (i.e., organic food Adoption Behaviour). The following section provides results on the moderation effect analyses.

6.5.1. Simple Moderation Model Results

This section describes how the relationship between two variables (i.e., exogenous and endogenous variables) that depended on (or were moderated by) the value of a third variable (also called an interaction term). The first test for moderation analysis entailed establishing whether Consumer Innovativeness moderates the relationship between Social Identity on organic food adoption. Moderation tests were analysed through regressing the model using Hayes' PROCESS Procedure for SPSS Version 4.0. Under options, the following was selected:

- Generate code for visualising interactions
- Pairwise contrast of indirect effects
- Mean centering was set at only continuous variables that define products
- For probing any interactions, conditioning values were set at 16^{th}, 50^{th} and 84^{th} percentiles. The probe interactions were set at the default, i.e., $p < 0.10$.
- Model number 1 was selected for moderation analysis, at 95% Confidence Interval with 5000 bootstrap samples.

6.5.1. (i) CI Moderating the Relationship on SI and AB

The basic depiction of the model in Figure 6.4 below shows that this study tested that the effect of Social Identity (as a predictor variable) on Adoption Behaviour (as an outcome variable)and this relationship was moderated by Consumer Innovativeness, i.e., Consumer Innovativeness moderated the path between Social Identity and Adoption Behaviour.

The general model is depicted below:

Figure 6.4: General Model Description for Moderation

```
**************************************************************************
Model  : 1
    Y  : AB
    X  : SI
    W  : CI

Sample
Size:  385

**************************************************************************
```

*Note: *p<0.10; SI = Social Identity; CI = Consumer Innovativeness; AB = Organic Food Adoption Behaviour*

6.5.1. (ii) Regression Analysis on Adoption Behaviour

The regression result on the outcome variable shows that the interaction between Social Identity and Consumer Innovativeness accounted for approximately 63% of variation in Adoption Behaviour (i.e., the chi-square value). The slope of the conditional effects (i.e., coeff) for Social Identity and Consumer Innovativeness was 0.5991 and 0.3726 respectively. This implies that the slope for both Social Identity and Consumer Innovativeness was established to be positive. Statistical significance was established by checking whether zero lay between the lower and upper confidence levels. Since zero did not lie between the two intervals, i.e., 0.5305 to 0.6676 (for Social Identity) and 0.2823 to 0.4629 (for Consumer Innovativeness), this meant that both these conditional effects were confirmed to be statistically significant.

Regarding the interaction effect for Social Identity and Consumer Innovativeness, a negative slope was established, i.e., -0.0570. In terms of statistical significance, the results show that zero did not lie between the lower and upper confidence levels, i.e., -0.1077 to -0.063. Therefore, this study submits a negative slope for the interaction effect, with proven statistical significance. Consequently, it was established that Consumer Innovativeness moderates the relationship between Social Identity and organic food Adoption Behaviour for Millennials in South Africa as the interaction effect was found to be statistically significant in the regression model.

Figure 6.5: Regression Model on Adoption Behaviour

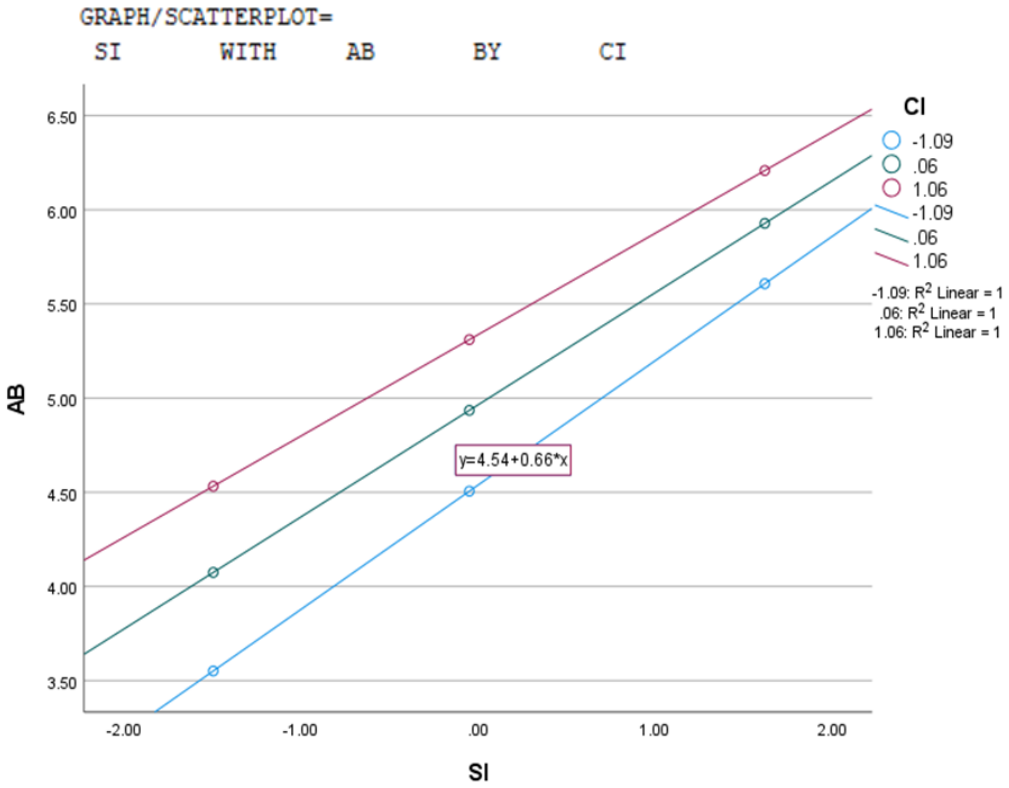
```
OUTCOME VARIABLE:
 AB

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .7961      .6339      .7020   219.8551     3.0000   381.0000      .0000

Model
              coeff         se          t          p       LLCI       ULCI
constant     4.9430      .0467   105.8636      .0000     4.8512     5.0348
SI            .5991      .0348    17.1911      .0000      .5305      .6676
CI            .3726      .0459     8.1142      .0000      .2823      .4629
Int_1        -.0570      .0258    -2.2101      .0277     -.1077     -.0063

Product terms key:
 Int 1    :        SI       x        CI
```

*Note: *p<0.10; SI = Social Identity; CI = Domain Specific Consumer Innovativeness; AB = Adoption Behaviour*

6.5.1. (iii) Sample Slopes Scatter Plot

To visualise the conditional effects for the main predictor, the data for the scatter plot was copied from PROCESS and pasted into SPSS syntax window, then executed. Figure 6.6 below depicts the scatter plot for the conditional effects.

Figure 6.6: Scatter Plot of SI by AB on CI



Note: SI = Social Identity; CI = Consumer Innovativeness; AB = Adoption Behaviour

- The blue lines reflected the most pronounced slope
- The green lines reflected the next most pronounced slope
- The red lines reflected weakest pronounced slope.

6.5.1. (iv) Conditional Indirect Effects

The indirect effects of the independent (Social Identity) and dependent (Adoption Behaviour) variables shows that the conditional indirect effect is getting smaller moving from the lower to the higher confidence interval. It starts at 0.6609, then to 0.5958 and ultimately to 0.5388. Using the confidence intervals to check for moderation effect, statistical significance was determined by checking whether zero fell within or outside these confidence intervals. From the lower and upper bounds, zero fell outside all these confidence intervals. This implies that all the three conditional indirect effects were established to be statistically significant. Therefore, this study further cements that there is a significant difference between the conditional indirect effects, thus evidence exists to support the earlier claim that Consumer Innovativeness moderates the relationship between Social Identity and Adoption Behaviour.

Figure 6.7: Conditional Effects of the Moderator

```
Conditional effects of the focal predictor at values of the moderator(s):

          CI     Effect         se          t          p       LLCI       ULCI
     -1.0853      .6609      .0458    14.4286      .0000      .5709      .7510
      .0575      .5958      .0348    17.1188      .0000      .5273      .6642
     1.0575      .5388      .0431    12.4889      .0000      .4539      .6236
```

Note: Level of confidence for all Confidence Intervals in output: 95%
Number of bootstrap samples for percentile Confidence Intervals: 5000
Moderator (W) Values in Conditional tables are the 16th, 50th and 84th percentiles
Consumer Innovativeness and Social Identity were mean centred prior to analysis

6.5.2. CI Moderating the Relationship on SIN and AB

Figure 6.8 below depicts the basic model and shows that this study tested the effect of Social Influence (as an independent variable) on Adoption Behaviour (as a dependent variable) and this relationship was moderated by Consumer Innovativeness. This implies that Consumer Innovativeness moderated the path between Social Influence and Adoption Behaviour. The general model is depicted below:

Figure 6.8: General Model Description for Moderation

```
**************************************************************************
Model  : 1
    Y  : AB
    X  : SIN
    W  : CI

Sample
Size:  385

**************************************************************************
```

*Note: *p<0.10; SI = Social Influence; CI = Consumer Innovativeness; AB = Organic Food Adoption Behaviour*

6.5.2. (i) Regression Analysis on Adoption Behaviour

The regression result on the outcome variable shows that the interaction between Social Identity and Consumer Innovativeness accounted for approximately 63% of variation in Adoption Behaviour (i.e., the chi-square value in Figure 6.9). The slope of the conditional effects (i.e., coeff) for Social Influence and Consumer Innovativeness was 0.3419 and 0.5517 respectively. This indicates that the slope for both Social Influence and Consumer

Innovativeness was found to be positive. Again, statistical significance was established by checking whether zero lay between the lower and upper confidence levels. As zero did not lie between the two intervals, i.e., 0.2449 to 0.4389 (for Social Influence) and 0.4363 to 0.6671 (for Consumer Innovativeness), this implied that both these conditional effects were proven to be statistically significant.

To confirm the statistical significance of the moderation effect, the interaction effect for Social Influence and Consumer Innovativeness was used. In light of this interaction effect between Social Influence and Consumer Innovativeness, a negative slope was established, i.e., -0.0572, which yielded a confidence level of -0.1234 to -0.0091. The results show that zero did not lie between the lower and upper confidence levels. Thus, this study submits a negative slope for the interaction effect, with a confirmed statistical significance. Accordingly, it was found in this study that Consumer Innovativeness moderates the relationship between Social Influence and organic food Adoption Behaviour for Millennials in South Africa as the interaction effect was found to be statistically significant in the regression model.

Figure 6.9: Regression Model on Adoption Behaviour

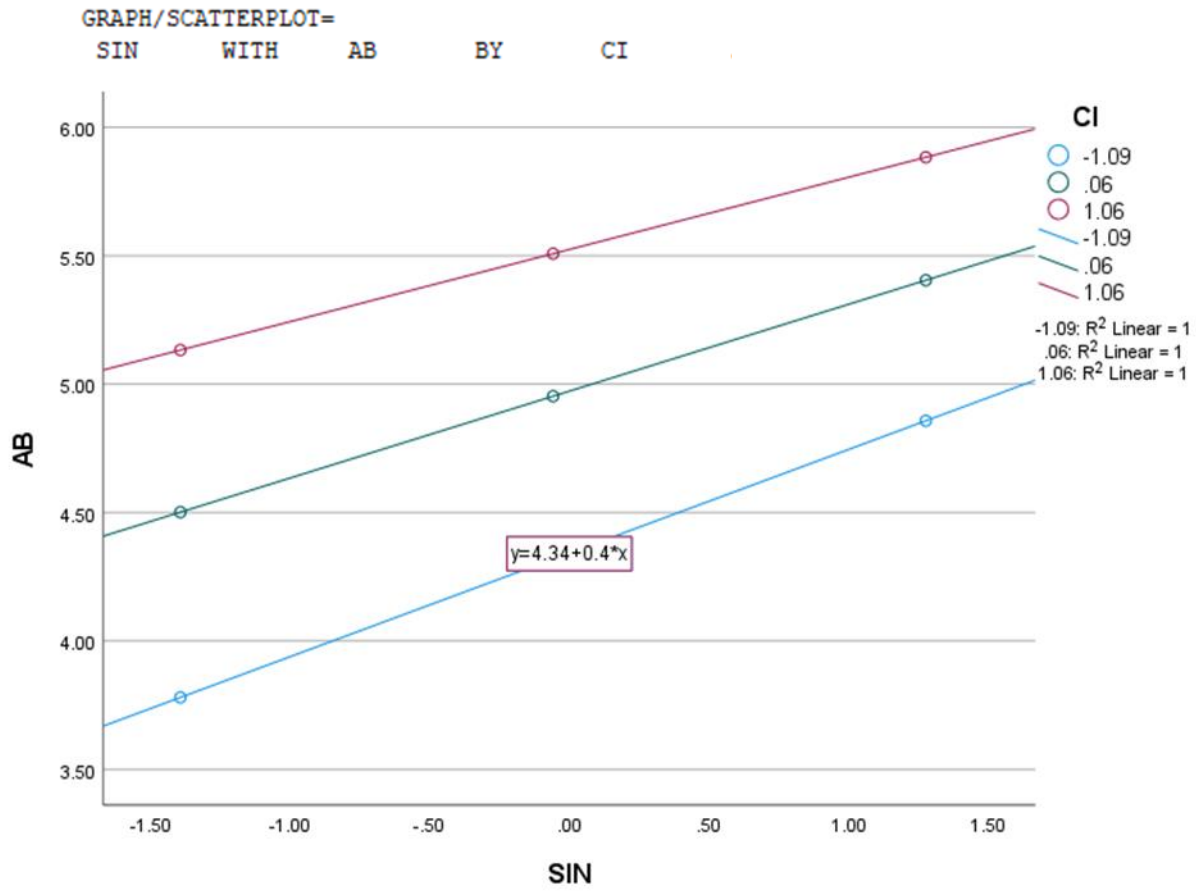
```
OUTCOME VARIABLE:
 AB

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .6489      .4211     1.1099    92.3951     3.0000   381.0000      .0000

Model
              coeff         se          t          p       LLCI       ULCI
constant     4.9411      .0586    84.3091      .0000     4.8259     5.0564
SIN           .3419      .0493     6.9312      .0000      .2449      .4389
CI            .5517      .0587     9.3981      .0000      .4363      .6671
Int_1        -.0572      .0337    -1.6961      .0907     -.1234     -.0091

Product terms key:
 Int_1    :        SIN      x        CI
```

*Note: *p<0.10; SIN = Social Influence; CI = Domain Specific Consumer Innovativeness; AB = Adoption Behaviour*

6.5.2. (ii) Sample Slopes Scatter Plot

The data that was established from PROCESS was copied and pasted into SPSS syntax window, then executed to create a visual depiction of the conditional effects for the main predictor in the scatter plot. Figure 6.10 below depicts the scatter plot for the conditional effects.

Figure 6.10: Scatter Plot of SIN by AB on CI



Note: SIN = Social Influence; CI = Consumer Innovativeness; AB = Adoption Behaviour

- The blue lines reflected the most pronounced slope
- The green lines reflected the next most pronounced slope
- The red lines reflected weakest pronounced slope.

6.5.2. (iii) Conditional Indirect Effects

The indirect effects of the exogenous variable (Social Influence) and endogenous variable (Adoption Behaviour) depicted that the conditional indirect effect is getting smaller moving from the lower to the higher confidence interval. It started at 0.4039, then to 0.3386 and ultimately to 0.2815. To check for moderation effect, the statistical significance was determined by examining whether zero fell within or outside the lower and upper confidence intervals. From the lower and upper bounds, zero fell outside all the confidence intervals. This finding confirmed the statistical significance of all the three conditional indirect effects. This confirmed that there is a significant difference between the conditional indirect effects, thus evidence exists to support the earlier claim that Consumer Innovativeness moderates the relationship between Social Influence and Adoption Behaviour – as corroborated by this study's results.

Figure 6.11: Conditional Effects of the Moderator

Conditional effects of the focal predictor at values of the moderator(s):

CI	Effect	se	t	p	LLCI	ULCI
-1.0853	.4039	.0681	5.9357	.0000	.2701	.5377
.0575	.3386	.0489	6.9243	.0000	.2425	.4348
1.0575	.2815	.0535	5.2582	.0000	.1762	.3867

Note: Level of confidence for all Confidence Intervals in output: 95%
Number of bootstrap samples for percentile Confidence Intervals: 5000
Moderator (W) Values in Conditional tables are the 16th, 50th and 84th percentiles
Consumer Innovativeness and Social Influence were mean centred prior to analysis

Another key aspect that this study sought to test was the effect of the mediating variable in the presence of moderation, i.e., moderated mediation analysis. The results from this analysis are presented below.

6.6. Moderated Mediation Analysis

Another expectation of this study was that Consumer Innovativeness was to moderate how Perceived Value mediates the relationship between Social Identity and Social Influence on Adoption Behaviour. Therefore, moderated mediation analysis was a valuable technique that this study used to assess whether the assumed indirect effects were conditional on the effects of the moderating variable.

Moderated mediation was also analysed through regressing the model using Hayes' PROCESS Procedure for SPSS Version 4.0. Under options, the following was selected:

- Generate code for visualising interactions
- Pairwise contrast of indirect effects
- Mean centering was set at only continuous variables that define products
- For probing any interactions, the researcher selected 1 standard deviation below the mean, at the mean and 1 standard deviation above the mean on the moderator variable. The probe interactions were set at the default, i.e., $p < 0.10$.
- Model number 7 was selected for moderation mediation analysis, at 95% Confidence Interval with 5000 bootstrap samples.

6.6.1. CI Moderating the Mediation Relationship of PV on SI and AB

The basic depiction of the model shows that this study tested the effect of Social Identity on Adoption Behaviour and this relationship was mediated through Perceived Value, and at the same time this mediation effect was moderated by Consumer Innovativeness. This implies that Consumer Innovativeness moderated the path between Social Identity and the mediating variable of Perceived Value on the outcome variable of Adoption Behaviour. The general model is depicted below:

Figure 6.12: General Model Description for Moderated Mediation

```
**************************************************************************
Model  : 7
    Y  : AB
    X  : SI
    M  : PV
    W  : CI

Sample
Size:  385

**************************************************************************
```

*Note: *p<0.10; SI = Social Identity; PV = Perceived Value; CI = Consumer Innovativeness; AB = Organic Food Adoption Behaviour*

6.6.1. (i) Regression Test on Perceived Value

On the first regression result, Social Identity and Consumer Innovativeness accounted for about 45% of variation in Perceived Value (see Figure 6.13). The mediating variable of Perceived Value was regressed onto Social Identity and Consumer Innovativeness and the interaction between the two variables were mean centred – i.e., the mean was converted to zero, but the standard deviation remained exactly the same. Under the slope of the conditional effects (i.e, coeff), the gradient for the effect of Social Identity on Perceived Value for cases falling at the mean on Consumer Innovativeness is 0.4955. This implies that the slope for Social Identity is positive. The effect of Consumer Innovativeness on Perceived Value for cases falling at the mean for Social Identity is reflected by 0.2517. The implication of this is that the slope for Consumer Innovativeness is positive. Statistical significance was derived by checking whether zero lies between the lower and upper confidence level, and since zero did not lie between the two intervals, i.e., 0.4177 to 0.5733 (for Social Identity) and 0.1492 to 0.3542 (for Consumer Innovativeness), this meant that the conditional effects were deemed to be statistically significant.

In terms of the interaction effect for Social Identity and Consumer Innovativeness, there was a negative slope, i.e., -0.0231. In terms of statistical significance, zero lies between the lower and upper confidence levels, i.e., -0.0807 to 0.035. Therefore, this study submits a negative slope for the interaction effect, with no statistical significance. Therefore, it was established that there is no mediated moderation because the interaction effect was not statistically significant in the regression model.

Figure 6.13: Regression Model on Perceived Value

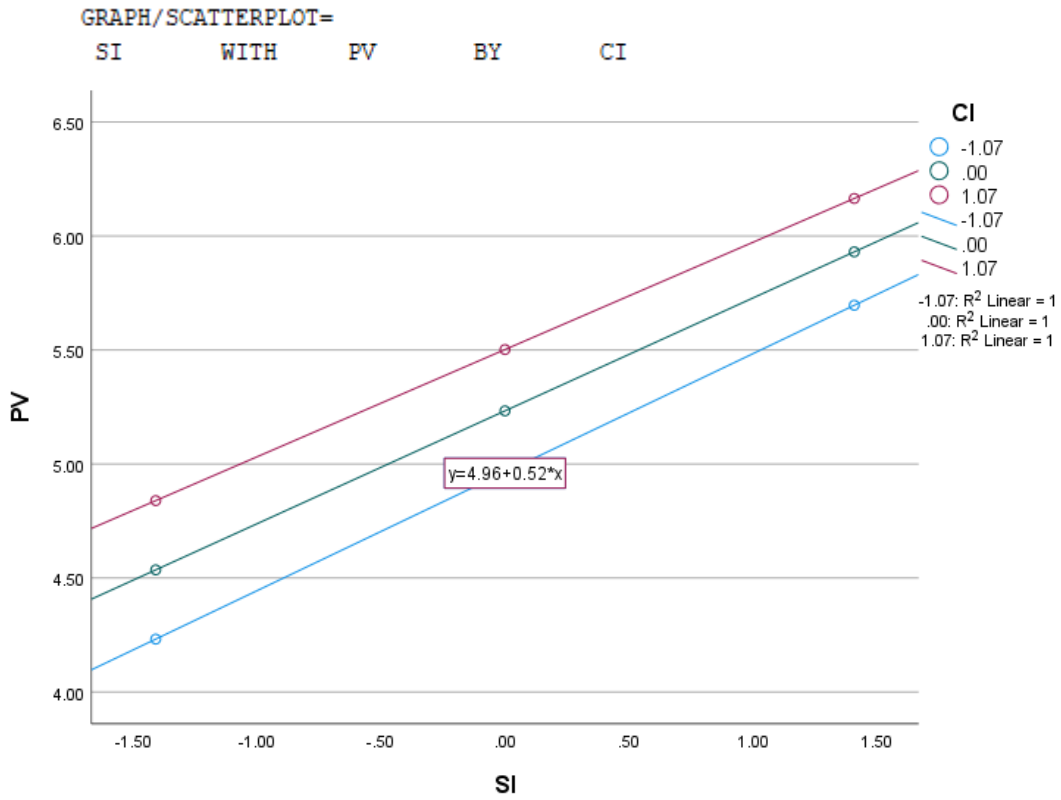
```
OUTCOME VARIABLE:
 PV

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .6729      .4528      .9048   105.0962     3.0000   381.0000      .0000

Model
              coeff         se          t          p       LLCI       ULCI
constant     5.2333      .0530    98.7255      .0000     5.1291     5.3376
SI            .4955      .0396    12.5245      .0000      .4177      .5733
CI            .2517      .0521     4.8271      .0000      .1492      .3542
Int_1        -.0231      .0293     -.7878      .4313     -.0807      .0345

Product terms key:
 Int_1    :        SI       x        CI
```

*Note: *p<0.10; SI = Social Identity; PV = Perceived Value; CI = Domain Specific Consumer Innovativeness*

6.6.1. (ii) Sample Slopes Scatter Plot

The data for visualising the conditional effects for the main predictor was copied from PROCESS and pasted into SPSS syntax window, then executed to produce the scatter plot as depicted in the graph below.

