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Differences in consumers' decision-making styles across product categories with varying complexity

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Verhandeling

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Differences in consumer decision-making styles across product categories with varying complexity

by

Shayan Lee Olyott

Dissertation submitted in partial fulfilment of the requirements for a Master's degree in Consumer Science: Interior Merchandise Retail Management

in the

Faculty of Natural and Agricultural Sciences
Department of Consumer and Food Sciences
UNIVERSITY OF PRETORIA

Supervisor: Dr S Donoghue
Co-Supervisor: Prof AC Erasmus

July 2018

"Decision-making can sometimes seem like inner civil war."

Jim Rohn

Dedicated to

My Parents,

Peter & Yvonne

Thank you for your unwavering support

Declaration

I, Shayan Lee Olyott, hereby declare that the dissertation for the Masters in Consumer Science: Interior Merchandise Retail Management at the University of Pretoria, hereby submitted by me, is my own work and has not previously been submitted for a degree at this or any other university or tertiary institution, and that all reference material contained herein has been acknowledged.

Shayan Lee Olyott

July 2018

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Abstract

Differences in consumers' decision-making styles across product categories with varying complexity: A South African perspective

By

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Researchers in consumer behaviour agree that consumers' purchasing behaviour is influenced by a variety of factors, including – but not limited to – personal or individual characteristics such as personality, attitudes, knowledge and motivation, and external factors such as social, situational or contextual factors, as well as marketing-related and market-related factors. These factors influence consumers' decisions in terms of what, where and why they purchase certain products, and also how consumers behave and react in the marketplace, more specifically pertaining to their application of specific consumer decision-making styles when purchasing products. Most researchers in consumer behaviour concur that consumers' purchasing decisions can be arranged along a continuum of complexity, ranging from extended and in-depth decision-making through to low involvement/routine decision-making.

The aim of this study was to determine and describe demographic differences in consumers' predominant decision-making styles in the South African context, and subsequently to ascertain how the predominant decision-making styles of specific demographic subsets of the population are similar (or differ) across selected product categories varying in complexity, namely major household appliances, clothing (workwear or best daywear), and groceries. A survey research design was implemented, using a structured, self-administered questionnaire to measure consumers' decision-making styles with an adapted version of Sproles and Kendall's (1986) consumer style inventory (CSI) across the three product categories.

Through the EFA procedure, the data pertaining to consumers' decision-making styles (CDMS) was reduced to between 18 and 28 items per product category, which were distributed amongst

five factors for each product category. Of the five factors, three factors showed similar results across the product categories in terms of item content, namely the perfectionist, the confused by over-choice, and the heuristic decision-making styles. The perfectionism CDMS was identified as the most pertinent (fairly strong); the heuristics CDMS was the second most pertinent, and the confused by over-choice CDMS was the least pertinent across the three product categories.

More specifically, the results showed that consumers were fairly perfectionistic in their CDMS when purchasing major household appliances and clothing. These consumers were also concerned about value for money when it came to groceries and major household appliances. Overall, the confused by over-choice CDMS was the least prevalent across the product categories. It appears that the confused by over-choice CDMS is dependent on the product category, as consumers were more prone to apply a consumer decision-style that epitomises confusion when purchasing major appliances, than when purchasing clothing and groceries.

The MANOVA indicated that across all three of the product categories, consumers with a low level of educational attainment and Millennials were respectively more likely to apply the confused by over-choice or the heuristic CDMS, which both suggest a lack of rationality. This is of concern in terms of informed consumer decisions. In addition, specific consumer decision-making styles were more prominent for certain product categories and among consumers with specific demographic characteristics.

The study makes a valuable contribution towards the literature, and also for consideration by marketers, brand managers and retailers of appliances, clothing and groceries.

Key words: consumer decision-making styles, product complexity, major household appliances, clothing decisions, grocery purchases, demographic differences

Opsomming

Verskille in verbruikers se besluitnemingstyle oor produkkategorieë wat onderling verskil in kompleksiteit: ’n Suid-Afrikaanse perspektief

deur

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Navorsers in verbruikersgedrag stem saam dat verbruikers se aankoopgedrag beïnvloed word deur ’n verskeidenheid faktore, insluitende – maar nie beperk tot – persoonlike of individuele kenmerke soos persoonlikheid, houding, kennis, motivering, en eksterne faktore soos sosiale, situasionele of kontekstuele faktore, bemarkingsverwante, asook markverwante faktore. Hierdie faktore beïnvloed verbruikersbesluite oor wat, waar en waarom hulle sekere produkte koop, asook hoe verbruikers op die mark reageer, veral wat betref hul toepassing van spesifieke verbruikersbesluitnemingstyle tydens produkaankope. Die meeste navorsers in verbruikersgedrag stem saam dat verbruikers se aankoopbesluite in terme van ’n kontinuum van kompleksiteit gerangskik kan word, wat wissel van uitgebreide en in-diepte besluitneming tot lae betrokkenheid-/roetine-besluitneming.

Die doel van hierdie studie was om demografiese verskille in verbruikers se prominente besluitnemingstyle in die Suid-Afrikaanse konteks te bepaal en te beskryf, en om die dominante/ prominente besluitnemingstyle van spesifieke demografiese groepe van die populasie te beskryf vir geselekteerde produkkategorieë wat in terme van kompleksiteit verskil, naamlik groot huishoudelike toerusting, klere (werks- of beste dagdrag), en kruideniersware. ’n Opname-navorsingsontwerp deur middel van ’n gestruktureerde, self-geadministreerde vraelys is gebruik om verbruikersbesluitnemingstyle volgens ’n aangepaste weergawe van Sproles en Kendall (1986) se verbruikerstylinventaris (CSI) oor die drie produkkategorieë te meet.

Deur die verkennende faktor-analiseprosedure (EFA) is die data oor die verbruikerbesluitnemingstyle gereduseer tot tussen 18 en 28 items per produkkategorie, wat versprei is oor vyf faktore per produkkategorie. Drie van die vyf faktore (verbruikersbesluitnemingstyle) se iteminhoud het grootliks ooreengestem oor die produkkategorieë, naamlik die perfeksionistiese, die verwarring weens verskeidenheid, en die heuristiese besluitnemingstyl. Perfeksionisme was die mees prominente besluitnemingstyl, wat redelik sterk was, gevolg deur die heuristiese besluitnemingstyl, terwyl die verwarring weens verskeidenheid besluitnemingstyl die mins prominente besluitnemingstyl was by al drie produkkategorieë.

Meer spesifiek toon die resultate dat verbruikers ’n perfeksionistiese besluitnemingstyl volg in hul aankoop van veral groot huishoudelike toerusting en klere. Hierdie verbruikers blyk ook besorg te wees oor waarde vir geld tydens die aankope van kruideniersware en groot huishoudelike toerusting. In die geheel gesien, was die verbruikersbesluitnemingstyl (VBS) wat deur verwarring weens verskeidenheid gekenmerk word, die mins prominente VBS oor al drie die produkkategorieë, maar dit het ook geblyk dat die toepassing daarvan van die produkkategorie afhang. Verbruikers blyk meer verward te wees tydens die aankoop van groot elektriese toerusting vergeleke met die aankoop van klere en kruideniersware.

Deur die MANOVA is vasgestel dat verbruikers met ’n lae opleidingspeil en Millenniërs oor al drie die produkkategorieë onderskeidelik meer geneig was om VBS toe te pas wat deur verwarring weens verskeidenheid en die gebruik van heuristiese kenmerke gekenmerk is, wat op ’n gebrek aan rasionaliteit dui, en wat implikasies het vir die neem van ingeligte verbruikersbesluite. Daarbenewens was sekere verbruikersbesluitstyle meer prominent by sekere produkkategorieë en by verbruikers met bepaalde demografiese kenmerke.

Die studie maak ’n waardevolle bydrae tot die bestaande literatuur en dien ook vir kennisname deur bemarkers, handelsmerkbestuurders en kleinhandelaars wat elektriese toerusting, klere en kruideniersware verkoop.

Sleutelwoorde: verbruikersbesluitnemingstyle, produkkompleksiteit, groot huishoudelike toerusting, kledingbesluite, kruideniersaankope, demografiese verskille

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List of Abbreviations

CDMS:	Consumer decision-making styles
CL:	Clothing: workwear or best daywear
CSI:	Consumer Style Inventory
EFA:	Exploratory factor analysis
GROC:	Groceries
MANOVA:	Multivariate Analysis of Variance
MHA:	Major household appliances
O-CSI:	Online Consumer Style Inventory

CHAPTER 1 – THE STUDY IN PERSPECTIVE

This chapter provides the backdrop to the study and introduces the research problem as well as the justification for the research. The aim and objectives, research design and methodology of the study, and the theoretical perspective guiding the research, are also briefly discussed, and the structure of the dissertation is explained.

1.1 INTRODUCTION AND BACKGROUND

Researchers in consumer behaviour concur that consumers' purchasing behaviour is subjected to a multitude of factors including, but not limited to, personal or individual characteristics that inter alia comprise personality, attitudes, knowledge and motivation, and external factors such as social influences, marketing-related factors and market-related factors, and situational or contextual factors (Babin & Harris, 2017:255; Erasmus, Donoghue & Dobbelstein, 2014). Apart from influencing consumers' decisions in terms of *what, where* and *why* they purchase certain commodities, these factors influence *how* consumers behave and react in the marketplace, and in the context of this study, specifically their application of specific consumer decision-making styles (Erasmus *et al*., 2014; Sangodoyin & Makgosa, 2014; Erasmus, Makgopa & Kachale, 2005).

The investigation into consumer decision-making has gained in significance over the years as marketers seek to create specific niches in an overcrowded market with ever-increasing competition (Erasmus *et al*., 2014; Erasmus, Donoghue & Sonnenberg, 2011; Saleh, 1998). Consumers' approach to decision-making depends on the amount of involvement with a product category or purchase and the amount of purchase risk involved in decision-making (Parumasur & Roberts-Lombard, 2014:269-270). In most literature on consumer decision-making, researchers agree that consumers' purchasing decisions can be arranged on a continuum of complexity ranging from extended decision-making, referring to decisions that require more attention and effort, to low involvement/routine decision-making, referring to decisions that are generally completed in limited time with limited cognitive and emotional strain (Babin & Harris, 2017:256; Solomon, 2017:335-336; Erasmus *et al*., 2014; Parumasur & Roberts-Lombard, 2014:270-271). Adding to the intricacy of decision-making, are the influences of rapidly evolving technology in terms of new product development that consumers need to keep up with, influencing consumer evaluation of product features specifically pertaining to technologically advanced products, the rapid obsolescence of these products, and consumers' ability to adapt in diverse shopping contexts posed by multichannel retailing (Pantano, Iazzolino & Migliano, 2013; OECD, 2010; Rai & Terpenny, 2008). Irrespective of the degree of complexity associated with consumer

decision-making, it is a cognitive process involving mental activities that determine the physical activities, ranging from problem recognition to post-purchase behaviour, needed to solve a problem or to fulfil a need (Parumasur & Roberts-Lombard, 2014:263). Across purchasing decisions that differ in level of complexity, specific consumer decision-making styles may become more or less dominant depending on the level of complexity (Erasmus *et al*., 2014).