Figure 6.14: Scatter Plot of SI by PV on CI



Note: SI = Social Identity; PV = Perceived Value; CI = Consumer Innovativeness

- The blue lines reflected one standard deviation below the mean on Consumer Innovativeness (i.e., the most pronounced slope)
- The green lines reflected the mean on Consumer Innovativeness (i.e., the next most pronounced slope)
- The red lines reflected one standard deviation above the mean on Consumer Innovativeness (i.e., weakest pronounced slope).

6.6.1. (iii) Regression Test on Adoption Behaviour

The next regression model featured Adoption Behaviour regressed on Social Identity and Perceived Value. Social Identity and Perceived Value accounted to about 75% of variation in Adoption Behaviour (see Figure 6.15). From the results, Social Identity has a positive predictive relationship (i.e., has a positive slope of 0.3741) and is statistically significant (i.e., zero does not lie between the lower confidence interval of 0.3100 and the upper confidence interval of 0.4283). Then, for Perceived Value, the slope is also positive (i.e., 0.6145) and statistically significant (i.e., zero does not lie between the lower confidence interval of 0.5400 and upper confidence interval of 0.6851). Essentially, this implies that the direct effect of Social

Identity on Adoption Behaviour is positive and statistically significant while the direct effect of Perceived Value on Adoption Behaviour is also positive and statistically significant.

Figure 6.15: Regression on Outcome Variable

```
OUTCOME VARIABLE:
 AB

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .8678      .7531      .4721   582.6220     2.0000   382.0000      .0000

Model
              coeff         se          t          p       LLCI       ULCI
constant     1.6956      .1904     8.9068      .0000     1.3213     2.0699
SI            .3741      .0326    11.4612      .0000      .3100      .4383
PV            .6145      .0359    17.1311      .0000      .5440      .6851
```

*Note: *p<0.10; SI = Social Identity; PV = Perceived Value; AB = Organic Food Adoption Behaviour*

6.6.1. (iv) Conditional Indirect Effects

The indirect effects of the independent and dependent variable shows that the conditional indirect effect is getting smaller moving from the lower to the higher confidence interval (see Figure 6.16). It starts at 0.3196, then to 0.3045 and finally to 0.2893. Using the bootstrapping confidence intervals, statistical significance was determined by checking whether zero fell within or outside these confidence intervals. From the lower and upper bounds, zero fell outside all the confidence intervals – thus all the three conditional indirect effects were deemed statistically significant.

Figure 6.16: Conditional Indirect Effects

```
Conditional indirect effects of X on Y:

INDIRECT EFFECT:
 SI          ->    PV          ->    AB

        CI     Effect     BootSE   BootLLCI   BootULCI
   -1.0688      .3196      .0404      .2424      .4002
     .0000      .3045      .0320      .2424      .3675
    1.0688      .2893      .0397      .2110      .3686
```

6.6.1. (v) Index of Moderated Mediation & Pairwise Contrasts

The single index of moderated mediation provided an overall test of whether there was moderated mediation between the studied variables (see Figure 6.17). Since zero fell within the lower and upper bound of the bootstrapping confidence interval (i.e., -0.0587 to 0.295), therefore this study concluded that there is no evidence for moderated mediation between the studied relationships.

The pairwise contrasts between conditional effects allowed the researcher to probe further any kind of indirect conditional effects or essentially, probe the nature of the moderated mediation. All the pairwise contrasts show that zero fell within the lower and upper bound of the bootstrap confidence intervals. Therefore, this study further cements that there is no significant difference between the conditional indirect effects at 1 standard deviation below, at and above the mean on Consumer Innovativeness, thus no evidence for moderated mediation between the studied variables was established.

Figure 6.17: Index of Moderated Mediation

```
      Index of moderated mediation:
        Index     BootSE   BootLLCI   BootULCI
CI     -.0142      .0225     -.0587      .0295

 Pairwise contrasts between conditional indirect effects (Effect1 minus Effect2)
    Effect1    Effect2   Contrast     BootSE   BootLLCI   BootULCI
      .3045      .3196     -.0152      .0240     -.0627      .0315
      .2893      .3196     -.0303      .0480     -.1254      .0630
      .2893      .3045     -.0152      .0240     -.0627      .0315
```

Note: Level of confidence for all Confidence Intervals in output: 95%
Number of bootstrap samples for percentile Confidence Intervals: 5000
Moderator (W) Values in Conditional tables are the mean and +/- Standard Deviation from the mean
Consumer Innovativeness and Social Identity were mean centred prior to analysis

6.6.2. CI Moderating the Mediation Relationship of PV on SIN and AB

Moderated mediation was tested for the second time, to check whether the effect of Social Influence on Adoption Behaviour was mediated through Perceived Value, while this mediation was moderated by Consumer Innovativeness (see Figure 6.18). Therefore, Consumer Innovativeness was assumed to moderate the path between Social Influence and the mediating variable of Perceived Value. The general model is depicted below:

Figure 6.18: General Model Description for Moderated Mediation

```
**************************************************************************
Model  : 7
    Y  : AB
    X  : SIN
    M  : PV
    W  : CI

Sample
Size:  385

**************************************************************************
```

Note: p<0.10; SIN = Social Influence; PV = Perceived Value; CI = Domain-Specific Consumer Innovativeness; AB = Organic Food Adoption Behaviour

6.6.2. (i) Regression Test on Perceived Value

The initial regression model shows that Social Influence and Consumer Innovativeness accounted for about 27% of variation in Perceived Value (see Figure 6.19). The interaction effect between these two variables was also mean centred. The slope (i.e., conditional effect) of Social Influence on Perceived Value for cases falling at the mean on Consumer Innovativeness is 0.2527, thus highlighting a positive slope. Moreover, the effect of Consumer Innovativeness on Perceived Value for cases that fell at the mean for Social Identity is reflected by 0.2517, thus implying that the slope for Consumer Innovativeness is positive. Statistical significance was computed by examining whether zero lay between the lower and upper confidence level, and since zero did not lie between the two intervals, i.e., 0.1520 to 0.3534 (for Social Influence) and 0.2971 to 0.5368 (for Consumer Innovativeness). Therefore, it was established that the conditional effects for both variables were statistically significant.

Regarding the interaction effect for Social Influence and Consumer Innovativeness, the results yielded a positive slope, i.e., 0.0002. However, in terms of statistical significance, zero lay between the lower and upper confidence levels, i.e., -0.0685 to 0.0690. Therefore, a negative slope for the interaction effect was established with no statistical significance implying that no mediated moderation was established as the interaction effect was not statistically significant in the regression model.

Figure 6.19: Regression Model Summary for Perceived Value

```
OUTCOME VARIABLE:
 PV

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .5259      .2766     1.1963    48.5517     3.0000   381.0000      .0000

Model
              coeff         se          t          p       LLCI       ULCI
constant     5.2163      .0608    85.7302      .0000     5.0966     5.3359
SIN           .2527      .0512     4.9352      .0000      .1520      .3534
CI            .4170      .0609     6.8419      .0000      .2971      .5368
Int_1         .0002      .0350      .0071      .9943     -.0685      .0690

Product terms key:
 Int_1    :        SIN      x        CI
```

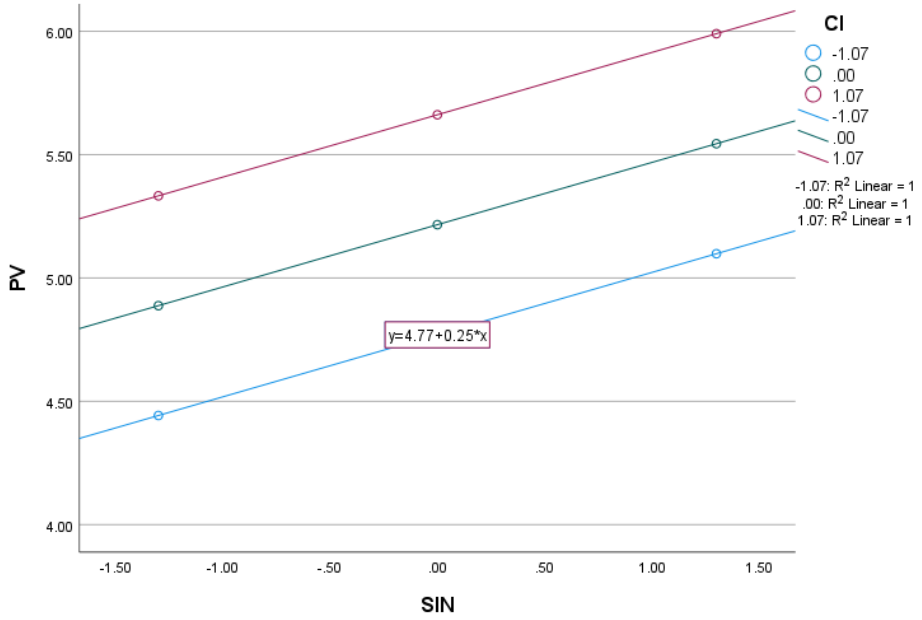
*Note: *p<0.10; SIN = Social Influence; PV = Perceived Value; CI = Domain Specific Consumer Innovativeness*

6.6.2. (ii) Sample Slopes for Scatter Plot

The plot was created through SPSS 28 Syntax functionality in order to plot out the conditional effects.

Figure 6.20: Scatter Plot of SIN and PV on CI

```
GRAPH/SCATTERPLOT=
 SIN      WITH     PV       BY       CI
```



Note: SIN = Social Influence; PV = Perceived Value; CI = Consumer Innovativeness

- The blue line reflected one standard deviation below the mean on Consumer Innovativeness (i.e., the most pronounced slope)
- The green line reflected the mean on Consumer Innovativeness (i.e., the next most pronounced slope)
- The red line reflected one standard deviation above the mean on Consumer Innovativeness (i.e., weakest pronounced slope).

6.6.2. (iii) Regression Test on Adoption Behaviour

Regression analysis was also performed for Adoption Behaviour regressed on Social Influence and Perceived Value (see Figure 6.21). Social Influence and Perceived Value accounted to approximately 70% of variation in Adoption Behaviour. The results for Social Influence further indicates a positive predictive relationship (i.e., a positive slope of 0.2227) and is statistically significant (i.e., zero does not lie between the lower confidence interval of 0.1583 and the upper confidence interval of 0.2871). As for Perceived Value, the slope is also positive (i.e., 0.7828) and statistically significant (i.e., zero does not lie between the lower confidence interval of 0.7174 and upper confidence interval of 0.8481). The implication of this result is that the direct effect of Social Influence on Adoption Behaviour is positive and statistically significant while the direct effect of Perceived Value on Adoption Behaviour is also positive and statistically significant.

Figure 6.21: Regression Model Summary on Adoption Behaviour

OUTCOME VARIABLE:
AB

Model Summary

R	R-sq	MSE	F	df1	df2	p
.8390	.7040	.5661	454.2702	2.0000	382.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	.8180	.1775	4.6078	.0000	.4689	1.1670
SIN	.2227	.0328	6.7962	.0000	.1583	.2871
PV	.7828	.0332	23.5579	.0000	.7174	.8481

*Note: *p<0.10; SIN = Social Influence; PV = Perceived Value; AB = Organic Food Adoption Behaviour*

6.6.2. (iv) Conditional Indirect Effects

The indirect effects of Social Influence and Adoption Behaviour demonstrates that the conditional indirect effect increased from lower to the higher confidence interval. The effect size started at 0.1976, then 0.1978 and finally 0.1980. The bootstrapping confidence intervals were used to determine statistical significance and when zero fell within the interval, it highlighted non-existence of statistical significance while if zero fell outside these confidence intervals it meant there was statistical significance. As depicted in the Figure 6.22 below, the lower and upper bounds show that zero fell outside all the confidence intervals – thus all the three conditional indirect effects were also found statistically significant.

Figure 6.22: Indirect Conditional Effects

Conditional indirect effects of X on Y:

INDIRECT EFFECT:
SIN -> PV -> AB

CI	Effect	BootSE	BootLLCI	BootULCI
-1.0688	.1976	.0608	.0785	.3163
.0000	.1978	.0450	.1103	.2875
1.0688	.1980	.0451	.1107	.2884

6.6.2. (v) Index of Moderated Mediation & Pairwise Contrasts

The index of moderated mediation was used to offer an general test of whether moderated mediation existed between the studied variables. As zero fell within the lower and upper bound of the bootstrapping confidence interval (i.e., -0.537 to 0.0544), it was thus concluded in this study that insufficient evidence exists to support the claim that there was moderated mediation between the studied relationships.

In order to further probe if there was any kind of indirect conditional effects, this study made use of the pairwise contrasts between conditional effects. This basically meant probing the nature of the moderated mediation. In light of the results depicted in Figure 6.23 below, all the pairwise contrasts show that zero fell within the lower and upper bound of the bootstrap confidence intervals. This suggests that there was no significant difference between the conditional indirect effects at 1 standard deviation below, at and above the mean on Consumer Innovativeness. Therefore, this study submits that no evidence was established to support moderated mediation between the studied relationships.

Figure 6.23: Index of Moderated Mediation & Pairwise Contrasts

```
      Index of moderated mediation:
        Index     BootSE   BootLLCI   BootULCI
CI      .0002      .0274     -.0537      .0544

 Pairwise contrasts between conditional indirect effects (Effect1 minus Effect2)
    Effect1    Effect2   Contrast     BootSE   BootLLCI   BootULCI
      .1978      .1976      .0002      .0293     -.0573      .0581
      .1980      .1976      .0004      .0585     -.1147      .1163
      .1980      .1978      .0002      .0293     -.0573      .0581
```

Note: Level of confidence for all Confidence Intervals in output: 95%
Number of bootstrap samples for percentile Confidence Intervals: 5000
Moderator (W) Values in conditional tables are the mean and +/- Standard Deviation from the mean
Consumer Innovativeness and Social Influence were mean centred prior to analysis

6.7. Chapter Summary

This chapter presented the results of this study from both descriptive and inferential analyses. The descriptive statistical analysis primarily used outputs from SPSS 27 to assess participants' demographic data. At first, descriptive results were used to give meaning to the collected data through summary statistics, i.e., computing the measures of central tendency (i.e., mean) and measures of variability (i.e., standard deviation). Univariate analysis entailed the computation of Cronbach's alpha coefficients, to check whether the measurement instruments were reliable, while bivariate analysis entailed using the correlation matrix to check how highly or lowly correlated the variables were between each other. The correlation matrix also helped in determining both the convergent and discriminant validity of the study variables. Inferential analyses results were yielded through SEM via AMOS 27 and through the MLE method. As suggested by Anderson and Gerbing (1988), SEM followed a two-step process, which was kickstarted by conducting CFA to confirm the factor structure of the manifest variables. CFA entailed a reconfirmation of reliability (i.e., composite reliabilities), validity (i.e., AVE values) of study variables while model fit helped determine whether the hypothesised model managed to fit the gathered data. Path modelling was the final stage for SEM, whereby model fit was rechecked and compared against the values obtained under CFA. Hypothesis testing was the last step of path modelling used to determine the statistical support for the posited relationships.

This chapter thus presented the results from all the analyses that were conducted. Furthermore, each hypothesis was declared supported (i.e., fail to reject) or not supported (i.e., rejected). The results show that of the eight hypotheses postulated in Chapter 3, only seven were supported, with one of the hypotheses being rejected as it yielded an inverse relationship. In case the hypothesis was rejected, this meant that insufficient evidence exist from the gathered data to substantiate the previously hypothesised relationship. All the moderation effects that were assumed in this study were supported, as there was statistical basis to corroborate them, while all the moderated mediation effects were rejected owing to non-significant results for the interaction effects

The next chapter discusses the findings contained in this chapter in light of the existing submissions in literature by previous scholars.

CHAPTER 7

DISCUSSION & INTERPRETATION OF STUDY RESULTS, DRAWING RELEVANT CONCLUSIONS

7.0. Introduction

This chapter interprets and describes the significance of the study's findings in light of what is already known in the extant literature regarding the investigated research problem. After considering these findings, any novel insights about the studied problem(s) are identified and explained to fill the current literature gap and give meaning to the complex statistical analyses results presented in chapter 6. Details about the results from data analysis are construed in line with their statistical significance. This chapter also objectively reports on the research findings by giving meaning to these results while putting them in context with the purpose of this study and explaining why they matter. This was done by establishing whether the findings of this study confirmed or failed to confirm the conclusions from previous scholars. Therefore, this chapter indicates the significance level of the results by providing logical explanations relative to those submitted by previous scholars. Main findings will be highlighted at the end of each section that discusses and interprets the relationships between the variables in order to confirm whether they were supported or rejected.

7.1. Purpose of the Study

The basis of this study entailed an analysis of how social context factors shape Millennials' adoption decisions for organic food in South Africa through the moderated mediation effect of Consumer Innovativeness and Perceived Value, respectively. Establishing this relationship through an empirical study was deemed indispensable in light of contemporary marketers' desire to unravel and understand the antecedents of organic food Adoption Behaviours of the younger generation, mainly through the lens of social context factors, while accounting for the role of the moderation and mediation effects.

7.2. Research Objectives

This study sought to determine whether there is a relationship between social context factors and the adoption of organic food (through the moderated mediation effects) from the perspective of Millennials in South Africa. To achieve this broad aim that triggered this study and provide a direction to effectively conduct this study, specific objectives and questions were formulated (see Section 1.6 and 1.7 respectively).

7.3. Summary of the Results

In order to realise the objectives of this study, it was vital to make sure that all the measurement instruments used to evaluate the links between the constructs were both internally reliable and valid. Therefore, the reliability and validity of measurement scales were established to ensure that meaningful statistical results were found. Once the measurement scales were deemed reliable and valid, this study ensured that the model aligned with the gathered data. Model fit was confirmed by computing different fit indices and comparing the results against the established thresholds. Once model fit was confirmed (both under CFA and path modelling), this study was ready to test all the hypothesised relationships detailed in chapter 3.

The following section summarises the principal outcomes of this research, i.e., it will highlight what the key research outcomes revealed or indicated and suggested. This summary will represent the totality of the results in light of the previous submissions in the extant literature.

7.3.1. Conclusions Regarding Reliability Analysis

The reliability of a measurement instrument is one of the critical aspects of research (Cronbach, 1951). If the findings from this research were to be replicated consistently, this implies that they are reliable. Nunally (1978) suggested that it was paramount for a study to determine the reliability coefficients of all variables before significance testing. Therefore, in line with Nunnally (1978), only constructs with a satisfactory reliability coefficient were used for testing hypotheses. It was for this reason that this study first determined the internal consistency coefficients of all measures to ensure that every item included in each variable profoundly contributed to the reliability of each scale before hypotheses were tested. Nunnally (1978) also submitted that item-total correlations beyond 0.20 are pointers of internal consistency while Cronbach alpha values above 0.70 generally depict acceptable reliability content of measuring scales (see also Byrne, 2006; Cronbach, 1951; Kerlinger & Lee, 2000; Pallant, 2010; Tavakol & Dennick, 2011). Moreover, Kline (2011) suggested that alpha coefficients between 0.6 and 0.7 represent a marginally acceptable threshold. The results for Cronbach's alpha values are presented in Table 6.3 and they demonstrate that alpha coefficient figures for this adapted scales ranged between 0.804 and 0.940. Thus, this study's Cronbach's alpha findings meant that the suggested threshold of 0.7 (as suggested by Cronbach, 1951) was effectively met.

This study further highlighted that determining reliability through the computation of alpha coefficients was a necessary but inadequate condition to confirm the reliability of its measurement instruments or variables (Anderson & Gerbing, 1988). Therefore, Composite Reliability tests were conducted under Confirmatory Factor Analysis. Composite Reliability values were used as an alternative to further corroborate instrument reliability as Peterson and Kim (2012) further argued that CR values yield a better reliability estimate than the standard alpha coefficients. Consistent with previous scholars, this study accepted CR values above 0.7 (Hulland, 1999; Hair et al., 2007), or marginally acceptable values between 0.6 and 0.7 (Hair et al., 2007). The results from the calculation of CR values showed that they ranged between 0.79 and 0.87. In line with Hulland (1999) and Hair et al. (1998), all the measurement scales or constructs for this study met the acceptable threshold of above 0.7, as depicted in Table 6.5.

Therefore, in light of the above discussion, the study results from reliability analyses (i.e., alpha coefficients and CR values) were deemed satisfactory and acceptable as per the abovementioned guidelines. This implies that all the measurement scales achieved reliability scores that surpassed the suggested minimum threshold of 0.7. Given all these results, this study concluded that the measurement instruments and scaled items used were reliable and suitable for hypothesis testing.

7.3.2. Conclusions Regarding Validity Analysis

After the measurement instruments attained satisfactory reliability results (as suggested in the extant literature), the next stage necessitated checking whether the study measures adequately and accurately assessed the constructs they professed to measure. In this manner, the validity of every variable was determined (Nunnally & Bernstein, 1994) to ensure that the study used questions that indeed measured the respective variables. Two broad metrics (i.e., convergent and discriminant validity) were used to determine the validity of the selected constructs. Only these two general metrics were applied to this study, following the recommendation by Westen and Rosenthal (2003) that it is sufficient to present relationships between one measure and other measures that are purportedly linked with it (i.e., convergent validity) or vary independently of it (i.e., discriminant validity). The convergent-discriminant validity relationship that characterised this study provided an approximation of the magnitude to which the difference in one measure also revealed the variance in the underlying construct, as explained in section 6.2.2.

This study used the bivariate correlation analysis to proffer initial evidence regarding the extent to which measurement items in a particular scale diverged or converged well with each other. As Ghauri and Grenhoug (2010) suggested, the correlation analysis was used to predict the pattern of results within the convergent-discriminant validity assessment. High correlations between the study constructs (i.e., $0.5 \geq X < 0.85$) indicated that items converged well with each other, while low correlations (i.e., <0.5) justified the existence of discriminant validity (Westen & Rosenthal, 2003). Furthermore, most of the items converged well with the total, with some showing signs of divergence as they ranged from 0.432 to 0.838. Thus, the conclusion that can be drawn from the results is that they depict the existence of convergent validity (i.e., for constructs that correlated reasonably with each other, for example, the correlation coefficient of 0.697** for Social Representation and Attitude) and the presence of discriminant validity (or marginal convergence) for those below 0.5 (for example, the correlation coefficient of 0.432** for Social Influence and Perceived Value) (Fraering & Minor, 2006; Nunnally, 1978).

The existence of convergent validity was also verified through the use of CR values. Consistent with Bagozzi and Yi (1988), CR values need to be no less than 0.6 for the study to confirm a marginally acceptable item convergence. Table 6.5 shows that composite reliabilities for the current study ranged from 0.79 to 0.87, suggesting that the suggested thresholds to establish convergent validity (i.e., at least 0.7) were successfully met (Anderson & Gerbing, 1988; Fornell & Larcker, 1981). AVE values were also used to further check the existence of convergent validity. Previous scholars like Anderson and Gerbing (1988), Fornell and Larcker (1981), as well as Kline (2011), suggested that the acceptable threshold to justify the existence of convergent validity is when AVE values are more than 0.5 (with values less than 0.5 depicting the presence of discriminant validity). Table 6.5 indicates that the AVE values for this study ranged from 0.50 to 073, implying that the recommended thresholds to justify convergent validity (as suggested by Anderson and Gerbing (1988) and other prominent scholars) were successfully used met. Thus, by and large, the findings of this study established that the minimum requirements for confirming convergent validity were met.

Another essential condition for verifying construct validity, as partly alluded to in the sections above, is that the study must distinguish between unlike variables, i.e., discriminant validity (Carlson & Herdman, 2012). Discriminant validity implies that each variable must be unique in light of the other tested variables within the same model (Rönkkö, & Cho, 2020). This study used the inter-construct correlation matrix to determine the existence of discriminant validity.

The results in Table 6.4 reveals that this study yielded no perfect correlation (i.e., r = 1 or 100% correlation between the study constructs), thus further signalling a sense of exclusivity or distinctiveness amongst the studied constructs. Also, the variables did not correlate too highly with each other (i.e., r < 0.85) as this would have indicated the problem of multicollinearity (Fraering & Minor, 2006). As the findings from the correlation matrix signal the exclusivity that existed between the selected variables, the uniqueness of the study variables (i.e., discriminant validity) was thus established.

The next section discusses the results on the relationships between the study constructs, i.e., it gives meaning to the findings from hypotheses testing and ultimately draws key or main conclusions for each of the hypothesised relationships.

7.4. Interpretation and Discussion of Results from Hypotheses Testing

The following section provides information that was used to determine whether the gathered data reinforced the hypothesised relationships specified during the conceptualisation stage. As a foundation for solid arguments, this discussion will be linked to the earlier literature review. The interpretation thereof will give suitable meaning to the results, thus leading to the refined or modified structural model, as displayed in Figure 7.1.

7.4.1. The Relationship between Social Identity and Perceived Value

A person's affiliation with a specific social group frequently predicts their value perceptions (He, Li & Harris, 2012). This argument supports the several conclusions submitted by previous authors and also arguments derived from the Social Identity Theory, which postulates that a person tends to find their value from categorising themselves to specific groups (Tajfel & Turner, 1979). (See section 2.5.1. for more detail). The findings from the correlation analysis established that the relationship between Social Identity and Perceived Value was moderate, significant and positive (i.e., β=0.685**; $p < 0.01$) (see Table 6.4). From hypothesis testing and at a 99% confidence level, this study found significant and positive results – although the relationship was weak (i.e., 0.188***; $p < 0.01$) (see Table 6.7). This weak relationship meant that a higher identification with a specific social group results in a minor probability that an individual's Perceived Value will correspondingly increase. The effect of this finding from hypothesis testing is that there is a slight but worthy likelihood that an individual's Social Identity would increase their value perceptions about organic food. Thus, this study can confirm that socially-oriented consumers will have a slightly restrained value when adopting organic foodstuffs rather than those with weak social ties (Cheah & Phau, 2011). This is partly because organic food is still in its infancy stage and that it is yet to reach its market potential. Only then (i.e., after reaching full market status), will such produces become socially entrenched in peoples' daily lives.

The above discussion shows that this study failed to reject Hypothesis 1 (i.e., Social Identity positively influences consumers' Perceived Value) because the analysis yielded positive results. In failing to reject H1, this study answered the previous question: "Does Social Identity positively impact Perceived Value?" as it established that the relationship was indeed positive. The study results are also in line with the propositions from the Social Identity theory, which argues that people downplay their values during self-categorisation (Papista & Dimitriadis, 2012). This study's finding further supports other existing studies, for example, an

investigation conducted by Persaud and Schillo (2017) which established that Social Identity is positively related to Perceived Value (β=0.49, p<0.01). Similarly, Chen and Lin (2019), alongside He et al. (2012), submitted that consumers' level of social identification positively impacts their Perceived Value. Jamal and Sharifuddin (2015) also empirically validated that consumers' Perceived Values are positively affected by their Social Identity. An earlier expression by McGowan et al. (2016), who posited that greater levels of cognitive Social Identity lead to higher levels of perceived social value, similarly supports this argument.

At this stage, it is also worth noting that this study did not only yield positive results, but they were significant as well. This outcome was in line with findings from previous studies, for example, Azis et al.,(2020), who also established that Social Identity has a positive and significant influence on Perceived Value. Given the vast array of literature (i.e., in chapter 2), and in light of the statistical support generated from the results of this study, it can be reasonably established that:

<u>Main finding 1:</u> There is a weak but significant and positive probability that Millennials' identification with particular social groups will influence their perceptions of value for organic food. Therefore, this study failed to reject the supposition that Social Identity positively influences Perceived Value and highlights that the relationship between these two constructs is not just positive but also significant.

7.4.2. The Relationship between Social Representation and Perceived Value

The correlation analysis proffered evidence for a substantial positive connection between Social Representation and Perceived Value (β=0.682**; p < 0.01) (see Table 6.4). This alpha coefficient meant that high levels of Social Representation are moderately and positively associated with Perceived Value, thus supporting Hypothesis 2 (i.e., Social Representation positively influences consumers' Perceived Value). In addition, hypothesis testing found a strong positive and significant relationship between Social Representation and Perceived Value. Although this study had initially projected a positive relationship between these variables, hypothesis testing further confirmed a significant link between them, thus creating new knowledge as additional support was found for Hypothesis 2 (i.e., 0.876***; p<0.01) (see Table 6.7). This study also provided a 99% confidence level for supporting a significant positive relationship between the two variables. Noteworthy, the association between Social Representation and Perceived Value yielded the second-highest and strong positive relationship compared to the other hypotheses tested in this study.

The findings from hypothesis testing suggest that Social Representations are significantly, strongly and positively linked to the manifestation of Millennials' positive perceptions about organic food. Therefore, the relevant statistical analyses supported Hypothesis 2, which predicted a positive relationship between the two variables. As this study provided statistical support for its failure to reject H2, this, in turn, resulted in it answering the earlier question that "Does Social Representation have a positive impact on Perceived Value?" by confirming that the relationship is indeed positive. Accordingly, this study failed to reject the hypothesis that Social Representation ignites positive value perceptions on Millennials' adoption of organic food. As aforementioned, it also highlighted that the relationship between these two variables is not just positive (as initially hypothesised) but is strong and significant.

This study's significant and positive result on the relationship between Social Representation and Perceived Value is consistent with submissions from previous scholars. For example, Midmore et al. (2011), Persaud and Schillo (2017) and Cowart et al. (2008) variously reached conclusions consistent with those of this study. Deriving from the Social Representations theory (Blau, 1964; Moscovici, 1981; Settoon, Bennett & Liden, 1996) (see section 2.5.2 i. for a detailed account); the findings from this study cements the fact that if group members share and strongly exhibit positive values, beliefs and ideas about organic food, they will likely perceive greater value in such products (as also submitted by Persaud and Schillo 2017). In addition, the findings from previous scholars corroborate the argument from this study that group members display greater congruence on symbolic aspects of new products (like conforming to specific norms) on how they derive their value perceptions (Cowart et al., 2008 Martikainen & Hakokongas, 2022). One possible explanation for this finding could be attributed to the approach to Social Representations, which underscores that these collective representations are linked to what people think they know or value about their prevailing situations (Blau, 1964; Stewart & Lacassagne, 2005). The results of this study and backed by evidence in the extant literature concluded that:

<u>Main Finding 2</u>: Social Representations play a strong significant, and positive role in shaping Millennials' value perceptions, which invariably translate to their acceptance of organic food, as such beliefs enable them to derive and give meaning to these novel foods. Thus, this research failed to reject the hypothesis that Social Representation positively influences Perceived Value and further underlines that the relationship between these two variables is significant and positive as sufficient evidence was garnered from this study.

7.4.3. The Relationship between Social Influence and Perceived Value

The findings from the inter-construct correlation analysis submitted evidence of a moderate, significant and positive correlation between Social Influence and Perceived Value (β=0.432**, $p < 0.01$). This alpha value implies that high levels of Social Influence translate to a moderate yet positive and significant association with Millennials' value perceptions for organic food (see Table 6.4). This correlation coefficient established support for Hypothesis 3 (i.e., Social Identity positively influences consumers' Perceived Value). As indicated in Table 6.7, the hypotheses testing results show that the relationship between Social Influence and Perceived Value was positive and significant (although weak). Hence, at a 99% confidence level, this study provided support for a significant and positive relationship between the two variables and accordingly failed to reject Hypothesis 3 (i.e., 0.117***; $p<0.01$). This study's inability to reject H3 meant that sufficient evidence exists to support a positive and significant relationship between Social Influence and Perceived Value. Accordingly, this study provided statistical support for its incapacity to reject H3, thus shedding light on the previous question that "Does Social Influence have a positive impact on Perceived Value?" by validating that the relationship is certainly positive.

The study findings could express the argument presented by Delre et al. (2010) that Social Influences activate value perceptions through factors like modelling and social persuasion. The significant and positive relationship between Social Influence and Perceived Value (as established in this study) is further reinforced by the critically important finding submitted by Langner et al. (2013) that the effects of opinion leaders are likely to engender positive and significantly strong value perceptions towards new product espousal by consumers. Value perceptions are usually drawn from opinion leaders who openly endorse these products, i.e., when they are seen consuming them, which influences individuals to want to try them. In essence, Social Influencers like opinion leaders, friends, and family members tend to positively impact individuals' value perceptions and behaviour by intensifying in-group salience, i.e., the feeling of belongingness to particular social groups (Stayman & Deshpande, 1989 Tjokrosaputro & Cokki, 2019). This notion is in line with this study's finding that suggests that individuals do not always adopt products owing to their functional or hedonic value but also because of the (social) value perceptions cultivated by important others (Fisher & Price, 1992; Foxall, 1998). In terms of organic foodstuffs, several scholars showed that an individual's link to social networks is significantly vital in explaining their value perceptions and thus sparking their intentions to adopt these foodstuffs (Bartels & Onwezen, 2014; Cheah & Phau, 2011).

The findings from this study further suggest that Social Influence is a more nuanced variable that helps in explaining some of the contradictory results reported in the literature, for example, Persaud and Schillo (2017) found a negative relationship between Social Influence and Perceived Value (i.e., with an Estimate of −0.16***). They also found that innovators displayed increased Social Influence towards organic products that significantly reduced their Perceived Value. Another submission from their study was that consumer innovators might rely less on the influence from others in their social networks that are not experts on difficult-to-verify claims regarding organic products (Bhate & Lawler, 1997). Although the research findings by Persaud and Schillo (2017) were incongruent with the conclusions of the present study, this does not dispel the noteworthy results that stemmed here. Ha-Brookshire and Norum (2011) noted that the Perceived Value of organic foodstuffs must be judged beyond their quality and monetary value, but rather through the societal benefits such produces offer. In line with Cheah and Phau (2011), socially-oriented consumers will perceive greater value from adopting organic food to benefit from the societal image of being a good citizen. Individuals' desire to safeguard their good citizenship also helps them avoid the cognitive dissonance associated with going against important and relevant others (Persaud & Schillo, 2017).

In light of the findings of this study alongside the empirical evidence from previous scholars, this study highlights that:

<u>Main finding 3:</u> The connection between Social Influence and Perceived Value corroborate those from earlier studies that this relationship is significant and positive, although weak. Hence, this study could not reject the hypothesis that Social Influence positively impacts Perceived Value and further underscores that the connection between these two variables is not just positive but is also significant.

7.4.4. The Relationship between Perceived Value and Attitude

Evidence from the bivariate correlation analysis submitted the highest positive correlation between Perceived Value and Attitudes (β=0.838, $p < 0.01$). This alpha coefficient value implies that high levels of Perceived Value result in more positive Attitudes (see Table 6.4). Furthermore, the analysis from Amos 27 also submitted a significant and positive relationship between Perceived Values and Attitudes, consequently providing support for Hypothesis 4 (Perceived Value positively influences Attitudes) (i.e., 0.939***; $p < 0.01$) (see Table 6.7). Thus, at a 99% confidence level, this study provided support for a significant and strong positive relationship between the two variables and accordingly failed to reject Hypothesis 4.

Consistent with the V-A-B model (see section 3.1.7), values influence Attitude, and consequently, Attitude influences behaviour (Homer & Kahle, 1988). There is also a pool of arguments derived from current literature that has demonstrated a strong positive relationship between values and Attitudes (for example, Muzikante & Renge, 2011), with a small body of literature advocating for the fact that values influence Attitudes only under specific circumstances (e.g., Shin et al., 2017). The finding of this study reinforces that of Thøgersen, Zhou and Huang (2016), who also found a strong positive correlation between Perceived Value and consumer Attitudes. Furthermore, Wu and Chang (2016) established that one of the dimensions of Perceived Value (i.e., conditional value) yielded more significant positive effects on consumer Attitudes. Haghirian et al. (2005) established that by generating advertising value, the Attitudes of individuals were more positively impacted.

Moreover, this research finding is also supported by a plethora of related studies, e.g., Homer and Kahle (1999) and Shin et al. (2017), who also validated that values have unique dimensions vital in the creation and development of certain attitudinal tendencies. According to Verplanken and Holland (2002) and Chen (2009), values and beliefs are thought to be the building blocks of Attitudes. In addition, the seminal work conducted by Kahle (1988) and Vinson, Scott, and Lamont (1977) showed that consumers' Perceived Values highly and positively influence individuals' Attitudes. This submission implies that high levels of Perceived Values significantly improves individuals' Attitudes toward particular products. Also, this further suggests that if individuals maintain positive cognitive values for certain products, their Attitude concerning such products will be more likely positive (Leppaniemi et al., 2004; Haghirian et al., 2005; Huang & Lu, 2020).

In accordance with the findings of this study and consistent with the empirical evidence from earlier studies (as presented in the literature review), this study emphasises that:

Main finding 4: As the positive link between Perceived Value and Attitude was confirmed by a plethora of empirical studies in the extant literature, this study further verified that this relationship is not just positive, but it is also significant and strong in the case of Millennials Adoption Behaviour for organic food. Consequently, this study failed to discard the hypothesis that Perceived Value positively influences Attitude and further accentuates the point that the link between these two variables is not just positive but also significant.

7.4.5. The Relationship between Social Identity on Adoption Behaviour

The study findings from the correlation analysis proffered enough evidence to support the claim that there exists a high positive correlation between social identification and Adoption Behaviour (β=0.751**, p < .010). Table 6.4 shows the correlation coefficient figures of Social Identity associated with Adoption Behaviour. Moreover, the findings from hypothesis testing also indicated a significant, positive relationship between these two variables (i.e., 0.275***; p < 0.01) (see Table 6.7). This result means that Hypothesis 5 (i.e., Social Identity significantly and positively influences Adoption Behaviour for organic food) was thus supported. Statistically, this meant that enough evidence exists from the study findings to support a significant positive effect on the relationship between Social Identity and Adoption Behaviour for organic food in light of Millennials in South Africa. This significant and positive finding derived support from earlier studies (e.g., Ashforth et al., 2008; Bäckström et al., 2004; Bhattacharya & Sen, 2003) that also reported similar correlation effects between these two variables. By confirming that Social Identity significantly and positively impacts Millennials' Adoption Behaviour, this study answered the previous question that "Does Social Identity have a significant and positive impact on Adoption Behaviour?" As aforementioned, the results of this study proved that the relationship between Social Identity and Adoption Behaviour is undeniably significant and positive.

Adopting new products within a specific domain, for example, from an organic food context, can indicate one's Social Identity. This study draws upon the extant literature (e.g., Ashforth et al., 2008; Bäckström et al., 2004; Bartels & Reinders, 2010; Bhattacharya & Sen, 2003), which established that consumers' Social Identity drives their Adoption Behaviour. This implies that other people are expected to be attracted to the Social Identity of organic consumers as a way to express their self-definitional needs like self-enhancement and self-continuity (Bhattacharya & Sen, 2003). Therefore, adoption is usually an identity-driven behaviour through which individuals seek to satisfy their self-definitional needs (Laverie et al., 2002; Reed et al., 2012). This argument adds the fact that when individuals classify themselves as organic consumers, their adoption of organic food instinctively becomes a significant way for them to confidently express their Social Identity. For example, individuals prefer products with which they perceive a sense of oneness or belonging, and in turn, adoption of these products becomes an important way of expressing their Social Identity (Bhattacharya & Sen, 2003). This further explains who they are and why they adopt these products.

Furthermore, this study supports the notion that adopting innovative foods is a socially-established way of creating a distinct impression (Simonson & Nowlis, 2000), and individuals build specific identities by adopting these 'new' products (Tian et al., 2001). In line with previous studies (e.g., Du, Bartels, Reinders & Sen, 2017), this study proffers the concept of 'organic consumer identification' as a stimulus for consumer enthusiasm with and consumer adoption of organic foodstuffs.

Based on the findings of this study and the support from the extant literature, this study concludes that:

<u>Main Finding 5:</u> Social Identity is a significant and positive predictor that explains millennial consumers' adoption of organic food in South Africa, as evidence exists to support this argument. Hence, it would have been erroneous for this study to reject the hypothesis that Social Identity significantly and positively impacts Adoption Behaviour. Thus, this study failed to reject H5, owing to its statistical support from its results.

7.4.6. The Relationship between Social Influence on Adoption Behaviour

The results from the correlation analysis established a moderate but significant and positive correlation between Social Influence and Millennials' Adoption Behaviour for organic food (β=0.523**, $p < 0.01$). Table 6.4 displays the correlation results of Social Influence associated with Adoption Behaviour. Conversely, the results from hypothesis testing indicated a non-significant, although positive relationship between Social Influence and Adoption Behaviour, i.e., 0.084 (see Table 6.7). Since this study projected a significant positive relationship between the two variables (i.e., Hypothesis 6 – Social Influence significantly and positively influences Adoption Behaviour for organic food), support was only established for a positive relationship. Again, this study failed to reject its proposed hypothesis, as empirical support was found for a positive association between these variables, although not as significant as previously hypothesised. Therefore, in answering the question: "Does Social Influence have a significant and positive impact on Adoption Behaviour?", this study settles that the relationship is indeed positive but not significant.

A reasonable exploration of the extant literature discovered that an individual's association with social networks is paramount in predicting their Adoption Behaviour (e.g., Bartels & Onwezen, 2014; Persaud & Schillo, 2017). What was also prevalent in the extant literature is that the influence of others significantly and positively impacts the Adoption Behaviour of

organic foods (Salazar et al., 2013). As hypothesised in this study, a significant relationship was not supported by the findings of this investigation. However, the results of this study reinforce the conclusions of Bäckström et al. (2004) and Huotilainen et al. (2006), who found that Social Influence is a key and influential determinant of consumers' willingness to adopt organic foodstuffs to their daily lifestyles. Furthermore, this study further upholds the notion that Social Influences act as an important positive trigger of individuals' emotional responses (through aspects like social persuasion) in a way that makes them ultimately espouse organic foods (Delre et al., 2010; Sadiq et al., 2021). This finding is consistent with arguments submitted by Stayman and Deshpande (1989) and recently Persuad and Schillo (2017) that opinion leaders and experts (e.g., Social Influencers) tend to exert positive effects (through their endorsements) on individuals' disposition to adopt new products. In essence, opinion leaders motivate trial and eventually the Adoption Behaviour of others through increasing in-group salience, i.e., a sense of belongingness to a particular social group (Stayman & Deshpande, 1989). In line with the evidence from a reasonable review of the literature (e.g., Bartels & Onwezen, 2014; Delre et al., 2010; Kim & Park, 2011; Persaud & Schillo, 2017; Vannoy & Palvia, 2010), this study validated the notion that Social Influence is a crucial positive predictor of an individual's Adoption Behaviour for organic food.

Consistent with the results of this study and after garnering the necessary support from previous scholars, this study affirms the following:

<u>Main Finding 6:</u> The findings of this study supported the claim that Social Influence is a vital predictor in explaining consumers' Adoption Behaviour for organic food. Although not significant as previously hypothesised, this study provides evidence for supporting a positive relationship between Social Influence and Adoption Behaviour. Accordingly, this study fails to reject the hypothesis that Social Influence has a positive impact on Millennials' adoption of organic foodstuffs.

7.4.7. The Relationship between Perceived Value and Adoption Behaviour

The results from the bivariate correlation analysis provided statistical evidence for a strong, significant, and positive correlation between Perceived Value and Adoption Behaviour (β=0.817**, $p < 0.01$). Table 6.4 displays the correlation results for Perceived Value and Adoption Behaviour. Furthermore, path modelling analysis through AMOS 27 similarly indicated a significant and positive relationship between the two variables, i.e., 0.860*** (see Table 6.7). Thus, although this study hypothesised a positive and weak relationship between

Perceived Value and Adoption Behaviour (i.e., Hypothesis 7 – Perceived Value positively influence Adoption Behaviour for organic food), the findings of this study supported a strong, significant and positive relationship between these two variables. Therefore, in answering the research question: "Does Perceived Value have a positive impact on Adoption Behaviour?", this study confirms that the impact between Perceived Value and Adoption Behaviour is not just positive but strong and significant as well.