Consumer decision-making styles relate to consumers' mental characteristics, representing some generalised way in which consumers handle purchasing decisions. Sproles and Kendall (1986) distinguished eight consumer decision-making styles, namely *perfectionism* or *high quality consciousness*; *brand consciousness/"price equals quality"*; *price and 'value for money' shopping consciousness*; *novelty/fashion consciousness*; *recreational and hedonistic shopping consciousness*; *confused by over-choice*; *impulsive/careless*; and *habitual/brand-loyal orientation*. Various studies have been conducted over time on consumer decision-making styles, either focusing on consumers' decision-making styles in general contexts, implying that consumer decision-making styles are not product or category-specific (Potgieter, Wiese & Strasheim, 2013; Sproles & Kendall, 1986), or limiting the investigation to a single, specific product category such as clothing (Cowart & Goldsmith, 2007; Radder, Li & Pietersen, 2006; Wang, Siu & Hui, 2004) or household electronics (Beatty & Smith, 1987), or to a specific purchasing context such as online shopping (Sam & Chatwin, 2015), or mall shopping (Alavi, Rezaei, Valaei & Ismail, 2016). In many of these studies, researchers also distinguished demographic and personal differences. Most of the studies have been done in First World contexts (Bakewell & Mitchell, 2006; Mitchell & Walsh, 2004; Bates & Mitchell, 1998; Lysonski, Durvasula & Zotos, 1996) and limited evidence of investigations exist in emerging and Third World contexts such as South Africa (Rani, 2014; Potgieter *et al*., 2013; Radder *et al*., 2006).

Outcomes of the former studies do not necessarily yield similar results regarding the number of decision-making styles and how they are labelled, probably due to contextual differences or lack of attention to the product category. The possibility exists that a consumer might demonstrate different consumer decision-making styles for products that differ in complexity, inter alia due to differences in the associated risk that influences a consumer's involvement in the purchasing decision. To date, in a South African context, studies have focused on the application of consumer decision-making styles in general contexts, for example general household items (Potgieter *et al*., 2013) or for specific (single) product categories, including clothing (Cowart & Goldsmith, 2007; Radder *et al*., 2006). One can therefore not confidently assume that the consumer decision-making styles as currently operationalised in literature, are valid across all product categories and diverse contexts, which has implications for marketing strategies that are meant to suitably address consumers' needs in a rapidly evolving consumer environment (Erasmus *et al*., 2014; Sangodoyin & Makgosa, 2014; Saleh, 1998).

1.2 RESEARCH PROBLEM

The Sproles and Kendall (1986) Consumer Style Inventory (CSI) (1986) differentiates between eight consumer decision-making styles, namely *perfectionism or high quality consciousness*; *brand consciousness/"price equals quality"*; *price and 'value for money' shopping consciousness*; *novelty/fashion consciousness*; *recreational and hedonistic shopping consciousness*; *confused by over-choice*; *impulsive/careless;* and *habitual/brand-loyal orientation*. Consumers' decision-making styles have been extensively investigated since 1986 in developed contexts including American, European and Asian countries (Bates & Mitchell, 1998; Lysonski *et al*., 1996; Hafstrom, Chae & Chung, 1992), with limited application in developing contexts. Mixed results concluded in previous research may therefore be ascribed to the context, as well as lack of attention to the complexity of the product category. The possibility exists that a consumer might demonstrate different consumer decision-making styles for products that differ in complexity due to differences in perceived risk. To date, in a South African context, studies have focused on the application of consumer decision-making styles in general, or for specific (single) product categories, for example general household products and clothing (Potgieter *et al*., 2013; Radder *et al*., 2006).

Several researchers caution that the product category should be acknowledged in our understanding of consumers' decision behaviour (Erasmus *et al*., 2014; Dhar & Wertenbroch, 2000; Sheth, Newman & Gross, 1991) and that a consumer's decision-making style(s) may depend on the product type and its perceived complexity (Erasmus *et al*., 2014; Dellaert, Arentze & Timmermans, 2008; Saleh, 1998), although supporting evidence is still lacking. Furthermore, consumers' demographic characteristics may reflect a propensity towards a particular decision-making style irrespective of the product category/type, or towards the implementation of various consumer decision-making styles (Sangodoyin & Makgosa, 2014; Potgieter *et al*., 2013; Saleh, 1998). This study hence argues that consumers' decision-making styles might differ across different product categories in accordance with the complexity that is associated with particular decisions, namely that an individual's decision-making styles might differ for different products and that an investigation for products in general would not necessarily be valid across all product categories. Alternatively, consumer decision-making styles may be associated with individuals' demographic characteristics, irrespective of the product category. This is supported by Dhar and Wertenbroch (2000), who emphasised the relevance of practical and self-indulgent considerations during consumer decisions that are product category-specific. In terms of the way that previous investigations about consumers' decision-making styles have been done before, it is therefore not yet clear whether consumers' decision-making styles are product-specific, or whether they are related to consumers' demographic characteristics.

Empirical evidence of differences in the complexity associated with different purchasing decisions and associated risk reinforces the relevance of product-related consumer experiences in our understanding of consumers' behaviour in the marketplace (Erasmus *et al*., 2014). To date, researchers have not devoted attention to an explication of consumers' decision-making styles in terms of different product categories denoting varying degrees of purchasing complexity. It is therefore not clear whether a specific decision-making style is characteristic of a consumer irrespective of the product category/type, or whether a specific consumer's decision-making style would differ significantly for products that differ in complexity, having consequences for consumer facilitation in the marketplace.

1.3 JUSTIFICATION

The South African consumer market embraces elements of both a developed and a developing economy (Riley, 2017). In addition, the global characteristics of many urban environments resemble what is offered in the First World (Erasmus *et al*., 2014). The South African consumer market is therefore very diverse and complex, and it cannot be assumed that findings of prior research concluded elsewhere in the world, are necessarily applicable in the South African situation. This study could expand the literature in terms of the applicability of Sproles and Kendall's (1986) CSI across different product categories in accordance with the complexity that is associated with particular decisions, and in the South African context with a very diverse society. An understanding of South African consumer decision-making styles pertaining to specific products would be useful for marketers in developing targeted marketing strategies which could deal effectively with the rapidly evolving consumer environment (Erasmus *et al*., 2014; Sangodoyin & Makgosa, 2014; Saleh, 1998).

1.4 RESEARCH AIM AND OBJECTIVES

The study aimed to determine and describe the demographic differences in consumers' predominant decision-making styles in a South African context, and subsequently to ascertain how the predominant decision-making style of specific demographic subsets of the population concur (or differ) across selected product categories which differ in complexity. The following objectives were articulated to ensure that suitable conclusions could be reached:

Objective 1: To identify and describe the predominant consumer decision-making styles that are prevalent in the following product categories:

Sub-objective 1.1: Major household appliances, a category that is characterised as a fairly complex purchasing decision

Sub-objective 1.2: Clothing: workwear or best daywear, which is characterised as a purchasing decision of moderate complexity

Sub-objective 1.3: Groceries, which is characterised as a low complexity purchasing decision

Objective 2: To compare and discuss the most prevalent decision-making styles within the three product categories, for consumers with specific demographic characteristics, namely:

2.1 Gender: male; female

2.2 Age differences: 25<40 years; ≥40<50 years; ≥50 years

2.3 Income differences: <R5000; ≥R5000<R10 000; ≥R10 000<R15 000; ≥R15 000 <R25 000; ≥R25 000

2.4 Education level differences: <Grade 10; Grade 10≤Grade 12; Grade 12 + degree/diploma; Postgraduate

2.5 Population differences: Black; White; Other population groups

1.5 STUDY AREA

This study was conducted in the geographical area of the Tshwane Metropolitan area, South Africa, in selected suburbs, which allowed involvement of consumers from a broad socioeconomic spectrum who are exposed to multiple retail formats and who are therefore not notably restricted in terms of shopping opportunities. In addition, the close proximity of the study area to the researcher facilitated convenient access to the sample and reduced the cost to conduct the investigation.

1.6 RESEARCH DESIGN AND METHODOLOGY

A survey research design was followed using a cross-sectional time frame from March 2015 to May 2015. Two of the requirements in the questionnaire were aimed at soliciting the correct profile of population required for the study. The qualifying criteria pertained to place of residence and a minimum age of 25 years. The objective was to ensure that respondents fulfilled the demographic characteristics required for the study. Data was collected by means of a structured, self-administered questionnaire that was manually distributed by the final year Consumer Science

students of 2015, using a non-probability sample technique. A total of 1950 questionnaires were distributed to respondents across the geographical area; however, only 1714 questionnaires were usable, with 236 questionnaires being discarded due to incompletion, incorrect entries or responses to questions, or both.

The questionnaire comprised two sections. Section A measured respondents' consumer decision-making styles, with three questions pertaining to clothing: workwear or best daywear purchases (CL); major household appliance purchases (MHA); and grocery purchases (GROC). Each question contained Sproles and Kendall's (1986) entire shopping inventory scale, including 39 items each, presented in terms of 5-point Likert-type agreement scales. The wording for each section was slightly adapted to pertinently reflect on the particular product category. Section B captured respondents' demographic characteristics including gender, age, level of education, monthly household income level, residential area and population group.

A pre-test was done with the assistance of 39 field workers, to test for evidence of potential ambiguity and to improve the flow of questions (Wiid & Diggines, 2015:174; Creswell, 2014:161). Feedback from the pre-test was used to identify potential pitfalls or shortcomings in the envisaged approach, such as, amongst others, ambiguous or confusing questions or spelling and grammatical errors. Once these were corrected, grammatical changes were also made. Each questionnaire was then distributed through a drop-off-collect-later procedure to the potential respondents in the Tshwane region for completion.

Once the data had been collected, it was checked by a trained technical assistant of the Department of Consumer Science, whereafter the completed questionnaires were coded by the final year Consumer Science students of 2015 under the supervision of the research coordinators of the study. Data capturing was done by a research company.

1.7 DATA ANALYSIS

Data analysis involved descriptive and inferential statistics. Exploratory factor analysis, specifically Principal Axis Factoring, using Oblimin rotation with Kaiser Normalization, was used to determine the underlying factors associated with consumer decision-making styles. Calculations of means, standard deviations, Cronbach's Alpha, MANOVAs, t-tests and Post hoc Bonferroni tests were used.

1.8 THEORETICAL PERSPECTIVE

A consumer decision-making style is defined as a mental orientation that characterises a consumer's approach to consumer choices (Sproles & Kendall, 1986). Consumer decision-making styles are the result of consumers' internal cognitive processes (Potgieter *et al*., 2013; Sproles & Kendall, 1986). As various authors advocate the mental accounting approach to consumer purchasing processes, mental accounting was considered an appropriate theoretical perspective for this investigation (Gilboa, Postlewaite & Schmeidler, 2010; Thaler, Kahneman & Tversky, 2000; Thaler, 1985; Kahneman & Tversky, 1984). Compared to other theoretical perspectives, mental accounting is a relatively recent model that integrates cognitive psychology and microeconomics, acknowledging consumers' mental coding, specifically their consideration of gains and losses utilising prospect theory (Thaler, 1985).