There are vast amounts of empirical evidence to support the findings of this study. For example, several scholars (e.g., Aoyagi-Usui, 2011; Karp, 1996; Tan, 2011) have posited that consumers' value perceptions have a significant, direct and positive causal effect on their Adoption Behaviour. Available research outcomes also indicate a significant and positive relationship between these two variables (e.g., Khoi, Tuu, & Olsen, 2018; Agrawal et al., 2012). These authors also argued that Perceived Value has a substantial effect that positively intercedes the impact of social context factors on adoption. This study's findings and submissions from previous scholars and influential models like the Value-Attitude-Behaviour model (Pitts & Woodside, 1983) (see section 3.1.4) support that values significantly and positively impact consumer behaviour. The findings of this study were also consistent with the validations from the Means-End Chain model that projects values function as fertile grounds for adoption-related behaviours to thrive (e.g. Williams, 1979). This implies that pre-Adoption Behaviours like product trial and selection are means for individuals to eventually attain the desired values like the *actual* adoption (Wisdom, Chor, Hoagwood & Horwitz, 2014).

In light of Kim, Chan and Gupta (2007)'s findings, Perceived Value proved to be a significant and positive predictor of adoption intention. Moreover, extant literature corroborates the argument that consumers' adoption decision outcomes are often positively determined by Perceived Value (Persaud & Schillo, 2017). While Kahle (1980) and the V-A-B model maintained that values indirectly affect behaviour through less intangible mediating factors like domain-specific Attitudes, this study submits a statistically proven direct, positive and significant impact between these two variables. Therefore, the current study failed to reject the hypothesis that Perceived Value positively affects Adoption Behaviour and underscores that this positive relationship is also strong and significant.

In line with the findings of this study and empirical backing from the existing knowledge, the following argument is sustained:

<u>Main Finding 7:</u> Perceived Value has a significant and positive effect on Millennials' Adoption Behaviour of organic food in South Africa. This evidence implies that Hypothesis 7 could not be rejected, as statistical support was derived from the findings of this study to support a significant and positive relationship between Perceived Value and Adoption Behaviour.

7.4.8. The Relationship between Attitude and Adoption Behaviour

The bivariate correlation analysis gave evidence of a significant, strong and positive correlation between Attitude and Adoption Behaviour (β=0.825**, $p < 0.01$) (see Table 6.4). However, the results from hypothesis testing indicated an weak and inverse relationship between the two variables, i.e., -0.087 (see Table 6.7). This finding implies that Millennials' Attitudes are negatively (or inversely) associated with their adoption of organic foodstuffs. This was contrary to Hypothesis 8, which postulated that Attitude positively influences consumers' Adoption Behaviour. Therefore, H8 was rejected as the results of this study confirmed that insufficient evidence exists to support a positive relationship between Attitude and Adoption Behaviour. When answering the research question: "Does Attitude have a positive impact on Adoption Behaviour?", this study declares that Attitude has a negative impact on Adoption Behaviour, and this can be explained by this Attitude-behaviour incompatibility, as demonstrated by previous researchers like Berger and Heath (2007), Shaw et al. (2016) and Yamoah and Acquaye (2019) among others.

Several scholars have studied the relationship between Attitudes and Adoption Behaviour and submitted different results. In their study on organic food adoption, Choo, Chung and Pysarchik (2004) found that consumers' Attitudes positively affected Indian consumers' acceptance of new foods. Similarly, other scholars reported that Attitudes positively increased the probability of consumers accepting these foods (McEachern & Willock, 2004; Siegrist et al., 2017). The results of a study done by Bekoglu, Ergen and Inci (2016) demonstrated that innovators influence the formation of positive consumer Attitudes towards other new and novel food products. Another argument submitted in the extant literature maintained that equipping innovative products with features required for acceptance by customers can alter their Attitudes towards adopting these foodstuffs (Jasiulewicz & Lemanowicz, 2016; Tandon et al., 2021). Furthermore, opposing research found has supported the notion that proper features of

innovative products, to a large extent, determine whether individuals tend to develop a positive or negative Attitude towards them (Tarkiainen & Sundqvist, 2005; Chen, 2009). Moreover, Pieniak, Aertsens and Verbeke (2010) submitted that Attitude was one of the significant and positive predictors of organic food adoption. In light of these previous submissions (that advocated for a positive relationship between Attitude and behaviour), this study also assumed that the relationship between the two variables was more likely to be positive. As discussed above, this assumption was invalid, owing to the negative relationship established in this study.

Although several scholars have argued that Attitudes act as antecedents of adoption, others have found that actual consumer adoption usually deviates from Attitudes (e.g., Auger & Devinny, 2007; Carrington et al., 2010; Balderjahn & Peyer, 2012). This discrepancy has been regarded as the Attitude-behaviour gap (Gupta & Ogden, 2009; Auger & Devinny, 2007; Carrington et al., 2010; Balderjahn & Peyer, 2012). This implies that even when individuals display positive Attitudes towards organic products (e.g., during the pre-trial or trial phase), they frequently exhibit inconsistent behaviours that make them fail to adopt these products to their daily lives (Hidalgo-Baz et al., 2017). This suggests that a positive Attitude does not regularly turn into adopting certain products (Gleim et al., 2013; Pickett-Baker & Ozaki, 2008; Gleim et al., 2013; Moraes et al., 2012). According to Ajzen (1991)'s Theory of Planned Behaviour (also refer to section 2.5.5), Attitudes do not directly influence behaviour, as they must be mediated by intention. This indirect link (as proposed in the Theory of Planned Behaviour) may further explain why contradictory findings were established in this study, as it assumed a direct relationship between these variables.

In light of the results of this study and consistent with the arguments from the existing literature, it became apparent that:

Main Finding 8: Attitude is inversely related to Adoption Behaviour for organic food. This was inconsistent with the hypothesis of this study, resulting in H8 being rejected as insufficient evidence exists to support a positive relationship between Attitudes and behaviour. In addition, the inverse relationship between Attitude and behaviour can be attributable to the Attitude-behaviour incongruity that is firmly entrenched in the existing literature. More importantly, the inverse relationship between Attitude and behaviour can be better explained by the Theory of Planned Behaviour (which strongly suggests that Attitude must be mediated by intention). Therefore, testing direct links between Attitude and behaviour without accounting for the mediation effect is too optimistic and theoretically invalid.

Another essential feature of this study was testing the indirect effects by applying the mediating variables of Perceived Value and Attitude. Moreover, this study also added the moderation effect of Consumer Innovativeness to either strengthen, diminish, alter the relationship between exogenous and endogenous variables. The following section provides a discussion and interpretation of the results after applying the moderation and mediation effects.

7.4.9. Moderating Influence of Consumer Innovativeness

When discussing the results from moderation analysis, this study acknowledged the seventh step suggested by Andersson et al. (2014:87) that the scholars must "return to theory when interpreting the results and explain them from a theoretical viewpoint". In other words, this study emphasised the substantive meaning of the results from the theoretical understanding of the phenomenon under study, instead of just a mere statistical significance. Moderation analyses in this study were tested using the interactions of latent variables. Since the analysis of the moderation effect of Consumer Innovativeness yielded significant results, these findings were informative. Section 6.5 of this study presented the results from the research on whether Consumer Innovativeness moderates the influence of Social Identity and Social Influence in light of Millennials' organic food adoption behaviours.

The following section discusses and interprets the moderation analysis results by considering the moderating role of Consumer Innovativeness on selected social-context factors examined in this study in light of Millennials' Adoption Behaviour for organic food.

7.4.9. (i) CI Moderating the Relationship on SI and AB

One of the key objectives of this study was to provide statistical evidence on how Consumer Innovativeness moderates the effect of the selected social dimensions on Millennials' adoption decisions relating to organic foodstuffs. Accordingly, the moderating role of Consumer Innovativeness was first examined against the predictive impact of Social Influence on Adoption Behaviour, and the section below discusses and interprets these results.

Table 7.1: Moderation Effect of CI on the Relationship between SI and AB

Independent Variable **SI =>> AB**	**Moderation Variable** **CI =>> AB**	**Interaction Effect** **SI*CI =>> AB**	**Moderation Effect**
Significant	Significant	Significant	Moderation Effect Exists

Note: SI = Social Identity; CI = Domain-Specific Consumer Innovativeness; AB = Organic Food Adoption Behaviour

This study (i.e., H5a) hypothesised that Consumer Innovativeness positively moderates the relationship between Social Identity and organic food adoption such that the effect will be significant in the presence of this moderation. Since the interaction of the variables in the presence of the moderating variable was found to be significant and positive (as hypothesised), this cemented the existence of the moderation effect. Statistically, this meant that the hypothesis that Consumer Innovativeness moderates the positive relationship between Social Identity and organic food adoption such that the impact will be significant in the presence of the moderation variable was supported by these results. Consequently, Consumer Innovativeness proved to be a moderator of the relationship between Social Influence and Adoption Behaviour. When answering the research question: "Does Consumer Innovativeness positively and significantly moderate the relationship between Social Identity and Adoption Behaviour?", this study affirms that Consumer Innovativeness proved to be a moderating variable on the relationship between Social Identity and Adoption Behaviour. Therefore, based on the results of this study, H5a was supported.

The finding of this study is in line with Persaud and Schillo (2017)'s finding that emphasised that Consumer Innovativeness significantly and consistently moderated the relationship between Social Identity and consumers' intention to adopt organic foodstuffs. Moreover, Triwijayati and Wijayanti (2020) also found that Consumer Innovativeness had a significant and positive moderating effect on new product adoption. Furthermore, Bartles and Reinders' (2011), in their meta-analysis, revealed that of the 44 papers that were reviewed, only 45% of them indicated a significant positive moderation relationship between Consumer Innovativeness and new product adoption, with 35% finding no meaningful relationship, while 20% submitted a partially significant positive relationship. However, contrary to these findings, other scholars found that Consumer Innovativeness had a weak but positive moderating effect on product and service adoption (e.g., Citrin et al., 2000; Im, Mason & Houston, 2007). Therefore, the results from this study potentially explain these contradictory results that primarily rests upon the differences in the moderating influence of Consumer Innovativeness on new product adoption – as indicated by the inconclusive results from previous studies.

Based on the results of this study and in conjunction with the empirical evidence from preceding research endeavours (as revealed in the literature review), this study highlights that:

Main Finding 9: Consumer Innovativeness proved to be a significant and *positive* moderating variable on the relationship between Social Identity and Millennials' Adoption Behaviour for organic food. Accordingly, this study failed to reject H5a as there was sufficient evidence from the gathered data to support the earlier claim that Consumer Innovativeness *significantly* and positively moderates the relationship between Social Identity and Adoption Behaviour for organic food amongst South African Millennials.

7.4.9. (ii) CI Moderating the Relationship on SIN and AB

The personal characteristic of Consumer Innovativeness was ultimately used to moderate the relationship between the independent variable (i.e., Social Influence) and the dependent variable (i.e., Adoption Behaviour). The findings of this relationship are discussed and interpreted in the section below.

Table 7.2: Moderation Effect of CI on the Relationship between SIN and AB

Independent Variable SIN =>> AB	Moderation Variable CI =>> AB	Interaction Variable SIN*CI =>> AB	Moderation Effect
Significant	Significant	Significant	Moderation Effect Exists

Note: SIN = Social Influence; CI = Domain-Specific Consumer Innovativeness; AB = Organic Food Adoption Behaviour

As the interaction effect of the moderating variable yielded significant positive results; and this meant that moderation effect existed This finding was consistent with this study's initial hypothesis (i.e., H6a) that Consumer Innovativeness is a significant and positive moderator for the relationship between Social Influence and organic food adoption. This finding implies that Consumer Innovativeness proved to be a moderator of the relationship between Social Influence and Adoption Behaviour – from a statistical point of view. Therefore, in answering the research question: "Does Consumer Innovativeness positively and significantly moderate the relationship between Social Influence and Adoption Behaviour?", this study sustains that Consumer Innovativeness is a significant moderating variable on the relationship between Social Influence and Adoption Behaviour. This finding further points to the fact that there is sufficient evidence in the current data set to conclude on the support for this moderation effect.

Accordingly, the results of this study suggest that H6a, which proposed that Consumer Innovativeness moderates the relationship between Social Influence and organic food adoption such that its influence becomes more robust and significant when Millennials develop the need to impress essential others to raise their social status,was supported by the results of this study.

Since the moderation effect of Consumer Innovativeness were significantly and positively related to Social Influence and Adoption Behaviour, this result opposed findings from Persaud and Schillo (2017) and Reinhardt and Gurtner (2015), who found no significant relationship for later adopters and Persaud and Schillo (2017)'s analysis on innovators that yielded a significant *negative* association (β ¼ −0.31). As corroborated by previous studies, the finding of this study implies that sometimes consumer innovators may recognise that the important others in their social network are experts on particularly hard-to-confirm organic food-related claims (Bhate & Lawler, 1997). Thus, such individuals tend to rely more on important others' influence and less on their intuition. This further suggests that Social Influence does not depend on perceptions of source integrity and credibility (Herr, Kardes & Kim, 1991; Persaud & Schillo, 2017). Consequently, consumer innovators who look for new information and exhibit higher levels of cognitive innovativeness (Venkatraman & Price, 1990) might dependless on Social Influence than the later adopters, who usually acquire their cues from innovators (Cowart et al., 2008).

<u>Main Finding 10:</u> Again, the results of this study proved that Consumer Innovativeness significantly and positively impacts the relationship between Social Influence and Adoption Behaviour. This statisticalsupport led to H6a being accepted, owing to sufficient evidence from the collected data to support the earlier claim that Consumer Innovativeness *significantly* and positively moderates the relationship between Social Influence and organic food Adoption Behaviour.

The following section discusses and interprets the results from the moderated mediation analysis.

7.4.10. Moderated Mediation Analysis

Previous scholars have variously validated the argument that Consumer Innovativeness not only has a moderating role on different relationships (e.g., De Oliveira, Ladeira, Sampaio & Pinto, 2018; Eryigit, 2020; Fu & Elliott, 2013; Kim, Di Benedetto & Hunt, 2017), but also moderates the mediation effect of other interceding variables like quality, satisfaction, product characteristics, Perceived Value, Purchase Intention, and Adoption Behaviour among others (Eryigit, 2020; Persaud & Schillo 2017). Accordingly, this study also sought to examine whether the indirect effects between the studied variables were mediated through Perceived Value (given the specific concerns around the importance of organic foodstuffs versus traditional foods), while at the same time being moderated by Consumer Innovativeness.

The following section discusses what has been coined the "moderated mediation" effect of Consumer Innovativeness and Perceived Value, respectively, on the relationships between social context factors (i.e., Social Identity and Social Influence) and Adoption Behaviour.

7.4.10. (i) CI Moderating the Mediation Relationship of PV on SI and AB

This study expected that Consumer Innovativeness would positively and significantly moderate how Perceived Value mediates the correlation between Social Identity and Adoption Behaviour (see H1a in chapter 3) owing to the substantial evidence from extant literature that supports this assertion (e.g., Midmore et al., 2011; Persaud & Schillo, 2017). Therefore, the following section deliberates on and construes the moderating and mediating roles of Consumer Innovativeness and Perceived Value, respectively, on the relationship between Social Identity and Adoption Behaviour, as shown in the results section of this study (see section 6.6).

Table 7.3: Moderation Effect of CI on the Relationship between SI, PV and AB

Independent Variable SI =>> AB	**Mediating Variable PV =>> AB**	**Moderation Variable CI =>> AB**	**Interaction Variable SI*PV*CI =>> AB**	**Moderation Effect**
Significant	Significant	Significant	Non Significant	No Moderation Effect

Note: SI = Social Identity; PV = Perceived Value; CI = Domain Specific Consumer Innovativeness; AB = Organic Food Adoption Behaviour

The results as summarised in Table 7.3 above demonstrate that the moderation effect of Consumer Innovativeness to the study variables did not alter the extent to which Perceived Value influenced the link between Social Identity and Adoption Behaviour as previously hypothesised. The non-significant finding from this study further points to the fact that there is insufficient evidence in the current data set to determine an effect on the general population.

Therefore, the results suggest that H1a (see section 3.5.1), which postulated that Consumer Innovativeness moderates how Perceived Value mediates the relationship between Social Identity and organic food adoption (such that the relationship is likely to be significantly positive in light of this moderated mediation), must be rejected due to the lack of statistical evidence. The rejection of this hypothesis further shed light on one of the research questions: "Does Consumer Innovativeness positively and significantly moderate the mediated relationship between Social Identity and Perceived Value on Adoption Behaviour?" by confirming that the moderated mediation effect was not supported, and thus was nullified by the results of this study.

The findings of this study were contradictory to Persaud, and Schillo (2017)'s finding that Consumer Innovativeness strongly moderates the mediated relationship of Social Identity and Perceived Value on Adoption Behaviour. This implies that this study found that innovative and socially-unique individuals did not significantly value adopting organic food, even though their evaluations about such foodstuffs remained positive.

Based on the empirical evidence presented in this study, while at the same time considering the arguments presented by previous scholars, this study concludes by maintaining the following:

<u>Main Finding 11:</u> Since the interaction effect yielded non-significant results, this meant that this study refuted the earlier hypothesis that Consumer Innovativeness moderates how Perceived Value mediates the relationship between Social Identity and organic food Adoption Behaviour such that the relationship is likely to be positive and significantly stronger in light of this moderated mediation. This statistical invalidation led to H1a being rejected, owing to insufficient evidence from the amassed data to support the earlier claim that Consumer Innovativeness *significantly* and positively moderates the mediation effect of Perceived Value on the relationship between Social Identity and organic food Adoption Behaviour. Therefore, innovative Millennials with high social identification did not significantly value adopting organic food, even though their evaluations about such foodstuffs remained positive.

7.4.10. (ii) CI Moderating the Mediation Relationship of PV on SIN and AB

Extant literature emphasised the need to judge Perceived Value beyond monetary value, quality, and convenience by examining available societal benefits (Ha-Brookshire & Norum, 2011). This study, therefore, sought to determine whether a socially-oriented customer is more likely to perceive greater value in adopting organic food (Cheah & Phau, 2011) and this objective was achieved by tapping into their level of innovativeness. Thus, this study expected Consumer Innovativeness to moderate how Perceived Value mediates the relationship between Social Influence and Millennials' Adoption Behaviour for organic food.

The following section deliberates and gives meaning to this study's findings on the moderated mediation effect in light of the relationship between Social Influence and Adoption Behaviour.

Table 7.4: Moderation Effect of CI on the Relationship between SIN, PV and AB

Independent Variable SIN =>> AB	**Mediating Variable PV =>> AB**	**Moderation Variable CI =>> AB**	**Interaction Variable SIN*PV*CI =>> AB**	**Moderation Effect**
Significant	Significant	Significant	Non-significant	No Moderation Effect

Note: SI = Social Influence; PV = Perceived Value; CI = Domain Specific Consumer Innovativeness; AB = Organic Food Adoption Behaviour

The non-significant results generated from this inquiry suggest that there was no statistical evidence for this study to safely conclude a moderated mediation (i.e., Consumer Innovativeness and Perceived Value, respectively) on the relationship between Social Influence and Adoption Behaviour. Therefore, there was no sufficient evidence from this study to support H3a (see section 3.5.1), resulting in this hypothesis being rejected. The retraction of H3a owing to new evidence that emanated from this study also helped in answering the question: "Does Consumer Innovativeness positively and significantly moderate the relationship between Social Influence and Perceived Value on Adoption Behaviour?" by declaring that the findings of this study did not uphold the previously alleged moderated mediation effect.

Persaud and Schillo (2017) established that Consumer Innovativeness did not significantly moderate the mediated effect of Perceived Value on the relationship between Social Influence and Adoption Behaviour, particularly for late adopters. In addition, for innovators, the

relationship was found to be significant, although negative. A reasonable explanation might be the notion that increased Social Influence can indicate broader adoption while simultaneously reducing the value of organic foodstuffs, especially when innovators try to differentiate themselves (Bhate & Lawler, 1997; Cowart et al., 2008). According to Persuad and Schillo (2014), Consumer Innovativeness significantly and negatively influenced the relationship between Social Influence and Adoption Behaviour through the mediation effect of Perceived Value. However, this finding proved not to be true in this study, and the possible reason for this could be the fact that organic foods are a relatively new product class, with many uncertainties that potentially influence innovative consumers'value perceptions of these products (Midmore et al., 2011; Tsakiridou et al., 2008). Although innovators are inherently risk takers, this study assumes that they are different due to different geographical backgrounds, cultures, and preferences, thus resulting in the rejection of any moderated effect of this study. It is possible that when organic food achieves its full market potential, then even innovators' perceptions about value would have changed, that they can effectively influence the later adopter segments.

In accordance with the findings of this study, and consistent with the arguments presented in the extant literature, this study corroborates the following statement:

Main Finding 12: The moderated mediation of Consumer Innovativeness and Perceived Value on the relationship between Social Influence and Adoption Behaviour for organic food also lacked statistical backing from the results of this study. This implied that this study overturned the earlier hypothesis that Consumer Innovativeness moderates how Perceived Value mediates the relationship between Social Influence and organic food adoption such that the relationship is likely to be positive and significantly stronger in light of this moderated mediation. Accordingly, this lack of statistical support negated the validity of H3a. Thus, the rejection of H3a was due to insufficient evidence from the accumulated data to substantiate the fact that Consumer Innovativeness does not moderate the mediated effect of Perceived Value on the relationship between Social Influence and organic food Adoption Behaviour.