In accordance with current literature in psychology, decision theory and economics, mental accounting proposes that consumers would take into consideration the *gains and losses* of a specific purchasing decision in an attempt to *maximise utility* (Gilboa *et al*., 2010). A mental accounting approach to a purchasing problem resolution focuses on consumers' cognitive interpretations of information relevant to the purchasing decision (Gilboa *et al*., 2010; Thaler *et al*., 2000). An implicit assumption of this theoretical perspective that is doubtful however, is that consumers are aware of all the components in their consideration set (Thaler, 1985), i.e. that they are aware of all the influencing variables. It is hence proposed that consumers *create a frame of reference for a specific transaction taking into consideration what they know and regard as important, anticipating certain outcomes,* for example preferring an *affordable* washing machine, or an *impressive design*. All product characteristics are therefore evaluated jointly as well as how they mutually affect the other in order to achieve the desired outcome. In terms of this study, a consumer's predominant decision-making style therefore indicates what the individual regards more desirable in terms of the type of outcome of the purchasing decision. For example, for a "perfectionist", high quality would supersede the importance of brands, which is crucial for a "brand-conscious" consumer, or price, which is in turn highly valued by "value for money"-conscious consumers.

Three types of psychological/mental accounts are distinguished, namely *minimal*, *topical* and *comprehensive (*Thaler, 1985 in Ranyard & Craig, 1995; Kahneman & Tversky, 1984). *Minimal accounting* is a simplistic consideration of pros and cons, which may apply during grocery shopping. *Topical accounting* applies when the purchase context is highly relevant, for example when a washing machine needs to be replaced urgently or when a consumer comes across a product that is considered a *must have*, for example a bargain (Kahneman & Tversky, 1984). *Comprehensive accounting* applies when consumers' mental representations fail to understand

the complexity of a task and when consumers lack the cognitive resources that are required to process information that is related to the purchasing decision. So-called “confused by over-choice” would represent the typical decision-making style in this instance. Understandably, these consumers will experience difficulty to cope. From the examples, it is highly likely that consumers’ decision-making styles might differ depending on the product category, although empirical evidence to this extent does not exist.

1.9 ETHICS

This study strove to ensure the ethical completion of all facets of the study. Ethics can be defined as a set of decent principles of professional behaviour about the most appropriate conduct towards respondents (Leedy & Ormrod, 2015:120; Wiid & Diggines, 2015:25-26, 28; Kumar, 2014:282). The research proposal was approved by the Ethics committee of the Faculty of Natural and Agricultural Sciences, University of Pretoria (Approval number: 2015-01244).

The respondents were informed by the field workers about the key information that was to be elicited, and the objectives of the study were set out in the consent form of the questionnaire. All the respondents took part voluntarily and they were assured that they could withdraw at any moment without negative or unpleasant consequences (Leedy & Ormrod, 2015:121-122; Wiid & Diggines, 2015:28-30).

The field workers were trained to be knowledgeable in collecting, coding and administrating the questionnaires, and were positioned to provide any advice and assistance in the accurate completion of the questionnaire if needed (Wiid & Diggines, 2015:212-214). The handling of the questionnaire was done confidentially and the privacy of the respondents was ensured at all times (Leedy & Ormrod, 2015:123). A prize of R500 in gift vouchers via a lucky draw was offered to the respondents with the objective of incentivising the completion of the questionnaire. To enter, respondents were asked to write their cell-phone number on a separate sheet, guaranteeing that their responses would be kept totally confidential.

To minimise the impact of personal bias and subjectivity when assessing the outcome of the data collected and collated, specific attention was paid by the supervisors to elimination of error in the analysis of the data. The findings of the study will be reported by proper citation and referencing (Wiid & Diggines, 2015:188, 355-356).

1.10 PRESENTATION AND STRUCTURE OF THE RESEARCH

The dissertation is structured in six chapters as outlined in the paragraphs below.

Chapter 1 has provided the backdrop to the study and introduced the research problem as well as the justification for the research. The aim and objectives, research design and methodology of the study, and the theoretical perspective guiding the research, were also briefly discussed, and the structure of the dissertation was explained.

Chapter 2 provides the theoretical background to the study. The literature review explains the relevance of the product category in terms of consumers' perception of the complexity of decision-making, the consumer decision-making process, and the role of consumer decision-making styles in consumer decision-making.

Chapter 3 describes and substantiates the theoretical perspective, namely mental accounting that was used to support the objectives and analysis of the study. The chapter concludes with the conceptual framework as well as the research aim and objectives.

Chapter 4 introduces the research design and methodology for the study. Measures that were taken to enhance the quality of the study and to address ethical concerns are discussed.

Chapter 5 presents the demographic characteristics of the sample, followed by data analysis and interpretation of the results in accordance with the specific objectives of the study.

Chapter 6 presents the conclusions of the study, the theoretical contributions, practical implications, limitations as well as recommendations for future research.

CHAPTER 2 – LITERATURE REVIEW

This chapter provides the theoretical background to the study. The literature review explains the relevance of the product category in terms of consumers' perception of the complexity of decision-making, the consumer decision-making process, and the role of consumer decision-making styles in consumer decision-making with reference to demographic differences.

2.1 THE COMPLEXITY OF CONSUMER DECISION-MAKING

Consumer behaviour literature generally differentiates between three types of consumer decision-making, namely habitual (routine), limited or complex (extended) decision-making, based on the complexity of the purchasing decision and the consumers' involvement in the decision-making (Erasmus, 2013:17; Mandl, Felfernig, Teppan & Schubert, 2011). The complexity of a consumer decision is inter alia influenced by the type of product, the variety of products available to the consumer, the consumer's coping strategies, i.e. skills and ability to handle the purchasing decision, and the context in which the purchasing decision is made (Erasmus, 2013:17). The extent of consumers' involvement in purchasing decisions depends on the importance of the purchase to the consumer, the perception of risk involved in the buying decision as a result of uncertainty about the decision and/or the potential consequences of a poor decision, including financial risk, social risk, safety risk or psychological risk, and the psychological and social significance of the purchase. Consumers are usually highly involved in decision-making when the product is important to them, when the product is closely linked to the individual's self-image, when the product symbolises something about the individual, or when the product involves some element of risk, while consumers are less involved when the opposite is true. Decision-making therefore becomes increasingly complex as consumers' level of purchase involvement increases (Parumasur & Roberts-Lombard, 2014:270; Erasmus, 2013:17).

Many purchases a consumer makes fall into the category of habitual (routine) purchasing decisions, including low-risk, low priced and frequently purchased products and services. Consumers who repeatedly buy the same products and services eventually become familiar with the attributes or the alternatives available and are likely to be predisposed to one particular brand (Doole, Lancaster & Lowe, 2005:37). Habitual decision-making is based on experience and therefore simplifies the decision-making process by reducing the information search and the evaluation of product alternatives (Joubert, 2014:130). Habitual decision-making eventually results in brand loyalty or repeat buying behaviour (Joubert, 2014:131; Parumasur & Roberts-Lombard, 2014:271). Although brand loyalty initially requires an emotional attachment or a strong psychological commitment to the products, consumers eventually use brands as heuristic as they

become less involved in the decision-making when buying the same brand repeatedly. Repeat buying, on the other hand, simply means buying the product over and over without psychological commitment (Joubert, 2014:130). Habitual decision-making therefore generally involves little to no conscious effort and low product involvement.

Limited decision-making requires little information search and consumers make decisions based on prior beliefs about products and product attributes (Babin & Harris, 2017:256; Kardes, Cronley & Cline, 2014:63-64). This type of problem decision-making typically occurs when a consumer purchases a new, updated version of a product that he/she has purchased before or when limited risk is involved such as purchasing school wear or socks (Solomon, 2017:352; Parumasur & Roberts-Lombard, 2014:272).

Complex decision-making occurs when consumers need to purchase expensive, important or technically complicated products or services for the first time, implying that consumers do not have established criteria for evaluating a product category or a specific brand in that category, and in other high involvement buying situations where the consumer needs to progress cautiously through all the stages of the decision-making process (Parumasur & Roberts-Lombard, 2014:272). Examples of complex purchasing decisions include buying a house, a car, complex technology etc. (Parumasur & Roberts-Lombard, 2014:272). This type of decision-making requires extensive information search and a careful deliberation of the alternatives available, especially when the decision relates to the consumers' self-concept (Solomon, 2017:339). In such purchases consumers will probably involve others to conclude the decision (Erasmus, 2013:17; Doole *et al*., 2005:34). Consequently, consumers that are highly involved in decision-making, need to make a concerted effort to ensure that the purchasing decision is the correct one, implying that decision-making will progress more formally (Doole *et al*., 2005:36).

Taking the above-mentioned information into account, one can understand why researchers concur that consumers' purchasing decisions can be described in terms of a complexity continuum that ranges from simple to complex buying decisions (Babin & Harris, 2017:218; Solomon, 2017:336; Parumasur & Roberts-Lombard, 2014:270-271). However, in most literature on the complexity of consumer decision-making, the authors arbitrarily provide examples of typical products and services that presumably differ in complexity to distinguish different types of consumer decisions, with very limited empirical evidence to support the examples provided (Erasmus *et al.*, 2014). Erasmus *et al*. (2014) filled this gap in the literature by providing empirical evidence of consumers' perception of the complexity of a variety of product/service decisions that households face from time to time, by mapping broad categories of products and services that seem similar in complexity on a complexity continuum. To facilitate the categorisation of purchasing decisions in terms of perceptions of complexity, Erasmus *et al*. (2014) requested the

respondents to rate the complexity of 18 product/service purchasing decisions relative to the decision to purchase an anchoring product, namely a washing machine, which in itself is considered fairly complex (Erasmus *et al.*, 2011; Donoghue, De Klerk & Ehlers, 2008). Erasmus *et al*.'s (2014) study found that the most complex decision related to the most expensive purchases that households ever make, namely purchasing a home and a car, while grocery purchases were perceived as the least complex. In addition, clothing purchases, specifically career wear and clothing for a special outfit, were regarded significantly less complex than purchasing a washing machine. Although Erasmus *et al*. (2014) were able to link levels of purchasing complexity with 18 carefully selected products and services, the authors do suggest that future studies into the perceived complexity of household purchases should include other product categories, such as fine dining restaurants, or should refine the product categories to refer to specific products rather than product categories, for example distinguishing groceries in terms of perishables, non-perishables and toiletries, or to distinguish clothing purchases more specifically in terms of formal, informal, or underwear, as an indication of visual significance.

2.1.1 The relevance of the product category in terms of consumer decision-making

Researchers concur that the same product would not entail the same level of complexity or pose the same level or type of risk for every consumer (Lamb, Hair, McDaniel, Boshoff, Terblanche, Elliot & Klopper, 2015:87; Erasmus *et al*., 2014; Ferrell & Hartline, 2007:156-159). Based on Erasmus *et al.*'s (2014) findings pertaining to the complexity continuum, three product categories namely appliances, clothing and groceries are discussed in the next section to explain possible differences in consumers' complexity perceptions.