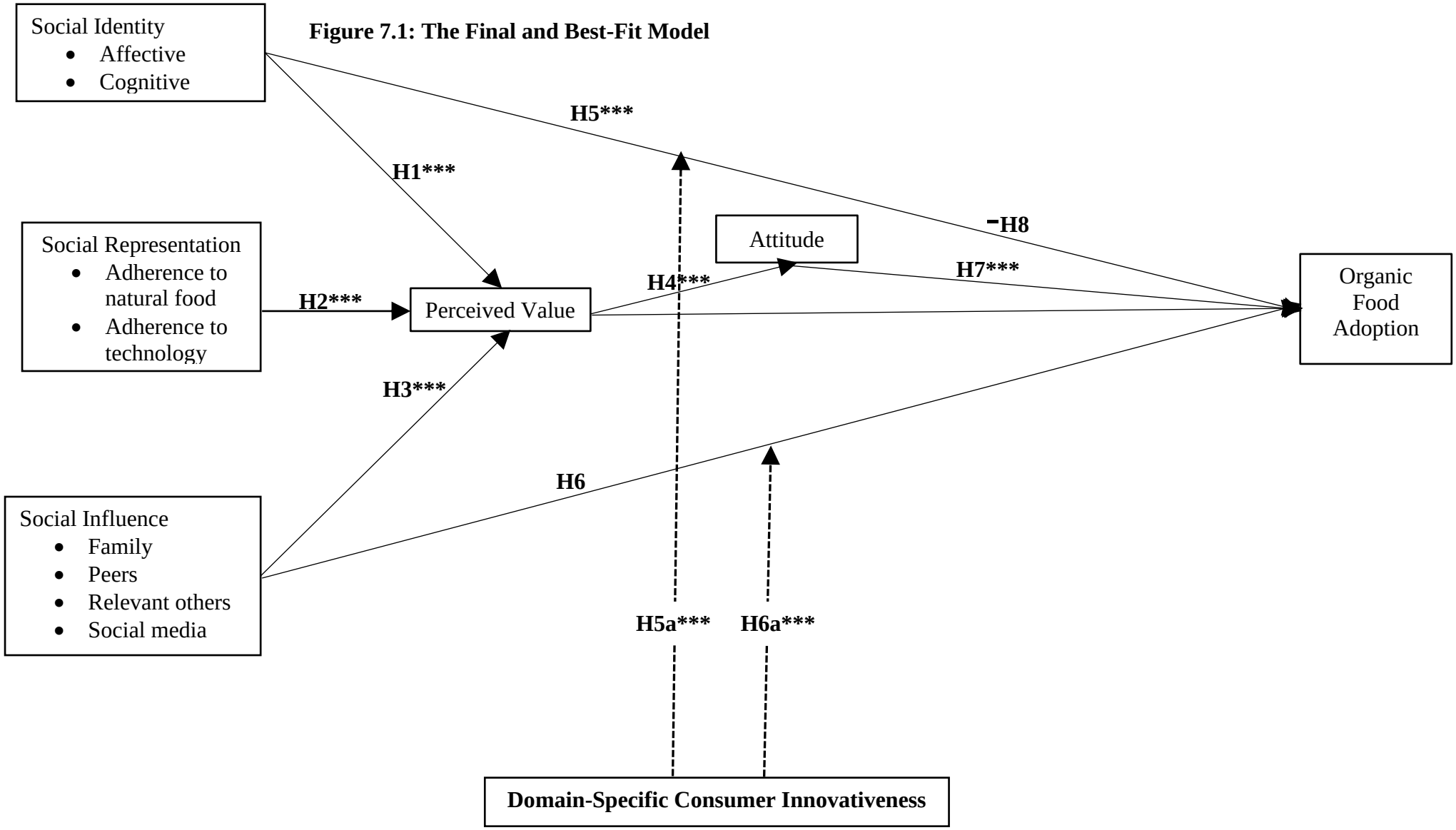
The above sections concentrated on giving meaning to the results while construing them in the context of the purpose of this study. Furthermore, the discussion and interpretation of the study results was made on whether the findings confirmed or did not endorse the conclusions submitted by previous scholars. It is important to note that all the hypotheses (except H8) were supported in this study. The moderation effect of Consumer Innovativeness was firmly established in this study, while there was no support for the moderated mediation effect. After discussing and interpreting the results, the final step was to generate the final model consistent with the findings of this study and that aligned with the collected primary data. Thus, the final best-fit model represented the transition from the conceptual framework (during hypotheses development and statement phase in chapter 3) to the final best-fit conceptual model (after presenting and construing the results of this study).

The following section explains and depicts the final and best-fit model that was supported by the results of this study.

7.5. The Final and Best-Fit Model

Figure 7.1 provides a portrayal of the ultimate best-fit model of this study, following the discussion in section the above sections. The best-fitting model signifies the broadly acceptable model-and-data fit. At this stage, it should be noted that the data fitted the postulated model to create the final best fit model only after doing post hoc amendments through modification indices (see section 6.3.3). Through the correlation of error terms that were highly interrelated with each other (an iterative process on Amos 27 – through the use of modification indices), this study reached an acceptable data-to-model fit after all the necessary thresholds for a good model fit were met (see Table 6.6.) Moreover, since this study's findings yielded different results (for example, the rejection of H8 and all moderation-related hypotheses) to the hypotheses from the proposed conceptual framework (see Figure 3.1), this necessitated that the initial model was supposed to be modified to reflect the conclusions drawn from this study. Therefore, the following section presents the best-fitting model achieved after ensuring that the data fitted the model and warranting that the structural relations reflected the path modelling results established from hypothesis testing.

Figure 7.1: The Final and Best-Fit Model



***= Significant (at $p < 0.01$)

The following section provides the supported relationships between the variables that were investigated in this study. The hypotheses are also in line with the final best-fit conceptual model in Figure 7.1 above:

- H1: Social Identity significantly and positively influences consumers' Perceived Value
- H1a) Consumer Innovativeness does not moderate the mediated relationship between Social Identity and organic food adoptions such that the relationship is stronger when Consumer Innovativeness is higher than when it is low Consumer InnovativenessSocial IdentityPerceived ValueAdoption BehaviourH2: Social Representation significantly positively influences consumers' Perceived Value
- H3: Social Identity significantly and positively influences consumers' Perceived Value
- H3a) Consumer Innovativeness does not moderate the mediated relationship between Social Influence and organic food adoptions such that the relationship is stronger when Consumer Innovativeness is higher than when it is low Consumer InnovativenessSocial InfluencePerceived ValueAdoption BehaviourH4: Perceived Value significantly and positively influences consumers' Attitudes
- H5: Social Identity significantly and positively influences Adoption Behaviour for organic food
    - H5a) Consumer Innovativeness moderates the relationship between Social Identity and organic food adoptions such that the relationship is stronger when Consumer Innovativeness is higher than when it is low Consumer InnovativenessSocial IdentityAdoption Behaviour
- H6: Social Influence positively influences Adoption Behaviour for organic food
    - H6a) Consumer Innovativeness moderates the relationship between Social Influence and organic food adoptions such that the relationship is stronger when Consumer Innovativeness is higher than when it is low Consumer InnovativenessSocial InfluenceAdoption Behaviour
- H7: Perceived Value significantly and positively influence Adoption Behaviour for organic food
- H8: Attitude negatively influences consumers' Adoption Behaviour

7.6. Chapter Summary

The purpose of this chapter was to discuss and interpret the results by describing their significance in light of what is presently known about the research problem. When giving meaning to these results, this study construed the findings in line with the purpose of this study. Revisiting the literature provided context to the arguments and hypothesised relationships presented in this study while simultaneously paving a path to outline fresh insights about the problem after considering the research findings. Unique understandings were drawn from this study; for example, the results of this study highlighted that Consumer Innovativeness moderated allthe relationships, as hypothesised. Another key conclusion was that perhaps the Attitude-behaviour link must be mediated by a certain variable (as strongly recommended by the Theory of Planned Behaviour) in order for this relationship to yield significant results. Finally, and consistent with the findings of this study, the section 7.5 presented the ultimate best-fit model, i.e., the model that was consistent with the collected data and the resulting findings of this study.

The next chapter outlines the contributions of this study, its limitations, managerial implications, and future research directions before concluding this investigation.

CHAPTER 8

MANAGERIAL IMPLICATIONS, RECOMMENDATIONS, CONTRIBUTIONS, LIMITATIONS & FUTURE RESEARCH DIRECTIONS

8.0. Introduction

Chapter 1 provided a contextual foundation of this study by giving a broad overview of Adoption Behaviour and its antecedents. In doing so, a critique of relevant theories and a discussion of the research problem, purpose, objectives, research questions, and justification for this study was presented. Chapter 2 was reserved for reviewing the extant literature whereby the theoretical underpinnings and an empirical overview of the underlying conceptualisations for the study constructs were provided. In line with evidence from past studies, chapter 3 presented an evaluation of the relationships that exist between the selected predictor (i.e., Social Identity, Social Representation, Social Influence), mediator (i.e., Perceived Value, Attitude) and moderating (i.e., domain-specific Consumer Innovativeness) variables in light of the outcome variable (i.e., Adoption Behaviour). This was done by discussing how the hypotheses were developed, then stated and ultimately depicted in the proposed conceptual framework (see Figure 3.1). Chapter 4 explained the methodology that was adopted by outlining the philosophy that underpinned this study (i.e., objective ontology and positivist paradigm) and the research design that was employed (i.e., quantitative design through non-probability convenience sampling). The development of the research questionnaire was done by adapting and modifying the previously used measurement scales. Relevant ethical issues that further guided the data collection process were discussed alongside the actual data gathering procedure which utilised online and mall-intercept data gathering procedures. Chapter 5 discussed how descriptive statistics (through SPSS 27 software) and inferential statistics (through Amos 27 software for SEM) were employed in this study to compute relevant statistical analyses that ultimately assisted in confirming the proposed conceptual framework presented in chapter 3. Chapter 6 presented the results from the data analysis section and highlighted that this study failed to reject seven of the eight postulated hypotheses that were supported. It was noted that hypothesis 8 and all moderation-related effects were supported as sufficient evidence existed to support their previously alleged claims. Chapter 7 provided a discussion and interpretation of the results that were presented in chapter 6.

The current chapter provides suggestions on what the results of this study might mean for theory, practice, and future research. Thus, contributions of this study, managerial implications and recommendations will also be discussed. Finally, this chapter will conclude by identifying the study limitations that unlocked avenues for future research endeavours.

8.1. Contributions of this Study

This study quantitatively determined the relationship between social-context factors (i.e., Social Identity, Social Representation and Social Influence) on Millennials' Adoption Behaviour for organic food (as indicated in section 1.6). This relationship was mediated by Perceived Value and Attitude while moderated by domain-specific Consumer Innovativeness. In so doing, this study established a deeper comprehension of how social considerations combine with Consumer Innovativeness to stimulate the diffusion of organic foodstuffs. This understanding was deemed pertinent to both scholars, marketing executives and other relevant stakeholders. Literature was reviewed to identify the theories that underpinned this study, and the variables drawn from the extant literature formed part of the conceptual model that was later subjected to empirical testing (i.e., under path modelling).

This section uses cross-references with the submissions in the extant literature to develop conceptual, theoretical, empirical and practical contributions. In addition, an integrated approach towards the discussion of these contributions was founded on the study findings to strengthen the arguments and discussion of this section. Against this backdrop, this study identified the following contributions – as discussed in the sections below.

8.1.1. Conceptual Contribution

This study's conceptual model (Figure 7.1) is unique because no such model exists in the extant literature of generational and behavioural studies, predominantly within the context of an emerging economy like South Africa. This unique conceptual model provides a new direction for the empirical comprehension of the relationships between the studied constructs. For example, Figure 7.1 shows that Attitude is *actually* inversely related to Adoption Behaviour. Moreover, it should be highlighted that this study sought to collect relevant data and use it to corroborate the conceptual framework and its hypotheses through the use of Structural Equation Modelling (see section 1.6.1. vi). Therefore, the uniqueness of this study lies potentially in its ability to submit a new framework while simultaneously paving the direction for future research endeavours in the area of organic food adoption.

Several researchers in developing countries had previously experienced challenges in delineating an all-inclusive and effective conceptual framework that can be readily available for application to the social-related factors that motivate individuals to embrace new foodstuffs like organic food. To the best of the researcher's knowledge, no theoretical framework exists

that incorporates the effect of social-context factors on the adoption of organic food – particularly in South Africa. Against this backdrop, the salient contribution of this study was the creation and validation of a conceptual framework that offered a unique way of understanding the complex relationships between the selected variables.

By submitting the best-fit conceptual model, this study contributed to the following:

- Presented fresh insights on the variables added in the conceptual framework (e.g., independent, independent, mediating, and moderator variables). This was done by synthesising existing knowledge into renewed insights
- Verified the abstract definitions of the original constructs
- Confirmed theoretical linkages (i.e., study hypotheses) with their associated rationale.
- Improved the theoretical rationale on the correlations that currently exist. This was done by integrating two (i.e., direct relationships) or three (i.e., moderation effect) and in some instances four (i.e., moderated-mediation effect) theoretical perspectives that provided a new way of viewing the underlying research problem.

8.1.2. Theoretical Contribution

There is a paucity of studies on social context factors and Consumer Innovativeness in existing literature (Persaud & Schillo 2017), particularly concerning organic foodstuffs (see section 1.4). Accordingly, this study contributed to filling this void that exists in current literature. This was done by extending our current understanding of organic food adoption by providing evidence on how, for example, Perceived Value mediates the relationship between social context factors and Adoption Behaviour. The social dimensions explored in this study sought to extend the extant literature that concentrates mainly on consumers' adoption of organic food. Moreover, this was achieved by providing empirical evidence on the relevance and significance of the social dimensions and their effect on individuals' Adoption Behaviour, thus contributing to the literature on the espousal of organic foods. This study further contributed to the literature on generational studies since it was confined to the millennial cohort, as this group often demonstrates heightened consciousness about the effect of their food-related adoption choices on the environment (Ngobo, 2011; Van Doorn & Verhoef, 2011). Thus, by validating that Millennials are 'social beings' and they are into ecologically friendly and sustainable products, this study highlighted that such individuals are more inclined to espouse more organic foods (Grunert & Juhl, 1995).

Most importantly, this study upheld the submission from the Theory of Planned Behaviour (Ajzen, 1991) that Attitude is not directly related to behaviour. Furthermore, linking Attitude directly with behaviour may potentially lead to misleading results – e.g., this study found that there is a negative relationship between Attitudes and behaviour, leading to the rejection of H8. Perhaps, this study would have yielded significant or positive results if Attitude was mediated by intention (as per the argument from the Theory of Planned Behaviour).

Consumer InnovativenessOn the whole, this study advanced our existing knowledge in generational and behavioural studies by testing theory and providing new empirical evidence to expound on the relationships between the investigated constructs. Furthermore, this new knowledge was created by facilitating a nuanced understanding of the interplay between variables that predict organic food adoption. From a theoretical grounding perspective, this study upheld the practicality of the Theory of Planned Behaviour but rejected the ability of the Diffusion Theory of Innovation to predict the espousal of 'new' innovations. Thus, this study contributes to the burgeoning body of research on organic food adoption as this new knowledge is indispensable and will ensure an effective diffusion of organic foodstuffs.

Therefore, this study presents the following key contribution:

- Confirmed the applicability of different theories that may have theoretically grounded this study.

The following section provides a brief account of the empirical contributions of this study.

8.1.3. Study Accomplishments

This discussion brings the contributions of this study together by aligning them with the empirical findings in chapter 6. The following section reveals insights into a phenomenon by showing both the originality and utility of this study.

The objective of this study hinged upon its ability to submit significant results for the hypotheses that were not presumed to yield this outcome. For example, this study had hypothesised that Social Identity positively influences Perceived Value (see H1 in Figure 3.1). However, the results showed that the relationship between these two variables was positive and significant, thereby creating a new way of understanding the relationship between these variables. This study further corroborated the mediation effect of Perceived Value and Attitude on the relationship between social context factors on Adoption Behaviour. Although H8 (which hypothesised a positive relationship between Attitudes and behaviour) was rejected, this study

cemented the existing argument that there is a mismatch between individuals' Attitudes and Adoption Behaviour (e.g., Berger & Heath, 2007; Shaw et al., 2016; Yamoah & Acquaye, 2019). As no significant results were found between the interaction variables to justify the moderation effect of Consumer Innovativeness, this study supported the claim that Consumer Innovativeness moderates the relationship between social context factors and Adoption Behaviour.

In light of the above, this study presents the following accomplishments:

- Tested of the theoretical linkages that were presumed to exist between variables
- Determined the extent to which Perceived Value and Attitude mediated the relationship between independent and dependent variables of this study
- Examined the effects of the moderator variable on the nature of the relationship between the study constructs
- Examined the moderated mediation effect in light of the study variables

The next unit conveys the practical contributions of this study.

8.1.4. Contributions to Practice

The relationship between research and practice is bidirectional, i.e., researchers must respond to the issues and problems of practical importance. This means that besides the scientific relevance of any study, it must also be practically relevant. Moreover, practitioners usually consider several ways in which research can positively impact their thinking and actions. Hence, it is equally important for researchers to consider and respond to the issues raised when applying their research findings. In light of this, another critical requirement for conducting this inquiry was to provide solutions to practical problems raised in section 1.4 of this study.

This study contributed to practice by ensuring that marketing practitioners and relevant stakeholders access meaningful information, thus providing a nuanced understanding of the relationships between the studied variables. The findings of this study are likely to help marketing managers in framing and applying practical, well-informed and 'winning' adoption strategies (e.g., market penetration strategies) that will further help their businesses to be profitable and bolster their sustainable competitive edge. The evidence submitted in this study may provide concrete guidelines to marketers in forecasting and managing behaviour that precedes the adoption of organic food amongst Millennials. It is also envisaged that the results of this research will entice marketers to effectively embrace innovation in the food sector and use this novelty as a source of differentiation and value-adding opportunity. Policymakers within the food industry are also likely to benefit from the findings which emanated from this study in their quest to develop proper public policies on food security and poverty alleviation.

Therefore, the utility of the specific findings of this research can have important contributions to practice as summarised below:

- **Attitude-behaviour gap** – This study's findings confirmed a severe gap between Attitude and Adoption Behaviour. As Attitude was the only variable that correlated negatively with Adoption Behaviour, this study highlights that practitioners must structure their promotional campaigns around altering the current unfavourable Attitudes towards organic food. As a remedial action, this means applying a more pragmatic and effective way of promoting the adoption of organic food by mainly concentrating on modifying young people's negative Attitudes.

Altering Millennials' Attitudes is likely to result in:

- Likely fewer rejection rates of new products due to, for example, food neophobia, resulting in low rates of organic foods failing to reach their full market potential, thus guaranteed marketers of future demand.
- Fast-tracking the current slow adoption rates towards organic food innovations. This implies that Millennials will adopt these foodstuffs much faster, which will, in turn, positively affect companies' profits and their continued survival in this highly volatile marketplace. Correspondingly, this will mean that organic food will cease to be in its infancy stage in South Africa as it will advance to other stages (as per the Product Life Cycle).

Linked to the practical contributions of this study are the managerial implications. These ramifications contrast the study's results against practitioners' actions required to address the research problem. Therefore, the impact of this study's results on managers is detailed below.

8.2. Managerial Implications

This section highlights what the study results meant in terms of actions that must be taken, i.e., with respect to the use of information for making practical decisions. The discussion on the managerial implications will be linked to the contributions of this study and broken down into crucial concepts supported by the main findings. The following sections breaks down the implications of the results of this study on the actions expected from managers or practitioners.

i). **Employ strategies that accentuate on social aspects of organic adoption**

- This study presents solutions for marketers to predict Millennials' acceptance levels of organic foodstuffs within a South African context. For example, the results of this study imply that social identification with specific consumer groups significantly determines Millennials' Adoption Behaviour for organic food. In addition, marketing managers can use insights from Social Identity theory to boost the salience of Millennials' identification with specific groups. More precisely, advertisements that communicate feelings of belonging to consumer groups while sharing sustainable behavioural ideas must be used to effectively stimulate the adoption of organic foodstuffs. Additionally, extant literature submits that consumers have diverse Social Representations of new products (e.g., Mäkiniemi, Bäckström, Ahola, Pieri, & Pirttilä-Backman, 2014). This implies that the insights into dominant social dimensions explored in this study and the variances in different cultures of groups could aid marketing managers to effectively enhance their communication strategies. Marketers can also use personal and impersonal communication channels to provide correct facts about their products while building new concepts and strategies. To create high Perceived Value for these 'new' products (that are still at an infant stage) among customers, marketers should also concentrate on launching organic foodstuffs that appeal or resonate well with Millennials' inner-self. That is, they must offer products that can be adopted effortlessly and have comparative advantages, are low risk, exhibit unparalleled benefits, and their benefits are apparent or easy to evaluate in light of consumers and are linked to social groups' image (Hubert, Florack, Gattringer, Eberhardt, Enkel & Kenning, 2017; Salem, Al-Jundi & Reshmi, 2019; Tuu & Olsen, 2012).

ii). **Formulate 'winning' market acceptance strategies for organic food**

- The findings of this study suggest that managers can safely establish links between their organic foodstuffs and Millennials' identities, representations and Social Influence to attain initial market acceptance. Essentially, early market acceptance strategies, such as market penetration, must emphasise these social identities since innovators are more apt to portray an identity-driven image through their adoption decisions. Moreover, for marketers to grow their organic food market, they should employ strategies that emphasise social aspects of organic adoption, as supported in this study and previous findings (Persaud & Schillo, 2017). This may mean that, for example, Social Influence may be used to mitigate anxieties about the worth of organic foods (e.g., food neophobia was identified as one of the main problems), particularly by later adopters (as submitted by Persaud & Schillo, 2017). Therefore, the role of "important others" (Bertrandias & Elgaaied-Gambier, 2014), whose opinions are valuable towards late adopters and whose approval they seek, might trigger adoption choices that are aligned with those of "influential others". Thus, marketing managers should use practical and well-informed launch and penetration strategies that employ key social dimensions to their promotional campaigns.

iii). Create brand images with identity-related behavioural choices

- As organic foodstuffs are still in their early stages in the Product Life Cycle, marketing managers must ensure that their promotion strategies are designed to generate greater awareness (i.e., Top of the Mind Awareness) and trial that is likely to result in adoption. In so doing, marketers must also focus on generating brand images consistent with innovative Millennials' personality traits and self-image. Emphasising consumer innovators' identities is fundamental as they have the utmost self-relevance to late adopters and often act as a catalyst to identity-related behavioural choices (Bertrandias & Elgaaied-Gambier, 2014). Furthermore, in light of the findings from previous studies, marketers can use these so-called consumer innovators to make them to promptly exhibit their innovativeness to other members (Persaud & Schillo, 2017). This may also reflect the propensity amongst innovators to transfer specific social identities (e.g. distinctiveness) through their Adoption Behaviours (Berger & Heath, 2007).

Since the moderation effect of Consumer Innovativeness was significant and positive, this study submits that implications relating to this variable must be applied confidently.

iv). Focus on modifying Millennials' Attitudes to the desired track

- While this study also established a discrepancy between Millennials' Attitudes and their Adoption Behaviour for organic food (in line with Berger & Heath, 2007), overcoming such Attitudes is crucial for the diffusion of new products like organic foods. Extant literature submits that equipping innovative products (like organic foods) with features necessary for approval by consumers can help in modifying their Attitudes towards adopting these foodstuffs (Jasiulewicz & Lemanowicz, 2016). Proper advertisements can also be used to promote the adoption of organic foods and dispel any negativities that may be linked to these foodstuffs. Since the early stages of any innovation are most likely to be characterised by high levels of uncertainty, marketers must put measures in place to reduce consumers' perceived ambiguity or alleviate it altogether (Thanasopon, Papadopoulos & Vidgen, 2016). To effectively lessen any form of negative Attitudes or perceptions on consumers, Hubert et al. (2017) suggested that marketing managers must present essential and beneficial elements and features of their new products to increase consumers' perceived innovativeness and facilitate the acceptance of such goods.

v). Customisation

- It is also necessary for marketers to have a structured and well-documented model to excellently meet the needs of its target group(s) (Sholeh, Ghasemi, & Shahbazi, 2018). This can be done through customisation, introducing organic foodstuffs that meet individual consumers' wants and needs (e.g., Relich & Pawlewski, 2018)

This study firmly established and highlighted the requisite for marketing practitioners to grasp the social context factors that motivate Millennials to adopt organic food. Such comprehension is likely to aid marketers to act proactively in detecting signs or behaviours that may work against the portrayal of positive adoption of organic food rather than reactively responding to the destructive effects of consumer rejection of these foodstuffs. Moreover, this study highlighted that marketers must effectively use their promotional tools to modify the current negative Attitude towards organic food (as supported by the findings of this study). Finally, it would be very expedient for marketing managers to purposefully incorporate the antecedent factors of Adoption Behaviour as part of their broad marketing strategy while simultaneously applying this study's conceptual model in creating a scientific basis and practical insight for formulating an effective overall marketing strategy.

The following section highlights the key recommendations that ensued from the findings of this study.

8.3. Recommendations

This section presents solid recommendations as something to take home. In addition, this section will be used to connect to the overall purpose of this study and primary or secondary objectives. Moreover, this section will also reflect on the research questions and how these can be addressed through recommendations that stemmed from this study. The objectives and research questions are also mirrored with the hypotheses of this study to further indicate how this investigation accomplished what it was initially set out for. Hence, this section brings together all the important sections of this study to give concise 'take-away' aspects for the reader while drawing valuable conclusions in light of the findings of this study.

To put everything into context, it is worth noting that this study was premised on eight secondary objectives with their corresponding research questions and hypotheses. From these eight objectives, two moderation assumptions and two moderated mediation assumptions were derived. The following discussion brings these sections together (i.e., research objectives, research questions, the resulting hypotheses and findings, and conclusions) to provide a succinct way of adequately presenting recommendations of this study.

Table 8.1: Relationship between Social Identity and Perceived Value

Research objective 1:	○ Investigate whether there is a positive relationship between Social Identity and Perceived Value
Research question 1:	○ Does Social Identity have a positive impact on Perceived Value?
Research hypothesis 1:	○ Social Identity positively influences consumers' Perceived Value
Research finding 1:	○ Social Identity significantly (although weak) and positively influences consumers' Perceived Value.
Conclusion 1:	○ There is a weak but significant and positive probability that Millennials' identification with particular social groups will influence their perceptions of value to adopt organic food.
Recommendation 1:	○ It is recommended that practitioners who wish to augment Millennials' value perceptions for organic food focus on understanding their target market's social identities to create an identity-based approach linked to their target market's perceptions of value. ○ A further suggestion is that marketers should effectively use promotional tools like advertisements to instil the value of organic foods, while at the same time correcting all negative perceptions that can spell doom to the adoption of these foods.

Table 8.2. Relationship between Social Representation and Perceived Value

Research objective 2:	○ Assess whether there is a positive relationship between Social Representation and Perceived Value
Research question 2:	○ Does Social Representation have a positive impact on Perceived Value?
Research hypothesis 2:	○ Social Representation positively influences consumers' Perceived Value
Research finding 2:	○ Social Representation significantly (strong) and positively influences consumers' Perceived Value
Conclusion 2:	○ Social Representation plays a strong significant, and positive role in shaping Millennials' value perceptions, which invariably translate to their acceptance of organic food, as these shared beliefs, values, norms enable them to derive and give meaning to these novel foods.
Recommendation 2:	○ It is strongly recommended that marketers should link the positive benefits of organic foods to Millennials' collective representations (like their norms, beliefs, culture and ideas) for such foodstuffs to resonate well with these groups. This is highly likely to ignite positive value perceptions on Millennials' adoption of organic food.

Table 8.3. Relationship between Social Influence and Perceived Value

Research objective 3:	○ Determine whether there is a positive relationship between Social Influence and Perceived Value
Research question 3:	○ Does Social Influence have a positive impact on Perceived Value?
Research hypothesis 3:	○ Social Identity positively influences consumers' Perceived Value
Research finding 3:	○ Social Representation significantly (although weak) and positively influences consumers' Perceived Value
Conclusion 3:	○ There is a weak but significant and positive likelihood that socially-oriented Millennials will perceive greater value from adopting organic food to benefit from the societal image of being good citizens.
Recommendation 3:	○ It is recommended that marketers must incorporate opinion leaders' influences in their marketing activities, as such 'important others' (e.g., use people like Bonang Matheba to endorse organic food). This is likely to significantly engender positive value perceptions towards the espousal of organic foods as Millennials would resonate well with such an individual. Thus, marketers must use opinion leaders who openly endorse these products for consumers to draw value perceptions from these 'important others'.

Table 8.4: Relationship between Perceived Value and Attitude

Research objective 4:	○ Evaluate whether there is a positive relationship between Perceived Value and Attitude
Research question 4:	○ Does Perceived Value have a positive impact on Attitude?
Research hypothesis 4:	○ Perceived Value positively influences consumers' Attitudes
Research finding 4:	○ Perceived Value significantly (strongly) and positively influences consumers' Attitudes
Conclusion 4:	○ Perceived Value has a strong, significant, and positive role in shaping Millennials' Attitudes towards organic food, thus cementing the notion that values are fundamental building blocks of Attitudes.
Recommendation 4:	○ It is strongly recommended that when marketers want to create or shape certain attitudinal tendencies, they must concentrate on promoting what the target market values the most (i.e., shared communal or group values), in order for them to achieve their desired results. However, marketers must also be mindful that values influence Attitudes only under specific circumstances, and thus their effectiveness in shaping Attitudes vary depending on the situation.

Table 8.5: Relationship between Social Identity and Adoption Behaviour

Research objective 5:	○ Investigate whether there is a significant and positive relationship between Social Identity on Adoption Behaviour
Research question 5:	○ Does Social Identity have a significant and positive impact on Adoption Behaviour?
Research hypothesis 5:	○ Social Identity significantly and positively influences Millennials' Adoption Behaviour for organic food
Research finding 5:	○ Social Identity significantly (although weak) and positively influences Millennials' Adoption Behaviour for organic food
Conclusion 5:	○ Social Identity is a significant and positive predictor in explaining millennial consumers' adoption of organic food in South Africa
Recommendation 5:	○ It is recommended in this study that for marketers to enormously enhance the adoption of organic food, they must use "organic consumer identification' as a strategy or stimulus to create consumer enthusiasm towards such foodstuffs. This means that they must put proper strategies in place to stimulate their target market to identify with organic food. ○ It is further recommended that marketers must link organic food to Social Identity so that Millennials can begin to identify with such foodstuffs.

Table 8.6: Relationship between Social Influence and Adoption Behaviour

Research objective 6:	○ Ascertain whether there is a positive and significant relationship between Social Influence and Adoption Behaviour.
Research question 6:	○ Does Social Influence have a significant and positive impact on Adoption Behaviour?
Research hypothesis 6:	○ Social Influence significantly and positively influences Adoption Behaviour for organic food
Research finding 6:	○ Social Influence positively influences Adoption Behaviour for organic food. This relationship was found to be non-significant
Conclusion 6:	○ This study supports the argument that Social Influence positively predicts consumers' Adoption Behaviour for organic food

Table 8.7: Relationship between Perceived Value and Adoption Behaviour

Research objective 7:	○ Establish whether there is a positive relationship between Perceived Value and Adoption Behaviour.
Research question 7:	○ Does Perceived Value have a positive impact on Adoption Behaviour?
Research hypothesis 7:	○ Perceived Value positively influence Adoption Behaviour for organic food
Research finding 7:	○ Perceived Value significantly (strongly) and positively influences Adoption Behaviour
Conclusion 7:	○ Perceived Value has a strong significant, and positive effect on Millennials' Adoption Behaviour of organic food in South Africa.
Recommendation 7:	○ It is strongly recommended that practitioners must align Millennials' value perceptions with organic food to facilitate the espousal of such foodstuffs. This is because values have significantly proven to function as fertile grounds for adoption-related behaviours to thrive.

Table 8.8: Relationship between Perceived Value and Adoption Behaviour

Research objective 8:	○ Assess whether there is a positive relationship between Attitude and Adoption Behaviour.
Research question :	○ Does Attitude have a positive impact on Adoption Behaviour?
Research hypothesis 8:	○ Attitude positively influences consumers' Adoption Behaviour
Research finding 8:	○ Attitude negatively and weakly influences Adoption Behaviour
Conclusion 8:	○ Attitude is negatively related to Adoption Behaviour for organic food. Furthermore, this inverse relationship between Attitude and behaviour can be attributable to the Attitude-behaviour incongruity that is firmly embedded in the existing literature
Recommendation 8:	○ It is recommended that practitioners must devise strategies to understand their customers' Attitudes to have deeper information about how consumers shape these inner attributes. ○ Marketers must always be aware that 'consumers do not walk their talk' and construe their actions differently. Therefore, it is recommended that marketers must always try to turn negative Attitudes into favourable ones by sticking to what consumers value the most and has a societal underpinning. ○ Understanding how consumers frame their adoption decisions will help bridge the gap between the generally positive Attitudes towards organic foods and alternatives in the marketplace.

Table 8.9: Moderation and Moderated-Mediation Effects

Research objectives:	○ 1a) Assess whether Consumer Innovativeness positively and significantly moderates the mediated relationship between Social Identity and Perceived Value on Adoption Behaviour. ○ 3a) Examine whether Consumer Innovativeness positively and significantly moderates the mediated relationship between Social Influence and Perceived Value on Adoption Behaviour. ○ 5a) Examine whether Consumer Innovativeness positively and significantly moderates the relationship between Social Identity and Adoption Behaviour. ○ 6a) Examine whether Consumer Innovativeness positively and significantly moderates the relationship between Social Influence and Adoption Behaviour.
Research questions:	○ 1a) Does Consumer Innovativeness positively and significantly moderate the mediated relationship between Social Identity and Perceived Value on Adoption Behaviour? ○ 3a) Does Consumer Innovativeness positively and significantly moderate the mediated relationship between Social Influence and Perceived Value on Adoption Behaviour? ○ 5a) Does Consumer Innovativeness positively and significantly moderate the relationship between Social Identity and Adoption Behaviour? ○ 6a) Does Consumer Innovativeness positively and significantly moderate the relationship between Social Influence and Adoption Behaviour?
	○ H1a) Consumer Innovativeness does not moderate the mediated relationship between Social Identity and Perceived Value on organic food adoption such that the relationship is stronger when Consumer Innovativeness is higher than when it is low Consumer InnovativenessPerceived ValueSocial Identity

Research hypotheses:	○ H3a) Consumer Innovativeness does not moderate the mediated relationship between Social Influence and Perceived Value on organic food adoption such that the relationship is stronger when Consumer Innovativeness is higher than when it is low Consumer InnovativenessPerceived ValueSocial Influence ○ H5a) Consumer Innovativeness moderates the relationship between Social Identity and organic food adoption such that the relationship is stronger when Consumer Innovativeness is higher than when it is low Consumer InnovativenessSocial Identity ○ H6a Consumer Innovativeness moderate the relationship between Social Influence and organic food adoption such that the relationship is stronger when Consumer Innovativeness is higher than when it is low Consumer InnovativenessSocial Influence
Research findings:	1. Consumer Innovativeness does not moderate how Perceived Value mediates the relationship between Social Identity and organic food adoption 2. Consumer Innovativeness does not moderate how Perceived Value mediates the relationship between Social Influence and organic food adoption 3. Consumer Innovativeness moderates the relationship between Social Identity and organic food adoption 4. Consumer Innovativeness moderates the relationship between Social Influence and organic food adoption
	1. Insufficient evidence exists to support the claim that Consumer Innovativeness moderates how Perceived Value mediates the relationship between Social Identity and organic food adoption 2. Insufficient evidence exists to support the claim that Consumer Innovativeness moderates how Perceived Value mediates the relationship between Social Influence and organic food adoption

Conclusions:	3. Sufficient evidence exists to support the claim that Consumer Innovativeness moderates the relationship between Social Identity and organic food adoption 4. Sufficient evidence exists to support the claim that Consumer Innovativeness moderates the relationship between Social Influence and organic food adoption
Recommendations for both Moderation and Mediated-Moderation Effects:	o It is recommended that marketers should place much emphasis on targeting innovative individuals to stimulate the adoption of organic food. o This study further recommends that when promoting organic food to innovators, more attention should be placed on having socially-oriented content in the promotional messages, by emphasising its benefits to alter any negative Attitudes towards such foods.

8.4. Main Recommendation

As a key recommendation, this study highlights the importance of marketers devising effective promotional strategies targeted at altering Millennials' Attitudes towards organic food. The fundamental purpose of these approaches must aid in bridging the existing Attitude-behaviour gap. Once these Attitudes are directed in the right direction, the espousal of organic food will improve, paving the way for these foodstuffs to reach a mass-market status and thus realise their full market potential. Furthermore, marketers will benefit from 'guaranteed' future demand and sustainable profitability if the adoption of organic food is accelerated to new heights.

8.5. Scope of this Research

This section elucidates on the parameters within which this study was conducted (i.e., the depth and breadth of this study) (Hair *et al.*, 2007). Accordingly, this research was restricted to seven variables (i.e., three predictor variables, two mediating variables, one moderating variable and one outcome variable). Although other theories like Ajzen's Theory of Planned Behaviour were used to substantiate the arguments presented in this study, this research was grounded primarily on Rogers (1962)'s Diffusion Theory of Innovation. Again, while the respondents were sampled across the country (mainly from the existing millennial database), this study concentrated primarily on urban cities of South Africa like Johannesburg, Pretoria, Cape Town and Durban. Moreover, this study was restricted to the millennial cohort as opposed to having a multi-generational focus. This was mainly because Millennials are currently one of the most important marketing demographics as they are the most technology-driven generation and use the Internet for social interaction (e.g., Lantos, 2014; Naumovska, 2017). Hence, focusing on this group was deemed justified in the quest to effectively meet the objectives of this study.

By and large, the scope of research paved the way for this study to highlight its limitations and the resulting future research directions. These aspects will be discussed in the sections below.

8.6. Limitations of this Study and Future Directions

Despite noting the valuable theoretical and practical contributions that emanated from this study, a few limitations warrant caution when intending to apply or generalise the results. These limitations existed owing to the constraints on the methodology or research design and other research aspects (e.g., statistical and impact limitations), and thus these factors affected the findings of this study. This implies that the specific constraints in the procedures that were used may have affected the final outcomes obtained in this study. The following section acknowledges the limitations in this research paper and explains how they affected the conclusions drawn from this study. Future research directions are combined with these limitations mainly because these suggestions for future research endeavours generally stemmed from the research limitations identified in the study.

Table 8.10: Conceptual Limitations

Sub-type	Theme	Detail (Nature and justification of choices)	Future directions
Framing of the conceptual framework	Non-exhaustive conceptual framework	The conceptual framework of this study was limited to the social-context factors that were anteceding elements on Adoption Behaviour while being conditioned on innovativeness. Restricting this study to these variables was deemed relevant in addressing the existing gap in research. This was in line with Persaud and Schillo (2017), who opined that socially-oriented behavioural studies are lacking in the extant literature as it seems as if previous scholars are 'deliberately' ignoring the impact of social-context factors on the overall espousal of new products.	Future research endeavours should focus on expanding the scope of the conceptual model by including more substantive variables, e.g., by instituting higher-order models to foster a more profound comprehension of each variable. For instance, extant literature has established that consumers with a high level of innovativeness are usually wealthier and better educated (the majority of them have a university qualification) (Raskovic, Ding, Skare, Dosen, & Zabkar, 2016). Thus, duplicating a similar study while adding more variables may potentially influence the findings and allow testing other product classes where social considerations may be less profound. Future scholars should also consider studying the impact of age, level of education and income as additional moderating effects while building new concepts and scales to improve the conceptualisation of Consumer Innovativeness (as also suggested by Bartels & Reinders, 2011; Roehrich, 2004). In this regard, personality traits can be used as aspects that reflect an individual's innovativeness (Morton, Anable, & Nelson, 2016; Vandecasteele & Geuens, 2010).

Table 8.11: Methodological Limitations

Sub-type	Theme	Detail (Nature and justification of choices)	Future directions
Questionnaire Design	Operationalis-ation of adapted and modified scales & Assuming that adapted scales were reliable and valid	The items of the variables used in this study were adapted from those of previous scholars but were modified before operationalisation. A notable limitation that is frequently linked with adapting instruments of earlier studies, that were proven to be statistically valid and reliable is that they may fail to correctly measure the current phenomenon under scrutiny and eventually might not yield valid and dependable outcomes. This assumption has been termed an "artificial and spurious sense of precision and accuracy" (Bryman & Bell, 2011:168). This implies that "the connection between the measures developed by social scientists and the concepts they are supposed to be revealing is assumed rather than real" (Bryman & Bell, 2011:168). However, this study deemed it valuable to use the already established scales and tweak them to suit its purpose due to time constraints of creating new items and doing a pilot study.	Future researchers should consider creating new research instruments and items to measure a specific phenomenon under specific circumstances. However, this will necessitate that pilot studies must be conducted to test the validity and reliability of the new instruments. In so doing, this will dispel the prevailing assumption that adapted scales are thought to be reliable and valid before conducting relevant statistical tests.

Table 8.12: Methodological Limitations continued…

Sub-type	Theme	Detail (Nature and justification of choices)	Future directions
Questionnaire Design	Usage of structured survey questionnaires & Lack of pilot testing	Linked to the concern of adapting measurement instruments and assuming that they are reliable and valid is the assumption that respondents uniformly understand the concepts used and ascribe similar connotations to the statements in the questionnaire. Unfortunately, reality has shown that respondents are more likely to interpret these statements differently (Bryman & Bell, 2011), although structured questionnaires have similar statements.	When new measures are created, pilot tests will ensure that the target respondents understand and interpret the statements uniformly. Revisions can be done to ensure that the understanding and interpretation of the statements is the same across all respondents

Table 8.13: Methodological Limitations continued…

Sub-type	Theme	Detail (Nature and justification of choices)	Future directions
Questionnaire Design	Use of a structured survey questionnaire	This study used a structured survey questionnaire to gather raw data (both online and through mall-intercept surveys). This meant that the meaningfulness of this study extensively relied on the reliability and validity of its measurement instruments. Although surveys have high representativeness and are not affected by the subjectivity of respondents, they, however, do not capture behaviours, emotions and changes in the sentiments of respondents (Queirós, Faria & Almeida, 2017). Furthermore, surveys often have the drawback of restraining respondents into pre-defined responses, and in so doing, they are very rigid as they limit the possibility of getting a variety of responses. Unlike interviews where participants have a chance to ask for clarity (and also provides an opportunity for the researcher to probe further and get meaningful insights) and also give the researcher a chance to probe further, structured or close-ended survey questionnaires tend to restrict respondents to the text in the survey on how to complete it because it has pre-determined statements. The fact that both self-administered online and researcher-administered mall-intercept surveys failed to capture the intricacy, fullness and depth of valuable insights and respondents' reactions, behaviours, and others, inevitably adds to the issues that formed part of the noteworthy limitations of this study.	A mixed-method is proposed for future studies to be able to capture behaviours, emotions and changes of sentiments amongst respondents. This means that qualitative methods like interviews can be used to get a variety of responses, unlike just sticking on the close-ended type questions, which are reminiscent to surveys.

Table 8.14: Methodological Limitations continued…

Sub-type	Theme	Detail (Nature and justification of choices)	Future directions
Data collection	Tendency to assume a 'fixed nature' of variables being explored	Extant literature constantly points out the methodological problems inherent in quantitative studies (e.g., Cozzetto, 1994; Hadler, Eder, Haller & Höllinger, 2015). This critique relates primarily to researchers' tendency to assume a 'fixed nature' of variables being explored while failing to deliberate on the real-life experiences of the respondents (Bryman & Bell, 2011).	Prospective researchers must deliberate on the real-life experiences of respondents. This can be done by doing pilot research and understanding participants' nature while aligning the research instrument accordingly. Once pilot studies are done, it may be sound for researchers to assume that the constructs of the study can be equally applied to all respondents.
	Equal application of all the constructs to the respondents	The underlying assumption of this study was to equally apply its instrument to the respondents of diverse backgrounds and different locations. Reality pointed out that the actual experiences of other respondents were not the same, given their differing social and group dynamics that determined their Adoption Behaviour for organic food.	