2.1.1.1 Major household appliances

Major household appliances including kitchen and laundry appliances are considered fairly challenging purchases due to the multiple forms of risk associated with such purchases decisions (Erasmus *et al*., 2014; Erasmus *et al*., 2011; Donoghue *et al*., 2008; Nieftagodien & Van der Berg, 2007). Consumers purchase these products not only for functional purposes but also for symbolic purposes (Erasmus *et al*., 2014; Donoghue *et al*., 2008). Many households rely on major household appliances for the smooth running of their homes as these appliances are used as both energy- and time-saving devices to reduce physical workloads (Donoghue *et al*., 2008). Additionally, appliances are visually conspicuous products that in many cases have become social status symbols reflecting improved socioeconomic status or a recently attained lifestyle (Erasmus *et al*., 2011; Donoghue *et al.*, 2008; Donoghue & Erasmus, 1999). Major household appliances are generally expensive and are expected to be durable. These purchases are made less frequently and involve an evaluation of technical features with considerable social and

financial implications in terms of maintenance, running costs and replacement (Erasmus *et al*., 2014; Donoghue, 2007; Donoghue & Erasmus, 1999).

Appliance purchasing decisions are unavoidably influenced by the individual's experience in a specific product category and the time lapse since the previous purchase that will determine the effort made to evaluate product alternatives (Erasmus *et al*., 2014; Sharma, 2014; Policy Studies Institute, 2006). Consumers' risk perception associated with major household appliance purchases may vary, depending on their level of experience with the product category. In general, consumers with limited product-related consumer socialisation lack the necessary product knowledge to formulate criteria to effectively and rationally evaluate product alternatives – a vital step in the consumer decision-making process. These consumers generally rely on either the price, brand name, aesthetics, salespeople, store image, advertisements, guarantees of quality on packaging or reference group members including family and friends with prior purchase experience, as a means to lower their perceived risk and to direct their purchasing decision (Erasmus *et al*., 2014; Erasmus *et al*., 2005). In most cases, such consumers' purchases are based on the assumption that "price equals quality", explaining why they would probably buy more expensive products (Terblanche & Boshoff, 2001 in Erasmus *et al*., 2005).

First-time buyers of appliances would probably perceive the purchasing decision as complex as they do not necessarily have the experience and information to formulate purchase criteria pertaining to the performance of the appliance, including functionality and durability, to evaluate product alternatives in concluding the decision (Erasmus *et al*., 2014; Parumasur & Roberts-Lombard, 2014:274). These consumers need to evaluate various sources of information to reduce risk perception and to ensure that they make the correct purchase. In an ideal world, consumers that need to replace a faulty appliance might perceive the purchasing decision as less complex if they can rely on previous experience to identify relevant product attributes (Babin & Harris, 2017:25). However, one should also consider the effect of contextual factors on complexity perceptions. For example, a retired couple who needs to downscale on appliances might find it difficult to buy appliances with a smaller capacity (Parumasur & Roberts-Lombard, 2014:264-265; Mandl *et al*., 2011).

2.1.1.2 Clothing: workwear or best daywear

In terms of the Erasmus *et a*l. (2014) continuum of complexity, clothing purchases, specifically career wear or an outfit for a special occasion are perceived to be less complex than purchasing a washing machine, but more complex than purcasing groceries. According to Engel, Blackwell and Miniard (1995) (in Chae, Black and Heitmeyer, 2006), consumers' involvement in clothing is inter alia driven by their particular interest in clothing. Apparel is a high involvement shopping item

that is often bought for its symbolic meaning, image reinforcement or psychological satisfaction, as it reflects the consumer's social life, aspirations, fantasies, affiliation and even the wearer's identity (Oh & Fiorito, 2002). Clothing plays an important role in the projection of a particular image that a consumer wishes to portray, and the more important this image is to the consumer, the greater the involvement with the product (Richins, 1994).

Demographic characteristics, including gender, have been shown to affect fashion consciousness (Kwon, 1997). Females are more involved in shopping and it is evident that their shopping behaviour changes as they become more involved in employment, with less time devoted to household activities (Kruger & Byker, 2009; Silverstein & Sayre, 2009). Research reveals that women have higher expectations and express a stronger perfectionistic orientation toward the purchasing of clothing, and that they tend to pay more attention to their appearance than men do (Hugo & Van Aardt, 2012; Mitchell & Walsh, 2004). Men who are concerned with their appearance tend to be fashion-conscious, are fashion innovators and fashion-opinion leaders, and approach their fashion requirements similarly to women (Workman & Studak, 2006). An example of this would be where their existing wardrobe of clothing does not meet the requirements of a formal workplace dresscode and would therefore require the purchasing of new clothing to meet this need (Nezakati, Khim & Asgari, 2011).

Perceptions of complexity are related to the type of product within a product category, for example Erasmus *et al*. (2014) found that consumers perceived purchases of everyday clothing less complex than purchases of clothing for a special occasion. From an economic perspective, a possible explanation for the difference in complexity perceptions pertaining to these products could relate to the need for, and the price of formal wear, compared to everyday clothing that is mass-produced and more affordable. On a symbolic level, everyday clothing may represent the reality of the consumer's economic position, while clothing for a special occasion may represent desired status or the attainment of a specific lifestyle. It follows, therefore, that the purchasing of special occasion clothing items, which the purchaser hopes will make a personal statement, would demand more consideration, investigation and cognitive effort than would, for example, everyday casual wear where the purchasing considerations may be based on practicality, durability and cost and where the act of purchasing casual wear occurs relatively more frequently (Millan & Mittal, 2017; Johnson, Lennon & Rudd, 2014; Bettman, Luce & Payne, 1998).

2.1.1.3 Groceries

Food and other household groceries form a regular part of the consumption of the average household. Food purchases are generally regarded as routine purchasing decisions which require low involvement and limited external search for information (Adamowics & Swait, 2013). Grocery purchases are therefore perceived as less complex purchases (Erasmus *et al*., 2014). However, depending on consumers' level of involvement with the product, consumers might perceive grocery purchases as more/less complex. For example, consumers who regularly purchase generic brand name grocery products might be less motivated to read product labels and might purchase these products out of habit, while health-conscious consumers who are more aware of the nutritional composition of specific grocery products would be more likely to read labels and search carefully for product alternatives. Although purchasing of food on the surface appears to be less complex than purchasing of clothing and other household goods, consumers' involvement with groceries and other factors such as product assortment, has led to increasing perceptions of the complexity of grocery purchases (Nguyen & Gizaw, 2014; Wilson Perumal & Company, 2014; Prinsloo, Van der Merwe, Bosman & Erasmus, 2012; Peters-Texeira & Badrie, 2005).

A number of socioeconomic and demographic factors, including age, education level and income, affect the consumer's overall involvement with food. For example, older respondents are more likely to be involved with more careful selection of their food and the ingredients therein due to the need to manage their health through better eating habits in order to offset or reduce the effects of aging on their general state of health (Worsley, Wang & Burton, 2015; Drichoutis, Lazaridis, & Nayga, 2006). It was also found that highly educated consumers and higher income consumers are less involved with food than consumers with a lower education level and a lower income level (Drichoutis *et al*., 2006). However, findings pertaining to the relationship between demographic variables including age, education level and income, and involvement in food purchases are inconclusive (Hanspal & Devasagayam, 2017; Mittal & Prashar, 2010; Harris & Shiptsova, 2007). Reasons for this could be ascribed to the rapidly evolving impact of the media, including social media on the self-image and health consciousness of consumers, which would imply that more recent studies may arrive at a different conclusion to earlier studies.

2.2 THE CONSUMER DECISION-MAKING PROCESS

Every purchasing decision potentially encompasses five main stages, though all stages are not necessarily equally extensive for all product decisions, including problem or need recognition, the information search, evaluation of alternatives, the purchasing decision and post-purchase evaluation (Parumasur & Roberts-Lombard, 2014:264).

During the **problem or need recognition stage**, the consumer becomes aware of a discrepancy between an actual state and an ideal or desired state, triggering the desire to solve the problem identified. The actual state is the consumer's perceived current state, while the desired state is the perceived state for which a consumer strives (Hoyer, MacInnis & Pieters, 2018:182; Babin & Harris, 2017:258; Solomon, 2017:339; Lamb *et al*., 2015:85). Needs pertaining to the actual state would, for example, include the need to replace a product that is not performing as expected or has reached the end of its lifespan. Needs pertaining to the desired state would include the desire to upgrade a product to a more modern product or a better known or aspirational brand (Hoyer *et al*., 2018:182; Solomon, 2017:340; Parumasur & Roberts-Lombard, 2014:266; Erasmus, 2013:19).

Having identified the problem, the consumer proceeds with the decision-making process by **searching for information** to satisfy certain needs (Erasmus, 2013:332-334; Kardes *et al*., 2014:240-244). During this stage, the consumer may conduct an internal search by either retrieving knowledge stored in their memory and by relying on prior experience, or they will undertake an external search by collecting information from external personal sources such as family, friends, salespeople, or external impersonal sources such as advertising, research reports and the internet, including social media platforms or user reviews (Solomon, 2017:340-342; Parumasur & Roberts-Lombard, 2014:268; Winer, 2009). The search for information is generally driven by the urgency of the situation or the ability of the consumer to make the purchase either immediately or at some stage in the future, the perceived complexity of the purchase, and the consumer's prior experience with regard to purchasing particular products (Parumasur & Roberts-Lombard, 2014:268; Gupta, 2013).

The **evaluation of alternatives** is the next stage in the decision-making process. According to Koch, Einsend and Petermann (2008) and Parumasur and Roberts-Lombard (2014:273), a consumer would typically consider the so-called evoked set of products or services, which is a list of between three to seven alternatives from which the final alternative will be chosen, allowing for minimal intimidation and confusion in the evaluation process (Erasmus, 2013:22). The evoked set provides the consumer with a framework within which the decision-making process can take place and therefore eventually consists of products that are potentially acceptable. When evaluating alternatives, consumers compare product features and assess them according to predetermined criteria, i.e. standards, characteristics or specifications used by consumers to compare products and brands (Joubert, 2014:131; Cant, Brink & Parumasur, 2006:201). For example, the criteria for buying a refrigerator may include capacity, durability, price, appearance, and energy consumption. The evaluation of alternatives can be difficult, time consuming and a challenging situation for consumers, depending on their personal experience in purchasing in a particular product category. The more expensive and sophisticated the item and the less prior experience

the consumer has with regards to a product, the more detailed and complex the search criteria (Erasmus *et al*., 2014; Erasmus, 2013:20-22).