Table 8.15: Impact Limitations

Sub-type	Theme	Detail (Nature and justification of choices)	Future directions
Generalisability	The external validity of a non-probability based study	In this study, a non-probability convenience sampling through mall intercepts was used as one of the sampling and online data collection methods were used. However, the non-probability convenience sampling method posed concerns regarding the sample's representativeness, and, in effect, this research's ability to generalise its results to other contexts became questionable. Furthermore, since this study was cross-sectional in nature, this further raised concerns about its external validity became evident (Bryman & Bell, 2011).	Prospective studies must consider using probability random sampling to improve the generalisability of results to other settings.
	Time constraints	As the researcher could not devote years to studying a single topic due to the limited time that was available to explore the research problem and measure stability or change in, for example, respondents' Attitudes, perceptions and behaviours over time, this became an apparent impediment to generalisability of its results.	Future researchers should consider conducting a longitudinal study whereby the variables can be studied over an extended period. Since a specific behaviour manifests itself after some time, it will be possible for researchers to make meaningful submissions if this phenomenon is investigated over an extended period.

	Cross-sectional research design	An additional concern on the cross-sectional design relevant to this study was the nature of the data used (i.e., once-off data). This also posed a threat to external validity as conclusions relating to causal analyses created from cross-sectional research designs may not be inferred to other research contexts, as such deductions are centred on a once-off exploration (Moorman, 1991).	In addition to the statement above, a longitudinal research design with time series that adopts both quantitative and qualitative techniques (i.e., a mixed-methods research strategy) can yield more robust conclusions and improve the overall generalisability of the findings. Furthermore, it is expected that a longitudinal study with a mixed-method approach will have more explanatory power in determining the link between the studied variables over time.

Table 8.16: Impact Limitations cont…

Sub-type	Theme	Detail (Nature and justification of choices)	Future directions
Limited focus	Focused on a single country, i.e., South Africa	In reality, knowledge about organic food very is limited, particularly on consumers in many developing countries. By focusing on South Africa, this study sought to enrich the literature on organic food behaviour from an emerging market perspective, which has received less research attention from previous scholars.	Testing this study's conceptual model by adding other product classes from different cultural contexts can be a worthwhile avenue for further research that might refine the current model. Further tests can be conducted in a product class where social considerations are less profound. This will validate the model presented in this study and extend it to include other relevant variables. This will further justify the fact that organic food adoption can also be explained beyond social considerations.
	Focused only on one product class, i.e., organic foodstuffs	The fact that this study was conducted in an organic food context implies that it could only explain a specific and not a broader kind of behaviour across different product classifications (Krystallis & Chryssohoidis, 2005; Lockie, Lyons, Lawrence, & Grice, 2004). However, this study focused only on organic food because the market for organic food is still at its preliminary stage. Hence, it became justifiable to do a study sorely in this context	
	Focused only on social-context factors	In most previous studies, there seemed to be a narrow focus on individual-level factors while neglecting the social context factors that influence Adoption Behaviour (Bertrandias & Elgaaied-Gambier, 2014; Langner et al., 2013; Persaud & Schillo, 2017). Thus, it became necessary that a study similar to this one must be conducted to forge a more profound understanding of how the social context factors impact Adoption Behaviour (when combined with consumers' innovativeness).	

8.6.1. Main Limitation and Key Recommendation for Future Research Endeavours

The main limitation of this study was methodological, i.e., the use of a non-probability convenience sampling procedure. As the ultimate goal of any research endeavour is to have generalisable results, this study could not attain this goal, as a non-probability sampling procedure was applied. Therefore, this study emphasises that future researchers must use probability sampling procedures to ensure that the results are generalisable to similar research contexts.

The next section briefly handles the subject of the external validity of this study's results.

8.7. Generalisability

Although this study engendered meaningful and significant results (in some instances), the conceptual, methodological and impact deficiencies highlighted above further constrained its external validity to other similar contexts. Whilst extant literature submits that the greater the population, the higher the likelihood that a study will yield generalisable results (Leung, 2015; Turnipseed, 2002), this study argued that having a large or representative sample does not automatically warrant external validity of the study. This is because the conceptual, methodological, impact, statistical problems may outweigh the substance of just having a representative sample. Furthermore, since this study did not fully apply randomisation when sampling the participants but instead employed non-probability convenience sampling through mall intercepts and 'convenient' online survey methods, this also posed questions about its generalisability to other results similar settings. Therefore, due to the chosen methodology, coupled with some other deficiencies, the findings from this study cannot be applied to similar settings.

The following section concludes this chapter and provides a synthesis of critical points that emanated from this study.

8.8. Chapter Summary & Conclusion

Recent studies have maintained that research focus is skewed towards individual-level factors, while most scholars overlook the predictive ability of social context factors on Adoption Behaviour (Bertrandias & Elgaaied-Gambier, 2014; Langner et al., 2013; Persaud & Schillo, 2017). Therefore, it became expedient that a study of this kind be conducted to forge a more profound understanding of how the social context factors (when moderated by Consumer Innovativeness) impact the Adoption Behaviour of organic food. The study findings suggested a need for further research to aid practitioners in bridging the existing Attitude-behaviour gap. While a mismatch between Millennials' Attitudes and their Adoption Behaviour was firmly established, this study further corroborates the findings from previous scholars (e.g., Berger & Heath, 2007), that overcoming such bad Attitudes is deemed fundamental for the effective diffusion of organic food. Once these Attitudes are fully understood and are directed towards the right direction (e.g., through relevant promotional activities), the espousal of organic food will improve, thus paving the way for these foodstuffs to reach a mass-market status and realise their full market potential. Eventually, marketers will have the assurance of future demand and sustainable profitability – if the adoption of organic food is accelerated to new heights.

Comprehensive and accurate documentation of the social context factors that predict Adoption Behaviour remains an indispensable aspect that will facilitate a better understanding of the interplay between these variables. This would lead to complete knowledge on the espousal of innovative products. Furthermore, once relevant knowledge is available, it is likely that the current high rejection rates of new products will be lessened, if not obliterated. Finally, once practitioners fully understand the aspects that stimulate consumers to adopt organic food, the demand for such produces can be accelerated, thus positively impacting their long-term profitability. In order to provide a clearer interpretation of the results, this evidence was also garnered from the introduction of the moderation effect. By changing the magnitude of the relationship between the study variables, this study firmly established the moderation effect of Consumer Innovativeness on social-context factors, however, the moderated mediation was not supported by the results of this study.

The findings of this study delivered some important theoretical and empirical contributions to the extant literature and meaningfully advanced the frontier of knowledge within the broader fields of generational and behavioural studies. Likewise, the managerial implications of this study were positioned within the context of the study findings, which offered marketing

managers solid and operational tools to help them proactively detect undesirable perceptions, Attitudes and behaviours that could eventually frustrate the smooth adoption of organic food. However, although this study proffered meaningful contributions, some methodological or research design constraints and other research limitations (e.g., conceptual, statistical and impact limitations) affected the generalisability of its findings. Owing to these limitations, the results of this study lacked external validity and thus cannot be applied to other similar research contexts.

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APPENDICES

Appendix I: Participant Information Letter

April 2020

Good day,

My name is Bongani Mhlophe, and I am currently completing my Doctoral degree in Marketing at the University of the Witwatersrand, Johannesburg.

My current research is entitled:

"*Social context factors and Consumer Innovativeness as drivers of organic food adoption among millennial consumers in South Africa"*

I am inviting you to be a participant in this study. Your selection into this research was based on the fact that you are a Millennial and you stay in either Johannesburg, Pretoria, Durban or Cape Town. Therefore, by being a participant in this research study, I would request that you fill in the survey questionnaire for my research, and it will take approximately 10-15 minutes to complete this survey.

Your participation in this research is voluntary, and I can guarantee that your details will remain anonymous throughout this research study as well as in the final write-up of the dissertation. As the participant, you are free to refuse to answer any questions you may feel uncomfortable answering, and you can also withdraw from this study at any time. Participating in this research will not receive payment of any form, and the information you disclose will be used to complete the final thesis. This survey will result in a research paper written into a Doctoral thesis and will be available through the University's website.

Should you have any further questions or queries, you are welcome to contact me or my supervisor, Prof Richard Chinomona, any time, using the contact details provided below.

Researcher
Names: Bongani Mhlophe
Email. 466524@students.wits.ac.za
Tel.: 083 3487 680

Supervisor
Prof. HB. Klopper
hb@davinci.ac.za
082 3361 044 / 087 8029 251

Consent Form for Participation in a Research Study

I acknowledge that I understand the purpose of this research, and the aims are clearly explained. I also know that the information I give will be used in the write-up of the Doctoral dissertation.

I further acknowledge that I understand the following:

- My participation in this research is voluntary
- My details will remain anonymous throughout the research study as well as in the write-up of the final dissertation
- I can refuse to answer any questions which I feel uncomfortable responding to.

☐ **Please sign with an X**

Appendix II: Research Questionnaire

SECTION A: DEMOGRAPHIC INFORMATION

The following questions pertain to your personal information. Place a cross (X) in the block that best corresponds to your answer.

1. Gender:

F	❑	M	❑

2. Age:

- ❑ Less than 18
- ❑ 18- 23
- ❑ 24 - 29
- ❑ 30 - 35
- ❑ 36 - 41
- ❑ Above 41

3. Marital Status:

- ❑ Married
- ❑ Cohabitation
- ❑ Single
- ❑ Divorced
- ❑ Widowed

Other (Please specify) _____

4. Which ethnicity do you identify with?

Please ONE from the following:

Afrikaans	❑	Tswana	❑
English	❑	Venda	❑
Ndebele	❑	Xhosa	❑
Pedi	❑	Zulu	❑
Sotho	❑	Swati	❑
Tsonga	❑		
Other (Please Specify) _____			

5. Occupation:

- ❑ Student
- ❑ Employed Part time
- ❑ Employed Full time
- ❑ Unemployed

6. Personal Income

- ❑ < R10000
- ❑ R10001-R20000
- ❑ R20001-R30000
- ❑ R30001-R40000
- ❑ +R40000

7. Frequency of Income:

- ❑ Monthly
- ❑ Fortnightly
- ❑ Weekly
- ❑ Other _____

8. Frequently used social media platform

- ❑ Facebook
- ❑ Instagram
- ❑ Snapchat
- ❑ Skype
- ❑ Twitter
- ❑ Whatsapp
- ❑ Youtube

9. How often do you look for organic food?

- ❑ At least once/week
- ❑ At least once/month
- ❑ Once in half year
- ❑ Seldom
- ❑ Never

SECTION B: STUDY INSTRUMENTS

The following questions will assist in determining your perceptions on the study variables. Please rate to what extent you agree with the following statements. Mark your answer by placing a cross (X) in the corresponding block on the scale from "strongly disagree" to "strongly agree"

	Strongly Disagree [1]	**Disagree [2]**	**Slightly Disagree [3]**	**Neutral [4]**	**Slightly Agree [5]**	**Agree [6]**	**Strongly Agree [7]**
Social Identify							
I identify with organic consumers	❑	❑	❑	❑	❑	❑	❑
When I talk about organic consumers, I usually say 'we' rather than 'they'	❑	❑	❑	❑	❑	❑	❑
I feel strong ties with organic consumers	❑	❑	❑	❑	❑	❑	❑
When someone criticises organic consumers, it feels like a personal insult	❑	❑	❑	❑	❑	❑	❑
I am very interested in what people think about organic consumers	❑	❑	❑	❑	❑	❑	❑
I experience a strong sense of belonging to organic consumers	❑	❑	❑	❑	❑	❑	❑
I feel good about organic consumers	❑	❑	❑	❑	❑	❑	❑
When someone praises organic consumers, it feels like a personal compliment	❑	❑	❑	❑	❑	❑	❑
I am like organic consumers	❑	❑	❑	❑	❑	❑	❑
Social Representation							
There are many new foods available nowadays	❑	❑	❑	❑	❑	❑	❑
New foods are useful	❑	❑	❑	❑	❑	❑	❑
I prefer unfamiliar and safe foods	❑	❑	❑	❑	❑	❑	❑
Organic food is the best in the world	❑	❑	❑	❑	❑	❑	❑
My childhood food was non-natural compared with the currently available food	❑	❑	❑	❑	❑	❑	❑

	Strongly Disagree [1]	Disagree [2]	Slightly Disagree [3]	Neutral [4]	Slightly Agree [5]	Agree [6]	Strongly Agree [7]
Health interest causes necessary stress	❑	❑	❑	❑	❑	❑	❑
I believe in the potential of new food technology	❑	❑	❑	❑	❑	❑	❑
Organic food can provide solutions to global food problems	❑	❑	❑	❑	❑	❑	❑
Organic food production is just aiding nature	❑	❑	❑	❑	❑	❑	❑
People are apprehensive towards organic food because they are not well known	❑	❑	❑	❑	❑	❑	❑
I value naturalness in everything	❑	❑	❑	❑	❑	❑	❑
I trust in organically grown foods	❑	❑	❑	❑	❑	❑	❑
In my opinion, organically grown foods are no better than the conventionally grown ones	❑	❑	❑	❑	❑	❑	❑
I feel good when I eat clean and natural food	❑	❑	❑	❑	❑	❑	❑
I would like to eat only food that has no additives	❑	❑	❑	❑	❑	❑	❑
I care a lot about what I eat	❑	❑	❑	❑	❑	❑	❑
I care a lot about how my food is produced	❑	❑	❑	❑	❑	❑	❑
I know much about new foods currently available in the market	❑	❑	❑	❑	❑	❑	❑
Social Influence							
I frequently gather information from friends or family about a product before I try it because I would like them to approve my decision to adopt it to my lifestyle	❑	❑	❑	❑	❑	❑	❑
I would adopt organic food to my lifestyle because people who are close to me think that I should buy organic	❑	❑	❑	❑	❑	❑	❑
I would adopt organic food to my lifestyle because I think other people that I value will approve it	❑	❑	❑	❑	❑	❑	❑

	Strongly Disagree [1]	**Disagree [2]**	**Slightly Disagree [3]**	**Neutral [4]**	**Slightly Agree [5]**	**Agree [6]**	**Strongly Agree [7]**
I believe that the adoption of organic food will enhance the image that others have of me	❑	❑	❑	❑	❑	❑	❑
Adopting organic food helps me show to others who I am and what I stand for	❑	❑	❑	❑	❑	❑	❑
Most people whose opinions I value think I should try eating organic food	❑	❑	❑	❑	❑	❑	❑
Most people who are important to me already eat organic food	❑	❑	❑	❑	❑	❑	❑
My parents think I should consider eating organic food	❑	❑	❑	❑	❑	❑	❑
My siblings think I should try consuming organic food	❑	❑	❑	❑	❑	❑	❑
My friends think I should include organic food in my food basket	❑	❑	❑	❑	❑	❑	❑
Social media is important to me when making decisions about what I eat	❑	❑	❑	❑	❑	❑	❑
I use social media sites to get ideas about my meals	❑	❑	❑	❑	❑	❑	❑
Social media influence my decisions about the foods that I buy	❑	❑	❑	❑	❑	❑	❑
I use social media when deciding on what foods to prepare at home	❑	❑	❑	❑	❑	❑	❑
I like to view pictures and videos related to food that others post on social media	❑	❑	❑	❑	❑	❑	❑
Perceived Value							
The money that I spend on organic food is well spent	❑	❑	❑	❑	❑	❑	❑
The old saying: “you receive for what you pay” is true for organic food	❑	❑	❑	❑	❑	❑	❑
Organic food is the best for me to accept for my diet	❑	❑	❑	❑	❑	❑	❑
I am willing to pay a bit more for food that does not harm my health	❑	❑	❑	❑	❑	❑	❑
I believe that organic foods have higher nutritional value	❑	❑	❑	❑	❑	❑	❑

	Strongly Disagree [1]	Disagree [2]	Slightly Disagree [3]	Neutral [4]	Slightly Agree [5]	Agree [6]	Strongly Agree [7]
I believe continuous consumption of organic food would promote my long term health benefits	❑	❑	❑	❑	❑	❑	❑
Attitude							
I am interested in organic food	❑	❑	❑	❑	❑	❑	❑
Organic foods are safer and more Reliable	❑	❑	❑	❑	❑	❑	❑
Organic foods are of better quality	❑	❑	❑	❑	❑	❑	❑
Organic foods are healthier	❑	❑	❑	❑	❑	❑	❑
Organic foods taste better	❑	❑	❑	❑	❑	❑	❑
Organic foods are of higher nutritional value	❑	❑	❑	❑	❑	❑	❑
Organic foods are affordable	❑	❑	❑	❑	❑	❑	❑
Organic foods are the best foods for me	❑	❑	❑	❑	❑	❑	❑
Adoption of organic foods represents higher social status	❑	❑	❑	❑	❑	❑	❑
There are a wide variety of organic foods in the market	❑	❑	❑	❑	❑	❑	❑
I trust organic foods	❑	❑	❑	❑	❑	❑	❑
Organic food adoption helps protecting the environment	❑	❑	❑	❑	❑	❑	❑
Consumer Innovativeness							
If I heard that new organic foodstuffs are available in my grocery store, I would be interested enough to try it	❑	❑	❑	❑	❑	❑	❑
I know more about new organic food products than other people	❑	❑	❑	❑	❑	❑	❑
If my friend is eating unfamiliar food, I make an effort to taste it	❑	❑	❑	❑	❑	❑	❑
I usually prefer new foods as compared to old and conventional ones	❑	❑	❑	❑	❑	❑	❑
I prefer trying new unfamiliar food	❑	❑	❑	❑	❑	❑	❑

	Strongly Disagree [1]	Disagree [2]	Slightly Disagree [3]	Neutral [4]	Slightly Agree [5]	Agree [6]	Strongly Agree [7]
I like food that has a fresh taste	❑	❑	❑	❑	❑	❑	❑
In general, I am the first in my circle of friends to try newly introduced food products	❑	❑	❑	❑	❑	❑	❑
Adoption Behaviour							
I am excited that I am able to try organic food	❑	❑	❑	❑	❑	❑	❑
I am always looking forward to buy organic food	❑	❑	❑	❑	❑	❑	❑
I view the adoption of organic food with great enthusiasm	❑	❑	❑	❑	❑	❑	❑
I purchase organic food for my family's diet	❑	❑	❑	❑	❑	❑	❑
I choose to adopt foodstuffs that are environmentally-friendly	❑	❑	❑	❑	❑	❑	❑
I have mentally accepted organic food as an important for my diet	❑	❑	❑	❑	❑	❑	❑
In my mind, I am convinced that organic foods are important for my diet	❑	❑	❑	❑	❑	❑	❑
I personally view organic food as an important aspect of my health	❑	❑	❑	❑	❑	❑	❑
I will continue to have organic food as part of my daily lifestyle	❑	❑	❑	❑	❑	❑	❑
If I can choose what I eat, I will still choose organic food	❑	❑	❑	❑	❑	❑	❑
I have convinced members of my family or friends to adopt food	❑	❑	❑	❑	❑	❑	❑

Thank you for giving up of your time in participating in this study. Your input is greatly appreciated and will be treated as confidential at all times.

*****END*****

Appendix III: Ethics Clearance Certificate

UNIVERSITY OF THE WITWATERSRAND JOHANNESBURG

Research Office

HUMAN RESEARCH ETHICS COMMITTEE (NON-MEDICAL)
R14/49 Mhlophe

CLEARANCE CERTIFICATE	**PROTOCOL NUMBER: H18/09/19**
PROJECT TITLE	Social context factors and consumer innovativeness as drivers of organic food consumption among Gen Y consumers in South Africa
INVESTIGATOR(S)	Mr B Mhlophe
SCHOOL/DEPARTMENT	Economic and Business Sciencesf
DATE CONSIDERED	14 September 2018
DECISION OF THE COMMITTEE	Approved Two year extension only
EXPIRY DATE	24 October 2023

DATE 25 October 2018 **CHAIRPERSON** _____
(Professor J Knight)

cc: Supervisor : Professor R Chinomona

DECLARATION OF INVESTIGATOR(S)

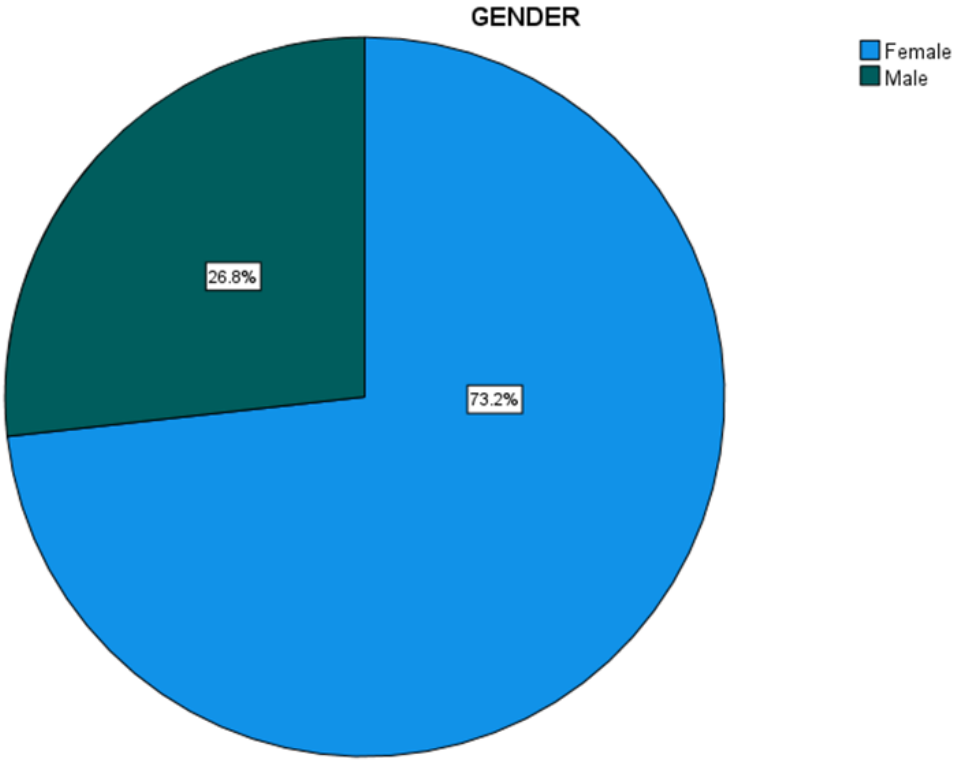
To be completed in duplicate and **ONE COPY** returned to the Secretary at Room 10004, 10th Floor, Senate House, University. Unreported changes to the application may invalidate the clearance given by the HREC (Non-Medical)

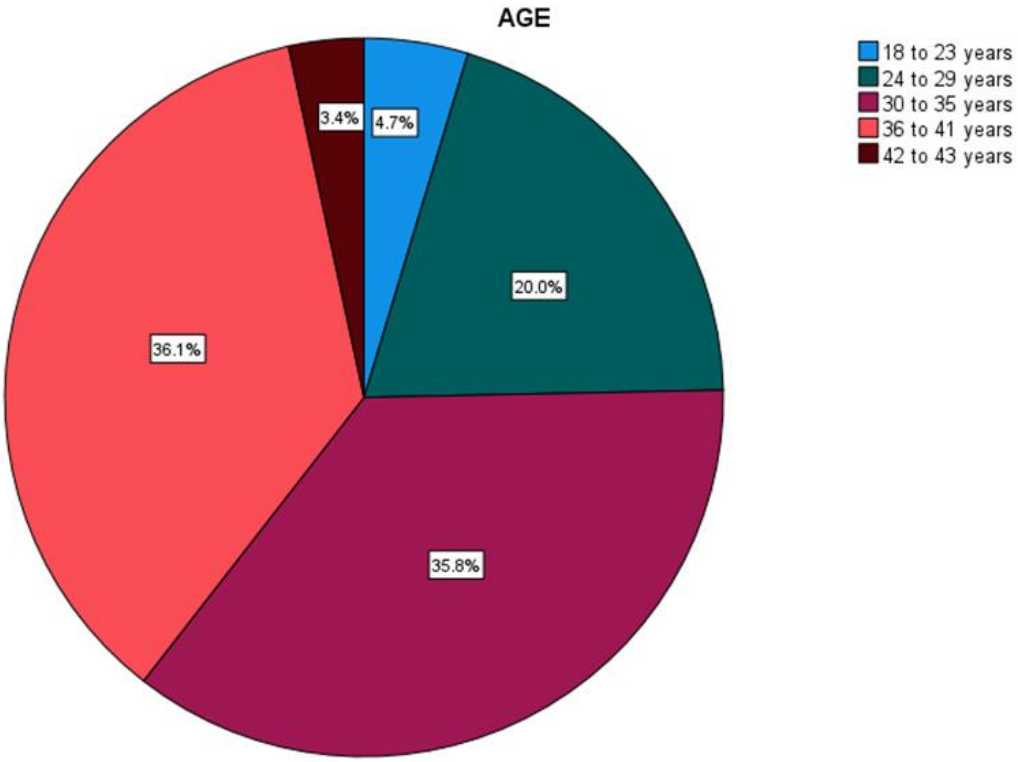
I/We fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to submit an amendment of the protocol to the Committee. **I agree to completion of a regular progress report. For Minimal and Low studies, this is due annually on 31 December. For Medium and High Risk studies, this is due twice annually on 30 June and 31 December.**

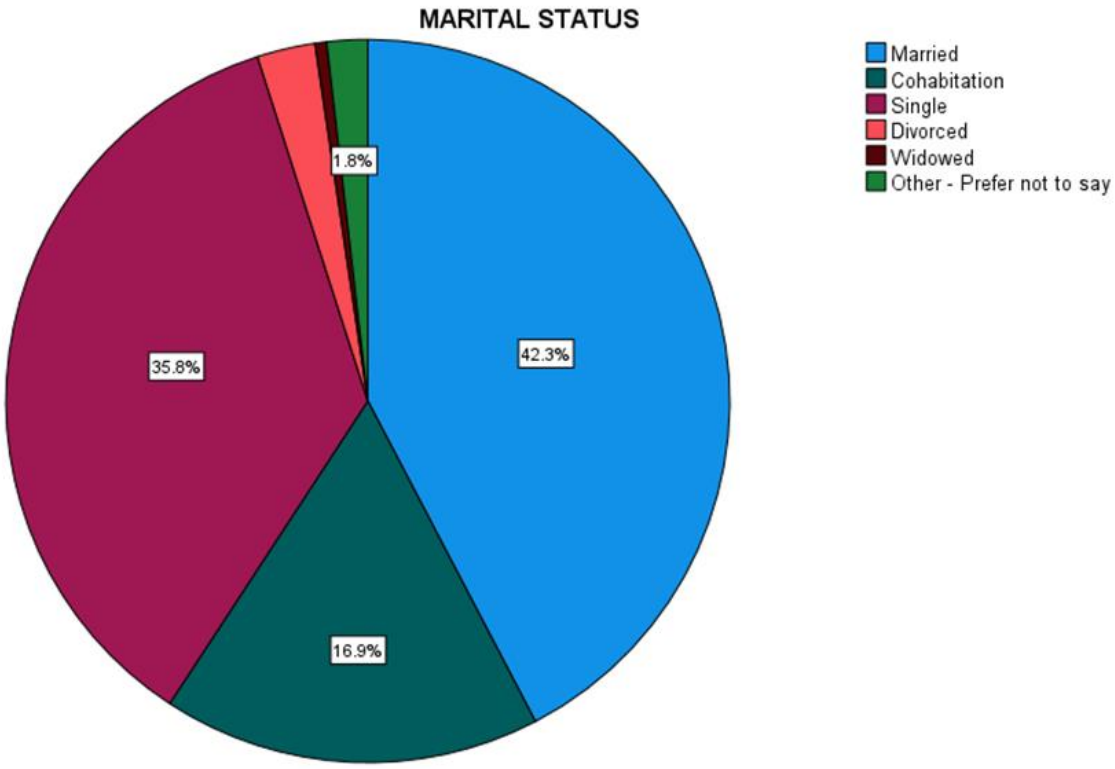
_____ _____/_____/_____
Signature Date

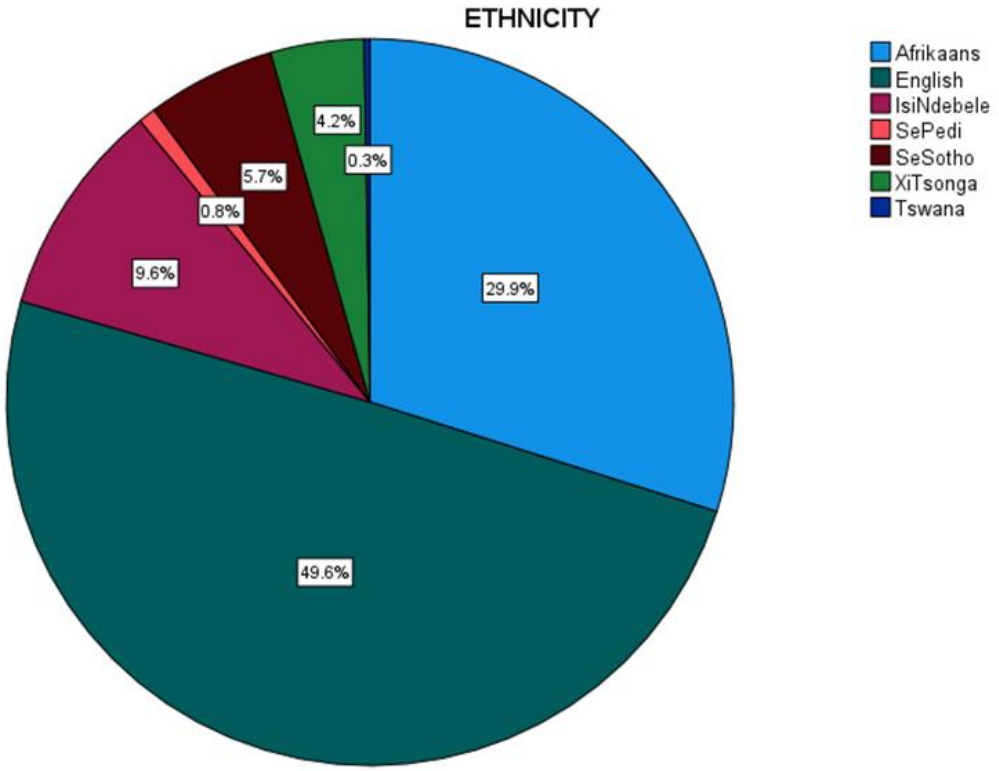
PLEASE QUOTE THE PROTOCOL NUMBER ON ALL ENQUIRIES

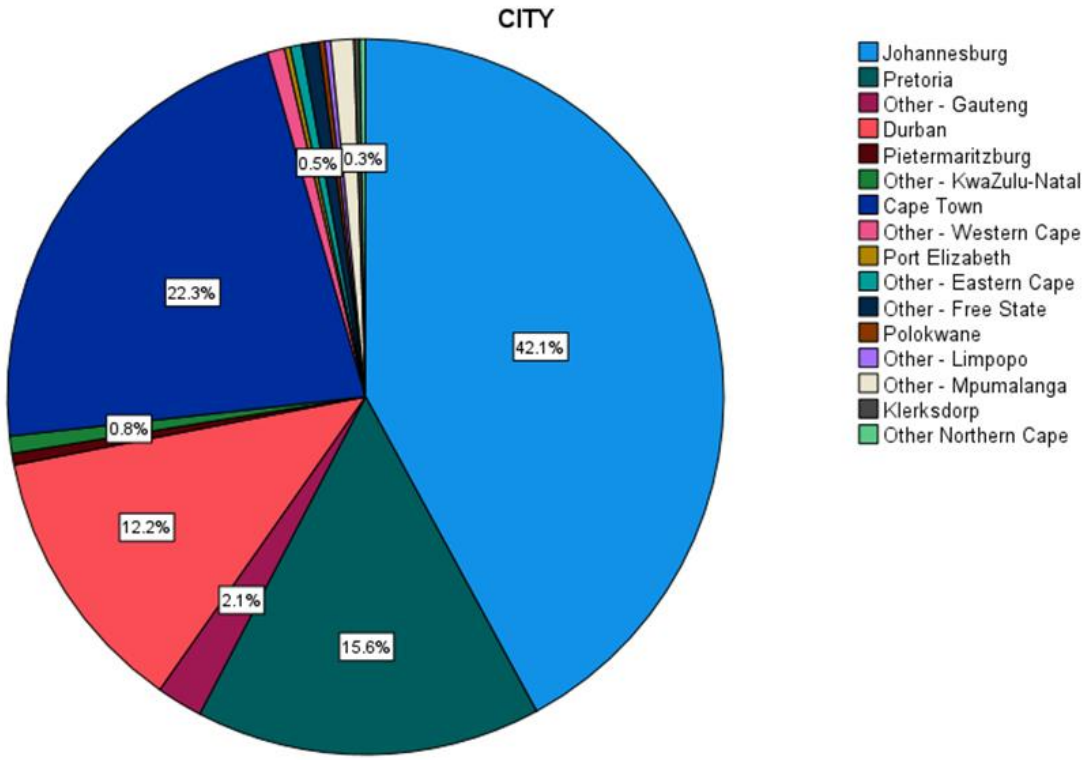
Appendix IV: Descriptive Statistics Results

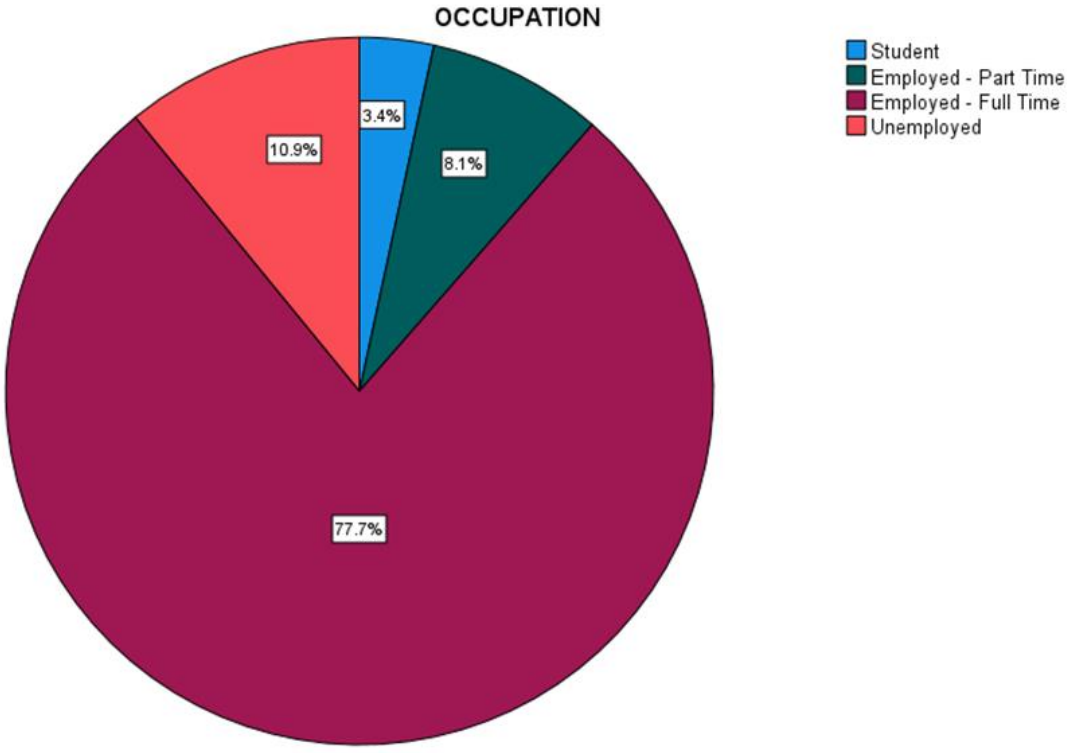


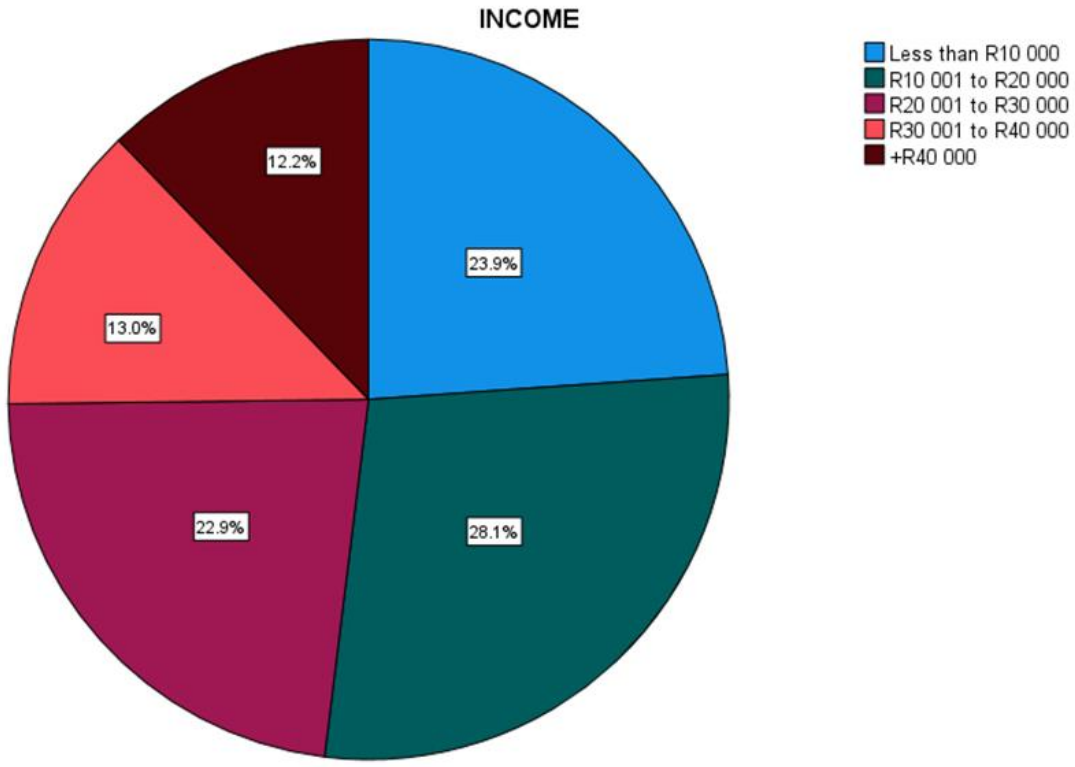


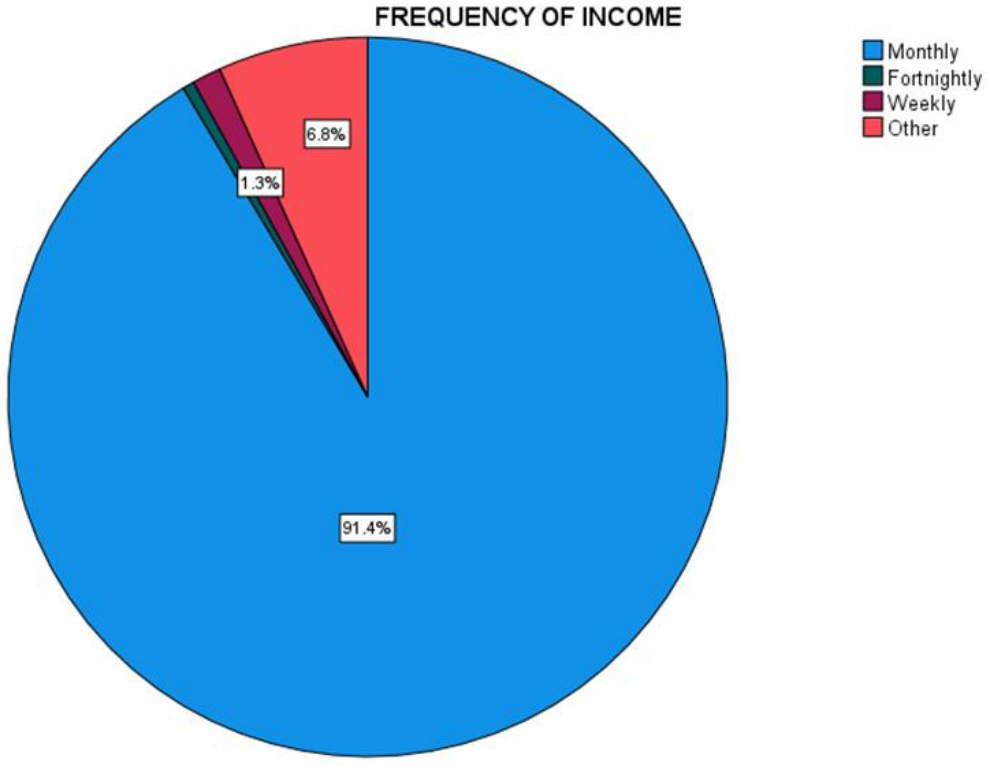

MARITAL STATUS
Married
Cohabitation
Single
Divorced
Widowed
Other - Prefer not to say
42.3%
16.9%
35.8%
1.8%

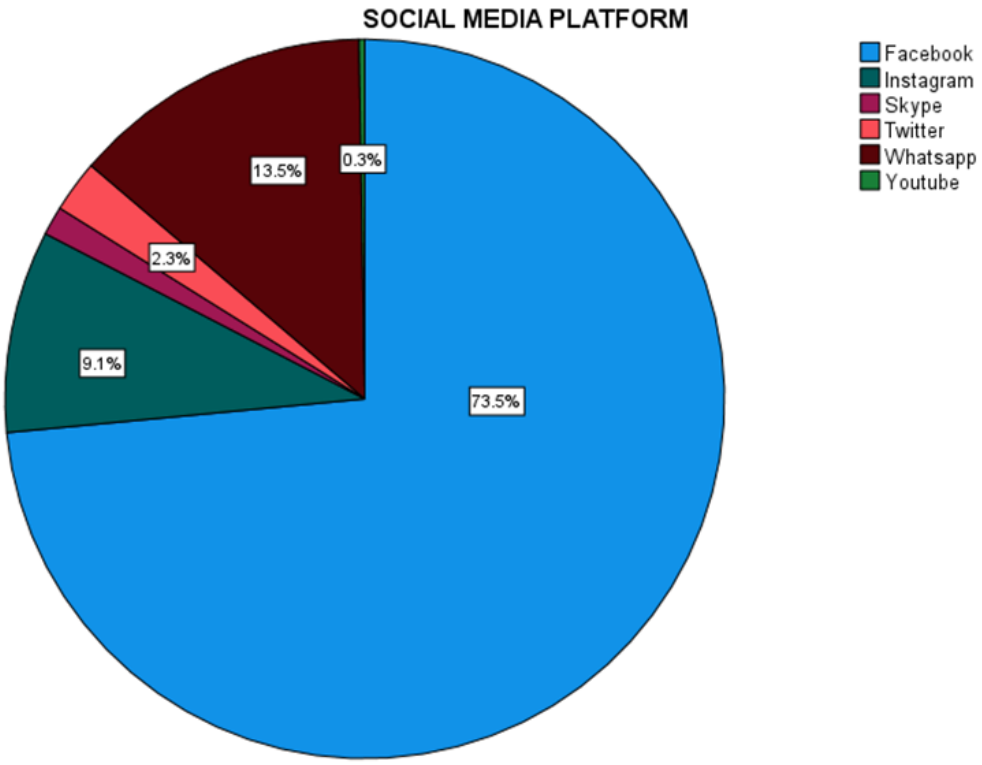

ETHNICITY
Afrikaans
English
IsiNdebele
SePedi
SeSotho
XiTsonga
Tswana
29.9%
49.6%
9.6%
0.8%
5.7%
4.2%
0.3%


CITY
Johannesburg
Pretoria
Other - Gauteng
Durban
Pietermaritzburg
Other - KwaZulu-Natal
Cape Town
Other - Western Cape
Port Elizabeth
Other - Eastern Cape
Other - Free State
Polokwane
Other - Limpopo
Other - Mpumalanga
Klerksdorp
Other Northern Cape
42.1%
15.6%
2.1%
12.2%
0.8%
22.3%
0.5%
0.3%


OCCUPATION
Student
Employed - Part Time
Employed - Full Time
Unemployed
3.4%
8.1%
77.7%
10.9%


INCOME
Less than R10 000
R10 001 to R20 000
R20 001 to R30 000
R30 001 to R40 000
+R40 000
12.2%
23.9%
13.0%
22.9%
28.1%


FREQUENCY OF INCOME
Monthly
Fortnightly
Weekly
Other
6.8%
1.3%
91.4%


SOCIAL MEDIA PLATFORM
Facebook
Instagram
Skype
Twitter
Whatsapp
Youtube
73.5%
9.1%
2.3%
13.5%
0.3%