The **purchasing decision** involves the selection of the most desirable alternative from a set of options that a consumer has generated (Parumasur & Roberts-Lombard, 2014:274; Erasmus *et al*., 2011). This most suitable choice depends on what the consumer determined to be the most important determinant for the selection of the particular product (Parumasur & Roberts-Lombard, 2014:274). Different selection criteria would be prioritised by different consumers, with some for instance selecting according to price, others on brand, and some selecting based on lower operating costs (Erasmus, 2013:22).

Post-purchase evaluation is the final stage of the decision-making process, and involves a consumer's evaluation of the performance of a product or service in relation to his/her initial expectations about product performance (Parumasur & Roberts-Lombard, 2014:274-275). Consumer satisfaction results when product performance exceeds expectations (Parumasur & Roberts-Lombard, 2014:275). Alternatively, dissatisfaction results when product performance does not meet expectations (Hoyer *et al*., 2018:264; Solomon, 2017:397; Parumasur & Roberts-Lombard, 2014:275-276). Satisfied consumers are more likely to repeat their purchase, to engage in positive word-of-mouth and to stay brand-loyal, while dissatisfied consumer are more likely to engage in negative behaviours such as negative word-of-mouth, and consumer complaint behaviour (Hoyer *et al*., 2018:266-268; Parumasur & Roberts-Lombard, 2014:276; Donoghue *et al*., 2008; Ndubisi & Ling, 2006)

Following the purchase of relatively expensive items, consumers – particularly first-time buyers – may experience feelings of uncertainty or discomfort, also known as *cognitive dissonance* (Babin & Harris, 2017:299; Parumasur & Roberts-Lombard, 2014:276). The levels of cognitive dissonance experienced will vary from consumer to consumer, depending on their perception of the complexity of the purchase and their subjective experience of uncertainty (Erasmus, 2013:23). Consumers typically employ dissonance reduction strategies such as seeking positive word-of-mouth about the alternative selected, seeking negative information about the alternative not selected, or rationalising the discomfort by minimising the perceived importance of the decision (Babin & Harris, 2017:299; Parumasur & Roberts-Lombard, 2014:276). Although the post-purchase evaluation represents the last stage of the consumer decision-making process, it is not the end of the process; the information gained during the post-purchase evaluation of products is stored in memory and forms part of the consumers' experience that influences future purchase-related decisions (Cant *et al*., 2006:202).

2.3 CONSUMER DECISION-MAKING STYLES

Researchers agree that the multitude of factors influencing consumer decision-making can be categorised into two main clusters of factors, namely internal or individual factors, and external factors. The internal factors relate to the things that go on in the mind and heart of the consumer or that are psychologically part of the consumer, such as learning, perception, attitudes, and to individual differences or the characteristic traits of individuals including lifestyle, personality and demographics. External factors relate to influences in the socio-cultural environment, marketing-related factors and market-related factors, as well as situational influences (Babin & Harris, 2017:27-28, Erasmus, 2013:19-20; Cant *et al*., 2006:194). Although various factors influence consumer decision-making, customers are thought to approach the market with certain basic cognitions influencing their decision (Cowart & Goldsmith, 2007; Wesley, LeHew & Woodside, 2006). For example, different consumers use different decision-making styles or cognitive approaches when they evaluate alternative products and services. The decision-making style chosen depends on the evaluative criteria used, such as price, quality or branding, and the relative importance of these criteria in the whole decision-making process (Potgieter *et al*., 2013).

2.3.1 Pertinent consumer decision-making styles

A consumer decision-making style is defined as a mental orientation characterising a consumer's approach to making consumer choices (Sproles & Kendall, 1986). One can characterise consumer decision-making styles in terms of the consumer characteristics approach, focusing on cognitive and affective orientations associated with consumer decision-making styles. Sproles and Kendall (1986) developed an instrument, similar to the personality traits concept, to measure consumer decision-making styles, referred to as the Consumer Style Inventory (CSI). The CSI identifies the following eight mental characteristics of consumer decision-making:

(1) *perfectionist or high quality consciousness*
(2) *brand consciousness*
(3) *price and "value for money" shopping consciousness*
(4) *novelty/fashion consciousness*
(5) *recreational, hedonistic shopping consciousness*
(6) *confusion by over-choice*
(7) *impulsiveness/carelessness*
(8) *habitual, brand-loyal orientation towards consumption*

Each decision-making style is characterised by certain cognitive and affective characteristics. Consumer decision-making styles and their characteristics manifest in specific types of consumers/shoppers (Potgieter *et al*., 2013; Radder *et al*., 2006; Sproles & Kendall, 1986).

Perfectionist or high quality-conscious consumers seek out the very best quality products, and have high standards and expectations about consumer goods. These consumers like to shop carefully, systematically and may not feel satisfied with just-good-enough brands (Potgieter *et al*., 2013; Sproles & Kendall, 1986).

Brand-conscious consumers choose expensive and well-known national brands. These consumers believe in "price equals quality" and have a positive attitude towards upmarket and speciality stores selling expensive and popular brands. They also tend to prefer heavily advertised brands (Potgieter *et al*., 2013; Sproles & Kendall, 1986).

Price- and "value for money"-conscious consumers are price-sensitive as they look for sale prices or the lowest-priced products, are concerned about getting the best value for their money, and are more inclined to compare products and prices (Sproles & Kendall, 1986).

Novelty/fashion-conscious consumers find excitement and pleasure from trying out new things and keeping up-to-date with the latest style/trends. These consumers therefore seek to buy novel and fashionable items, and seek variety by shopping at different stores and seeking new brands (Potgieter *et al*., 2013; Sproles & Kendall, 1986).

Recreational and hedonistic shopping-conscious consumers enjoy shopping, "shop just for the fun of it", and shop for leisure and entertainment (Sproles & Kendall, 1986)

Confused by over-choice consumers tend to find it difficult to choose from the many brands and shops available, often experience information overload and are easily confused by too many choices (Potgieter *et al*., 2013; Sproles & Kendall, 1986).

Impulsive, careless consumers tend to buy on impulse, do not plan their shopping carefully, and remain unconcerned about how much they spend (Potgieter *et al*., 2013; Sproles & Kendall, 1986).

Habitual brand-loyal consumers have favourite brands and stores, and their decisions to repurchase brands are based on a track record of past satisfaction with the specific brand or habit (Potgieter *et al*., 2013; Sproles & Kendall, 1986).

Predominance of a particular decision-making style thus indicates what the individual regards most desirable in terms of the outcome of the purchasing decision, and is particularly pertinent during product evaluation where the perceived level of importance of product attributes and desired outcomes are significant (Sproles & Sproles, 1990). Sproles and Kendall (1986) speculate that consumers may have one or two characteristics (decision-making styles) that dominate similar situations; however, this does not mean that these specific characteristics (e.g. price consciousness) will always be influential in all purchasing situations but it would play a role in many such situations. In addition, Sproles and Kendall (1986) propose that a consumer may have different consumer decision-making styles for each product category. Ultimately, an understanding of consumer decision-making styles is essential to fully comprehend consumers' decision-making pertaining to specific products (Erasmus *et al*., 2014).

2.3.2 Previous research on consumer decision-making styles

Sproles and Kendall (1986) conducted their first research on consumer decision-making styles by developing the CSI in the American context. The sample of their study was limited to high school students, limiting the generalisability of the findings to other consumers. Since then, various researchers have conducted studies in different cultural contexts to confirm the applicability of the scale and to investigate the relationship between consumers' predominant decision-making styles and their demographic characteristics (Sangodoyin & Makgosa, 2014; Potgieter *et al*., 2013; Bakewell & Mitchell, 2006; Mitchell & Walsh, 2004). For example, Lysonski *et al*. (1996) conducted a cross-cultural CSI investigation on university students in Greece, India (developing countries), New Zealand and the USA (developed countries), finding notable similarities in only three of the eight decision-making styles among the different groups, namely *brand-conscious, novelty/fashion-conscious* and *habitual decisions*. Their study emphasised the need to validate the instrument on samples other than students and concluded that the instrument would have little applicability in countries where consumers' choices are constrained by the level of economic development and government "intervention" such as in Vietnam, China and Africa (Lysonski *et al*., 1996).

Radder *et al*. (2006) tested the applicability of the CSI in the South African context with regard to students' clothing purchases and also identified the decision-making styles of Caucasian, Chinese, Motswana students enrolled at the Nelson Mandela Metropolitan University. Differences were found in the applicability of the scale, as only three common decision-making styles namely *perfectionist, recreational* and *habitual* could be confirmed across all three groups of students. Despite rather poor general applicability of the CSI in the South African context, the best results were obtained for the Caucasian students, with fairly good results for the Chinese students. However, the CSI did not seem to be applicable to the Motswana data set. Radder *et al*.'s (2006)

findings confirm the view of Lyonski *et al*. (1996) that the original CSI index is more applicable to Western developed cultures, due to notable differences in shopping styles amongst consumers with different cultural backgrounds.

In another study in the South African context, Potgieter *et al*. (2013) focused on the differences in adult consumers' decision-making styles based on demographic characteristics including ethnic background, education, age and gender when purchasing general household items. The results confirmed six of the originally proposed eight CSI factors, providing evidence of the CSI's usefulness in the South African context, while the CSI's *impulsiveness* and *carelessness* factor emerged as two separate factors, and a tenth factor, namely *value consciousness*, emerged in this study. Significant differences in consumer decision-making styles across the various demographic groups were also found (Potgieter *et al*., 2013). It should be noted that Potgieter *et al*.'s (2013) study was conducted for products in general, focusing on general household items, therefore not taking into account that consumer decision-making styles could be product-specific due to the level of perceived risk and complexity that individuals' associate with purchasing different categories of household products.

Alavi *et al*. (2016) studied mall shoppers' consumer decision-making styles, satisfaction and purchasing intention in Malaysia and Kuala Lumpur. Respondents scored highest on the characteristic of *impulsiveness/carelessness,* followed by *recreational shopping consciousnes*s, *confused by over-choice*, and *novelty and fashion consciousness*. Given the relatively recent economic transition of Malaysia to one of the economic powerhouses in the Asian region, which is second only to per capita income in Singapore, one can deduce that the relatively young population which has the means to purchase goods on a regular basis are not influenced by historical models but rather influenced by peer groups who have become materialistically inclined. The high scores for particular consumer decision-making styles are consistent with prior studies that identified the following styles as representative of relatively young, well-educated and middle-income consumers, namely: *high quality consciousness, brand consciousness, recreational shopping, confused by over-choice,* and *impulsiveness* (Sangodoyin & Makgosa, 2014; Mishra, 2010; Hafstrom *et al*., 1992).

In another study of consumer decision-making styles and mall shopping behaviour, Wesley *et al*. (2006) confirmed and extended Sproles and Kendall's (1986) speculation that a consumer does not follow one CDMS in all shopping decisions. Wesley *et al*. (2006) propose that many consumers adopt two to three approaches to making choices and rarely apply all styles proposed theoretically in shopping research.

Cowart and Goldsmith (2007) investigated US college students' shopper motivations for online apparel consumption, using the CSI. The result of the study showed that *quality consciousness, brand consciousness, fashion consciousness, hedonistic shopping, impulsiveness* and *brand loyalty* were positively correlated with online apparel shopping, while *price sensitivity* was negatively correlated with online spending. The findings also showed that shoppers with a hedonistic, recreational and impulsive orientation were more inclined to buy clothes online than shoppers with other consumer decision-making styles. Hedonistic, recreational shoppers also spent significantly more time online purchasing clothes than their peers, while impulsive shoppers spent more for apparel online in a typical month than other consumers. In addition, price-conscious consumers appeared to be less likely to purchase apparel online as an overall value/price orientation to shopping might cause price sensitive consumers to buy less in many product categories, including apparel (Cowart & Goldsmith, 2007).

Sam and Chatwin (2015) developed a 20-item, online consumers' decision-making style inventory (O-CSI) to understand online consumer behaviour better by analysing online consumers' decision-making styles. Their O-CSI is based on Sproles and Kendall's (1986) CSI but included only items directly related to the decision of selecting suitable products or service, i.e. items pertaining to *quality consciousness, brand consciousness, novelty/fashion consciousness, price consciousness,* and *brand loyalty*, and items that are directly related to the online shopping environment, including the security of personal information, customer reviews, self-service technologies facilitating product enquiry or tracking, website content and website interface, and product portability. The final O-CSI consists of seven consumer decision-making characteristics styles, four pertaining to the original CSI, including *high quality-conscious, brand-conscious, novelty/fashion-conscious* and *price-conscious*, and three new online consumer decision-making styles, including *portability consciousness, website content consciousness* and *website interface consciousness*. Based on their findings, Sam and Chatwin (2015) proposed that the O-CSI can be applied to diverse products.

The need to adapt the Sproles and Kendall's (1986) CSI is evident in a number of prior studies dealing with the applicability of the original eight consumer decision-making styles (Potgieter *et al*., 2013; Mokhlis & Salleh, 2009; Bakewell & Mitchell, 2006; Lysonski *et al*., 1996). Essentially, contextual influences such as cultural and societal values and views, the state of development of the retail environment (both physical and online environments) and the economic development of the country have an impact on the suitability and applicability of Sproles and Kendall's (1986) original eight consumer decision-making styles (Andersson, Hallberg & Ingfors, 2016).

2.3.3 Demographic differences pertaining to consumer decision-making styles

Researchers concur that demographic characteristics such as gender, age, income level, education level, and even culture influence consumer decision-making across all levels of purchasing complexity (Hoyer *et al*., 2018:321-322; Parumasur & Roberts-Lombard, 2014:55-56; Mitchell & Walsh, 2004; Kamaruddin & Mokhlis, 2003), and by implication consumers' decision-making styles (Sangodoyin & Makgosa, 2014; Potgieter *et al*., 2013; Bakewell & Mitchell, 2006; Mitchell & Walsh, 2004).

2.3.3.1 Gender

Stereotypically, females are viewed as being compassionate and socially inclined (Parumasur & Roberts-Lombard, 2014:137; Bakshi, 2012), while men are more task orientated and therefore process and apply information differently (Bakshi, 2012; Chen, Chen & Lin, 2012; Walsh, Hennig-Thurau, Wayne-Mitchell & Wiedmann, 2001). Research shows that males and females generally prefer different products and tend to differ in how they process product information and approach shopping. It is therefore not difficult to comprehend why manufacturers deliberately ascribe masculine or feminine characteristics to their products and the packaging of products (Hoyer *et al*., 2018:329-330; Solomon, 2017:340; Parumasur & Roberts-Lombard, 2014:72-73,126,137).

Research supports the contention that females tend to view the act of shopping more positively than men, for example, women generally tend to enjoy shopping as they view shopping as a social activity, visit shops as a leisure activity, visit more shops per shopping trip than men, and tend to shop to express their affection for significant others and other people (Hart, Farrell, Stachow, Reed & Cadogan, 2007). Men, on the other hand, generally perceive themselves as being competent shoppers, though not necessarily enjoying the shopping experience (Bakewell & Mitchell, 2006). Men who do enjoy shopping are generally brand-conscious and fashion-conscious, and are not only prepared to spend time shopping, but also buy impulsively and without monitoring how much they spend (Kotzé, North, Stols & Venter, 2012; Bakewell & Mitchell, 2006).

Prior studies investigating the differences in the decision-making styles of male and female consumers have delivered differing opinions regarding both the common styles as well as the gender-specific styles. Dennis, Brakus, Garcia, McIntyre, King and Alamanos (2016) developed a survey across consumers in seven countries and concluded that male and female consumers were genetically predisposed to differing approaches to consumer decision-making styles. The survey showed that differences in the consumer decision-making styles between the genders were more prevalent in low context cultures where gender equality is evident than high context

culture where greater degrees of gender inequality are evident. Other studies provided different contexts to the differences in approach by consumers. In Bakewell and Mitchell (2006), male consumers were found to be just as brand-conscious as female consumers. The study found that young male consumers were recreational in their approach to decision-making and displayed evidence of a perfectionist approach to their purchases. Mokhlis and Salleh (2009) found male and female consumers shared only three of the original eight Sproles and Kendall (1986) consumer decision-making styles, namely quality-conscious, brand-conscious and fashion-conscious. Walsh *et al*. (2001) identified the recreational, novelty and fashion-conscious, and quality-conscious shopping styles as more typical of females, while variety and time-saving shopping styles seemed to be more characteristic of male consumers. The above-mentioned studies as well as further studies have identified four decision-making styles pertinent to both male and female consumers, namely *perfectionism*, *brand consciousness, confused by over-choice* as well *impulsivness* (Sangodoyin & Makgosa, 2014; Hanzaee & Aghasibeig, 2008). These divergent findings pertaining to the impact of gender on consumer decision-making styles would suggest that other contextual influences might account for the disparate outcomes of the studies.

2.3.3.2 Age

Many of the studies conducted have focused on younger consumers or college students, thereby limiting the applicability of the findings to other age groups. Generational theorists agree that generational groupings' purchasing behaviour could be explained in terms of their similar life experiences and common needs (Hoyer *et al*., 2018:323; Parumasur & Roberts-Lombard, 2014:145). In the context of consumer decision-making styles, Bakewell and Mitchell (2006) suggest that younger females are more likely to be recreational shoppers and more prone to be confused by over-choice than older, more experienced female shoppers. They also found that younger consumers were more likely to employ different consumer decision-making styles than older consumers. Weiss (2003) found that younger consumers were more inclined to follow an impulsive decision-making style and did not appear to be as brand-loyal as older consumers. Older consumers, who wished to avoid being subjected to mass marketing, were found to be more disposed to a novelty and price/value decision-making style (Weiss, 2003). Potgieter *et al*. (2013) found that all age categories were quality-conscious, and particularly the age category 41 to 60 years were the most quality-conscious. Younger consumers were disposed towards a price-conscious decision-making style, while older consumers were likely to be brand-loyal. In their study, Duncan post hoc tests also revealed that younger consumers were more recreational, fashion-conscious and impulsive than older consumers. In a recent study by Mafini, Dhurup and Mandhlazi (2014), the most significant finding pertaining to the age of consumers was that

younger consumers appeared to be more confused by over-choice than older consumers, possibly as a result of information overload.

2.3.3.3 Education level

More recently, researchers have concluded that level of education is influential in terms of consumers' decision-making styles (Vinson, Scott & Lamont, 2014), although this relationship has also not yet been explored satisfactorily. Evidence exists that highly educated shoppers are more quality-conscious, price-conscious, impulsive, tend to be confused by over-choice, and brand-loyal, but less likely to be pressurised by time (Al-jawazneh & Ali Smadi, 2011), while some studies have reported more significant results when linking education levels with age (Wang *et al*., 2004). For example, younger adults with higher education levels have been associated with five of the eight decision styles, namely *quality consciousness, brand consciousness, recreational shopping, confused by over-choice,* as well as *impulsiveness* (Sangodoyin & Makgosa, 2014; Mishra, 2010; Hafstrom *et al*., 1992).

2.3.3.4 Income level

A comparison of the decision-making styles of different income groups is limited. Evidence that lower-income shoppers are price-conscious seems logical (Ailawadi, Neslin & Gedenk, 2001), while impulsive shopping seems more prevalent among higher income earners, who are obviously financially less constrained (Ghani, Imran & Ali Jan, 2011). Higher income earners are also more predisposed towards seeking leisure, spending time shopping and planning their shopping significantly (Sangodoyin & Makgosa, 2014).

2.3.3.5 Population group

Population group presents multiple challenges in modern plural societies as one's ethnicity is linked to socio-cultural matters that affect consumers' purchasing behaviours and attitudes as part of consumer socialisation within particular contexts (De Mooij & Hofstede, 2011). Lysonski *et al*.'s (1996) multicultural study including developed as well as developing countries across Greece, India, New Zealand and the USA, could for example only confirm similarities with respect to three of the eight original decision-making styles, pointing to notable differences in the shopping styles of consumers with different cultural backgrounds.

It is evident from research findings that the decision-making styles of African and Caucasian consumers differ (Potgieter *et al*., 2013; Radder *et al*., 2006). Although Radder *et al*. (2006) found that Caucasian, Chinese and Motswana students seemed to be perfectionistic when purchasing

clothing, Chinese students were also typically habitual shoppers, while Motswana students were image and quality-conscious and Caucasians were price-conscious. In another study, Potgieter *et al*. (2013) found that Caucasians were slightly less price-conscious than African consumers, and that African consumers were slightly more quality-conscious, engaged more in recreational shopping, were more novelty/fashion-conscious, were more brand-conscious, and more impulsive than Caucasian consumers.

2.4 SUMMARY

This chapter has provided an overview of existing theory pertaining to the complexity continuum of decision-making, the role product categories play in consumers' perceptions of complexity, the decision-making process, consumer decision-making styles and demographic differences pertaining to consumer decision-making styles, as the theoretical background to the study.

Consumers' perceptions of the complexity of purchasing decisions and their involvement in decision-making define their decisions. Complex decisions require thorough consideration of the available alternatives and cannot be made hastily without searching for additional information to support the final purchasing decision, implying high involvement decision-making, while low involvement decision-making implies that consumer may act without thinking and without being concerned about brand or product differences (Erasmus *et al*., 2014; Parumasur & Roberts-Lombard, 2014:270; Donoghue *et al*., 2008; Erasmus *et al*., 2005).

Consumers use various decision-making styles to facilitate their decision-making, specifically their evaluation of product alternatives and their purchasing decision (Sproles & Kendall, 1986). Various researchers have confirmed Sproles and Kendall's (1986) CSI, including the following characteristics: perfectionist or high quality consciousness, brand consciousness, price and value for money consciousness, novelty/fashion consciousness, recreational and hedonistic shopping consciousness, confused by over-choice, impulsiveness, carelessness and habitual brand-loyal consumers. The studies covered in this literature review demonstrate the utility of the CSI as a basic shopping orientation, comparable to the concept of personality in psychology (Cowart & Goldsmith, 2007; Wesley *et al*., 2006). The CSI has been used to examine consumer behaviour in various countries across the globe and within several product categories and specific shopping contexts (Sam & Chatwin, 2015; Radder *et al*., 2006; Lysonski *et al*., 1996), Demographic characteristics, including gender, level of education, income, age and race, are known to influence consumer decision-making styles across all levels of purchasing complexity (Sangoydin & Makgosa, 2014; Mitchell & Walsh, 2004; Kamaruddin & Mokhlis, 2003).

Researchers such as Sproles and Kendall (1986) and Erasmus *et al*. (2014) propose that the product category should be acknowledged in our understanding of consumers' decision behaviour, specifically their consumer decision-making styles (Erasmus *et al*., 2014; Dhar & Wertenbroch, 2000; Sheth *et al*., 1991).

CHAPTER 3 – THEORETICAL PERSPECTIVE

This chapter describes and substantiates the theoretical perspective for this study, namely mental accounting. This chapter starts with an explanation of cognition and consumer decision-making, followed by a discussion of mental accounting as cognitive perspective. The chapter concludes with the conceptual framework as well as the research aim and objectives.

3.1 COGNITION AND CONSUMER DECISION-MAKING

Cognition refers to all processes whereby sensory inputs to the brain (i.e. all stimuli that a person is exposed to), are transformed and converted in terms of existing cognitive frameworks that are stored in memory. During a particular situation, for example during a purchasing process, these cognitive frameworks are recovered and applied to facilitate a consumer's behaviour and understanding. According to Moschowitz (2013:3), social cognition is a sub-field in social psychology that refers to mental processes that are relevant in an individual's perception, attendance, recall, as well as thought processes in attempts to make sense of the people and occurrences in our social world. According to researchers in the field of social cognition, social behaviour is not directly derived from external environmental factors but rather from internal cognitive processes which influence our interpretation of a specific social context (Bandura, 1999; Stajkovic & Luthans, 1998).

Social cognition research centres on the identification and evaluation of mental processes, which underlie awareness and mediate our responses to social inputs. Social cognition seeks to explain how we form impressions of ourselves and others, how we mentally present our social knowledge and how these impressions influence our behaviour, including our relationships with others (Moschowitz, 2013:3).

The understanding of key internal cognitive processes is very important in an understanding of a consumer's decision-making style when purchasing products and/or services. The cognitive approach therefore assumes that the mind actively processes information that we become aware of through our senses. Eventually, complex mental (internal cognitive) processes link the stimuli that we are exposed to, with our responses (Moschowitz, 2013:3).

3.2 MENTAL ACCOUNTING AS A COGNITIVE PERSPECTIVE

A consumer's decision-making style is defined as a mental orientation that characterises an individual's approach to consumer choices (Sproles & Kendall, 1986). Consumer decision-making styles are the result of consumers' internal cognitive processes (Potgieter *et al*., 2013; Sproles & Kendall, 1986). As various authors advocate the mental accounting approach to consumer purchasing processes (Gilboa *et al*., 2010; Thaler, 1999; Thaler, 1985), mental accounting was considered an appropriate theoretical perspective for this investigation. Compared to other theoretical perspectives, mental accounting is a relatively recent model that integrates cognitive psychology and microeconomics, acknowledging consumers' mental coding, specifically their consideration of gains and losses utilising prospect theory (Thaler, 1985).

3.2.1 Mental accounting defined

Mental accounting was initially proposed as a set of cognitive operations that are employed by individuals and households to organise, evaluate and record financial activities (Gilboa *et al*., 2010; Thaler, 1999; Thaler, 1985). A fundamental principal of mental accounting is that consumers treat money differently, depending on factors such as the money's origin and its intended use, rather than thinking of it in terms of formal accounting (Thaler, 2008; Thaler, 1999; Thaler, 1985). In accordance with current literature in psychology, decision theory and economics, mental accounting proposes that consumers would take into consideration the *gains and losses* of a specific purchasing decision in an attempt to *maximise utility* (Gilboa *et al*., 2010). A mental accounting approach to a purchasing decision focuses on consumers' cognitive interpretations of information that is relevant to the purchasing decision (Gilboa *et al*., 2010; Thaler, 1999). An implicit assumption of this theoretical perspective that is doubtful, however, is that consumers are aware of all the components in their consideration set (Thaler, 1985), i.e. that they are aware of all the influencing variables. This theoretical perspective hence proposes that consumers *create a frame of reference for a specific transaction, taking into consideration what they know and regard as important, anticipating certain outcomes,* for example preferring an *affordable* washing machine, or an *impressive design*. All product characteristics are therefore evaluated jointly as well as how each mutually affects the others, in order to achieve the outcome that the consumer desires. In terms of this study, a consumer's predominant decision-making style therefore indicates what the individual regards more desirable in terms of the type of outcome of the purchasing decision. For example, for a "perfectionist", high quality would supersede the importance of brands, which is crucial for a "brand-conscious" consumer, or price which is highly valued by "value for money-conscious" consumers.

Three types of psychological/mental accounts are distinguished, namely *minimal*; *topical* and *comprehensive* accounts (Thaler, 1985 in Ranyard & Craig, 1995; Kahneman & Tversky, 1984). *Minimal accounting* is an unsophisticated consideration of pros and cons of a transaction, which may apply during less complicated transactions such as grocery shopping. *Topical accounting* applies when the purchase context is highly relevant, for example when a washing machine needs to be replaced urgently or when a consumer comes across a product that is considered a *must have*, for example a bargain (Kahneman & Tversky, 1984). *Comprehensive accounting* applies when consumers' mental representations fail to understand the complexity of a task and when they lack the cognitive resources that are required to process information related to the purchasing decision easily (Thaler, 1985 in Ranyard & Craig, 1995; Kahneman & Tversky, 1984). So-called "confused by over-choice" would represent the typical decision-making style in this instance. Understandably, these consumers will experience difficulty to cope. From the examples, it is highly likely that consumers' decision-making styles might differ depending on the product category, although empirical evidence to this extent does not exist.

3.2.2 Relevance of mental accounting in terms of consumers' decision styles

Mental accounting was initially proposed as a set of cognitive operations that are employed by individuals and households to organise, evaluate and record financial activities, specifically (Gilboa *et al*., 2010; Thaler, 1999; Thaler, 1985). However, this study will apply mental accounting in consumers' application of consumer decision-making styles.

A fundamental principle of mental accounting is that consumers treat money differently, depending on factors such as the money's origin and intended use, rather than thinking of it in terms of formal accounting (Thaler, 2008; Thaler, 1999; Thaler, 1985). *When applying the principle in this investigation of consumers' decision-making styles, it is therefore proposed that consumers apply different consumer decision-making styles in different contexts.*

In accordance with current literature in psychology, decision theory and economics, mental accounting proposes that consumers would take into consideration the *gains and losses* of a specific purchasing decision in an attempt to *maximise utility* (Gilboa *et al*., 2010). In terms of Thaler (1999), it is important to understand the economic decision-making process of an individual or a household when interacting in an economic environment i.e. how does a person make economic decisions, such as what to buy, how much to save, and whether to outright purchase or lease an item. The value function represents some of the primary components of the human perceived satisfaction index (Thaler, 1999; Thaler, 1985). *In terms of this investigation of consumers' decision-making styles, it is therefore proposed that consumers apply specific consumer decision-making styles (for example brand consciousness) to maximise utility (to*

benefit from the status associated with the brand or the excellent reputation), and to optimise consumer satisfaction.

Essentially, there are three influences on mental accounting. The value function refers to a calculation of gains and losses relative to some reference point that the individual may have (in memory), which may be based on prior experience. The expected utility theory focuses on changes, specifically the fractional nature of mental accounting, which means that small improvements (gains) are noted as an increase in value. Transactions are generally evaluated and processed individually and in isolation of other transactions, and loss aversion is a major factor. It will therefore be much more harmful/disappointing to lose R500 in a bad transaction than it would be to gain R500 because the aim is to maximise utility/gains and to avoid losses (Gilboa *et al*., 2010; Thaler, 1999; Thaler, 1985). *In terms of this investigation of consumers' decision-making styles, it is therefore proposed that consumers will apply specific consumer decision-making styles whereby they would gain the most/benefit the most so as to prevent loss and consumer dissatisfaction.*

According to Thaler (1999), consumers obtain two types of utility from a purchasing decision, namely *acquisition utility* and *transaction utility*. Acquisition utility is a measure of the financial value of the goods purchased relative to its price, while transaction utility measures the perceived value of the purchase, including hedonic benefits. *In this study, acquisition utility refers to the use of specific decision-making styles to optimise the money spent while transaction utility emphasises use of specific decision-making styles to optimise the experience*. Typically retailers appeal to acquisition utility when they have sales and when consumers can save a lot of money when purchasing goods at a reduced price. At the same time, transactional utility will refer to other benefits such as the pleasure derived when getting hold of bargains (Thaler, 1999).

Mental accounts provide consumers with a self-regulatory instrument, which means that a consumer will assign specific priorities to certain purchases (Heath & Soll, 1996), which may for example, restrict the amount spent or the brands selected, or the stores patronised, i.e. whichever criteria consumers use to maximise utility and to prevent loss. Every transaction is dealt with in the form of a mental account where the benefits are calculated as an indication of the gains. The consumer will always try to close the particular account with an overall gain (Prelec & Loewenstein, 1998). Rajagopal and Rha (2009) contend that research in the mental accounting of money has illustrated that consumers create mental accounts for money and follow psychological ideologies of categorisation while assigning money to different accounts, therefore violating the economic principles of the fungibility of money. In addition, given the relative scarcity of time (as with money), they propose that people may indeed have accounts for time as they do with money and may assign time in a similar manner to how they assign money. Subsequently,

when thinking about consumer decision-making styles, consumers may be brand-conscious to avoid time loss, which is typical of a complex consumer decision-making process.

3.3 CONCEPTUAL FRAMEWORK

The conceptual framework is constructed by organising and including all the relevant concepts and constructs that form part of the objectives of the study. The conceptual framework also depicts how these objectives are aligned in order to reach suitable outcomes for the study.

The schematic conceptual framework is presented in Figure 3.1. It depicts the possible relationship between **consumers' demographic characteristics** and their **consumer decision-making styles,** and in order to allow for possible differences in the decision-making style that is implemented when purchasing products that differ in complexity, the framework also indicates a possible interaction between the product type and the consumer decision-making style (Objective 1).

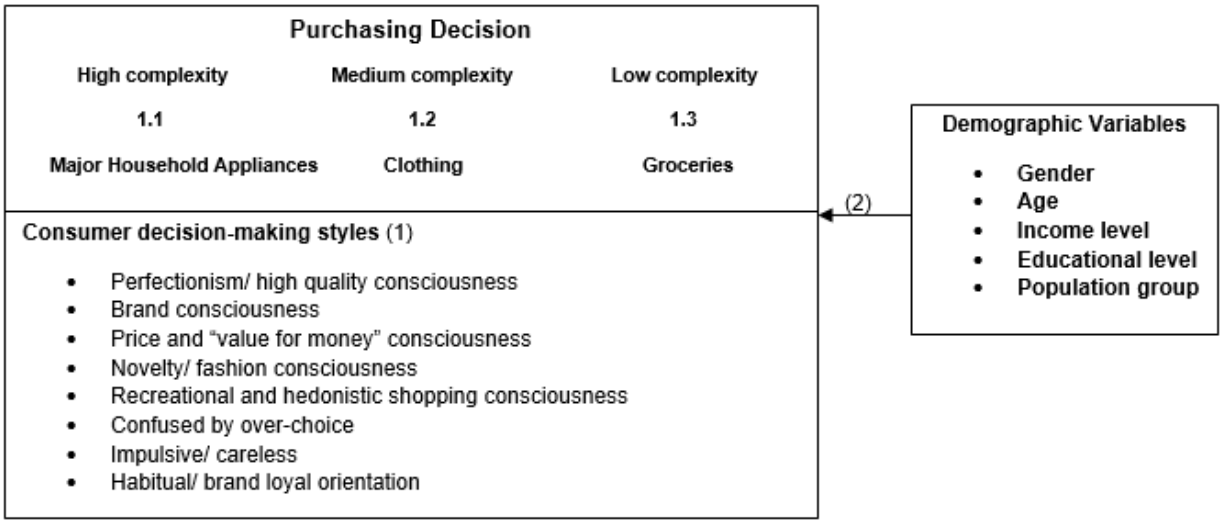

FIGURE 3.1: CONCEPTUAL FRAMEWORK

The conceptual framework suggests that consumers may employ different or maintain the same consumer decision-making style(s), depending on the product type, which may be influenced by the perceived complexity of the purchasing decision (Erasmus *et al*., 2014; Dellaert, Arentze & Timmermans, 2008; Saleh, 1998). Furthermore, according to the relevant literature, consumers' demographic characteristics may reflect either a bias towards a particular decision-making style, irrespective of the product category/type, or towards the adoption and employment of various consumer decision-making styles for different product categories (Objective 2) (Sangodoyin & Makgosa, 2014; Potgieter *et al*., 2013; Saleh, 1998).

3.4 RESEARCH AIM AND OBJECTIVES

3.4.1 Aim of the study

The study focuses on a South African context, and aims to determine and describe the demographic differences in consumers' predominant decision-making styles, and to subsequently ascertain how the predominant decision-making styles of specific demographic subsets of the population concur (or differ) across selected product categories which differ in complexity.

3.4.2 Objectives of the study

The following objectives were formulated to achieve the anticipated outcomes for the study.

Objective 1: To identify and describe the predominant consumer decision-making styles that are prevalent in the following product categories:

Sub-objective 1.1: Major household appliances, a category which is characterised as a fairly complex purchasing decision

Sub-objective 1.2: Clothing: workwear or best daywear, which is characterised as a moderate complexity purchasing decision

Sub-objective 1.3: Groceries, which is characterised as a low complexity purchasing decision

Objective 2: To compare and discuss the most prevalent decision-making styles within the three product categories, for consumers with specific demographic characteristics, namely:

2.1Gender: male; female

2.2 Age differences: 25<40 years; 40<50 years; ≥50 years

2.3 Income differences: <R5000; ≥R5000<R10 000; ≥R10 000<R15 000; ≥R15 000<R25 000; ≥R25 000

2.4 Education level differences: <Grade 10; Grade 10≤Grade 12; Grade 12 + degree/diploma; Postgraduate

2.5 Population differences: Black; White; Other population groups

3.5 SUMMARY

This chapter has provided the rationale for the selection of the mental accounting theory as an appropriate theoretical perspective for this study. Mental accounting follows a cognitive approach which pertains to the sensory inputs of the brain which are transformed and converted in terms of existing cognitive processes stored in the memory. This theory proposes that consumers take into account the gains and losses of a specific purchase decision in order to maximise utility. When purchasing decisions needs to be made, a consumer will recall and apply these cognitive frameworks to a particular situation. This cognitive approach assumes then that the mind actively processes information that one has been exposed to via one's senses and ultimately complex mental processes (internal cognitive processes) link the stimuli that we are exposed to, with relevant responses The understanding of these key internal cognitive processes is very important in the context of consumer decision-making styles when purchasing products and/or services.

The schematic conceptual framework presented in the chapter depicts all of the relevant concepts and constructs forming part of the objectives of this study. This framework links the various variables such as the product complexity, demographic variables and consumer decision-making styles and provides the basis for the comparisons of consumer decision-making styles employed across the product complexity continuum according to the various demographic profiles.

CHAPTER 4 – RESEARCH DESIGN AND METHODOLOGY

This chapter introduces the research design and methodology for the study. Measures that were taken to enhance the quality of the study and to address ethical concerns are discussed.

4.1 INTRODUCTION

This chapter provides a detailed explanation of the research design and methodology of the study. Research design and research methodology refer to two distinct aspects of a research project. Research design refers to the "plan or blueprint of the research project that precedes the actual research process", while research methodology focuses on the research process and the type of tools to be used (Leedy & Ormrod, 2015:92; Kumar, 2014:122-123).

The research methodology section of this chapter describes the sampling plan in terms of the unit analysis, the sampling techniques and sample size; the use of the questionnaire as the measuring instrument for this study; the data collection methods to gather primary data; the coding and capturing of the data; the data analysis techniques; the operationalisation in terms of the objectives of the research; as well as the validity, reliability and ethical considerations to ensure the quality and the integrity of the research.

4.2 RESEARCH DESIGN

The research design represents the procedural plan, structure and strategy of an investigation chosen by the researcher to conduct data collection and analysis (Leedy & Ormrod, 2015:92; Wiid & Diggines, 2015:42; Creswell, 2014:12; Kumar, 2014:122-123; Berndt & Petzer, 2011:31). A survey research design was implemented by using a structured, self-administered questionnaire to collect primary data (Leedy & Ormrod, 2015:158). A survey acts as a research tool to provide a quantitative or numeric description of specific characteristics, trends, attitudes or opinions of a population (Du Plooy-Cilliers, Davis & Bezuidenhout, 2014:149). Quantitative research utilises deductive logic where the researcher starts with an abstract idea, followed by a measurement procedure, and ends with empirical data (precise numerical information), capable of being analysed by statistical methods or other computational methods, representing the abstract ideas (Wiid & Diggines, 2015:64; Babbie, 2012:25-26; De Vos, Strydom, Fouché &

Delport, 2011:48,63-64; Walliman, 2011:210). This study therefore used a quantitative methodological research approach.

The research design could also be categorised as cross-sectional, since the data for this study was collected at a specific point in time to gain an understanding of the current situation regarding the differences in consumer decision-making styles relative to product categories across varying degrees of complexity (Wiid & Diggines, 2015:67-68; Kumar, 2014:134,136; Berndt & Petzer, 2011:133; De Vos *et al*., 2011:303). Although cross-sectional research does not account for factors that influence consumers' behaviour over an extended period of time, it is deemed appropriate for the purposes of this study, due to both financial and time constraints facing the researchers (Matthews & Ross, 2014:164; Salkind, 2014:194).

In this study, exploratory descriptive research was employed to clarify the differences in consumer decision-making styles across products with varying complexity. Exploratory research enables the researcher to gain insight into the research topic, to explicate central concepts and constructs and to develop methods to be employed in the study (Wiid & Diggines, 2015:64; De Vos *et al*., 2011:95-96), while descriptive research, related to quantitative methods, establishes a connection between variables of a specific service or product, while focusing on the "how, who, when, why and what" thereof (Leedy & Ormrod, 2015:154; De Vos *et al*., 2011:96).

4.3 METHODOLOGY

4.3.1 Sampling plan

4.3.1.1 Unit of Analysis

The unit of analysis for this study was consumers who were 25 years or older and who resided in suburbs across the Tshwane Metropolitan Area, Gauteng (South Africa), which allowed for involvement of consumers from a broad socioeconomic spectrum who are exposed to multiple retail formats and who are therefore not notably restricted in terms of shopping opportunities. In addition, it was further assumed that by age 25 the average person would have gained some experience with a variety of products differing in complexity.

4.3.1.2 Sampling technique and sampling size

Due to financial and time constraints, non-random sampling techniques were employed, considerably reducing the sampling costs (Matthews & Ross, 2014:164; Salkind, 2014:194). Field

workers, a cohort of 39 trained fourth-year Consumer Science students of the University of Pretoria, were instructed to distribute and collect a minimum of 50 questionnaires to potential respondents residing across the suburbs of the Tshwane Metropolitan Area to reflect the diversity of the population, using convenience and snowball sampling. Convenience sampling relies on data collection from population members who are conveniently available to participate in the study (Lamb *et al*., 2015:188). Field workers also requested participants to suggest other people with the same characteristics who might be willing to participate in the research, and then contacted these people through snowball sampling. Snowball sampling recruits people who are often part of a group of similar people being subjected to convenience sampling, resulting in a larger (and more representative) sample population (Lamb *et al*., 2015:188; Kumar, 2014:244-245; Berndt & Petzer, 2011:174; De Vos *et al*., 2011:233). Although non-random sampling techniques are limiting in the sense that the findings from the techniques cannot be generalised to the population, the implications of the study could still be considered valuable to marketers and retailers.

4.3.2 Measuring instrument

The structured, self-administered questionnaire consisted of two sections. Section A measured consumers' decision-making styles, with three questions pertaining to clothing purchases: workwear or best daywear (CL) (V1-V39); major household appliance purchases (MHA) (V49-87); and grocery purchases (GROC) (V97-V135), respectively. Each question contained Sproles and Kendall's (1986) entire shopping inventory scale, including 39 items each, presented in terms of a 5-point Likert-type agreement scale (1 = strongly disagree to 5 = strongly agree). The wording for each section was slightly adapted to pertinently reflect on the particular product category, but the sequence and number of questions were retained for all three sections. Section B captured respondents' demographic characteristics including gender, age, level of education, monthly household income level, population group and residential area.

The structure of the questionnaire is depicted in Table 4.1 in terms of the different sections, the aspects measured and the questions pertaining to each aspect.

TABLE 4.1: QUESTIONNAIRE STRUCTURE

Section	Aspects	Question
A	Respondents' shopping style when purchasing specific products in terms of: 1.1: Clothing purchases, specifically clothing suitable as workwear or as your best daywear	Question 1.1 (V1-39)
	1.2: Household appliance purchases, specifically major appliances such as refrigerators, washing machines, dishwashers, tumble dryer	Question 1.2 (V49-87)
	1.3: All foods-related grocery purchases (excluding cleaning products and toiletries)	Question 1.3 (V97-135)
B	Demographic data	
	- Gender	Question 145 (V145)
	- Age	Question 146 (V146)
	- Education level	Question 147 (V147)
	- Approximate monthly household income	Question 148 (V148)
	- Population group	Question 149 (V149)
	- Suburb	Question 150 (V150)

4.3.2.1 Pre-testing the measuring instrument

As part of their training, each of the field workers had to complete a questionnaire to identify potential ambiguity or incorrect wording (Wiid & Diggines, 2015:174; Creswell, 2014:161). After correcting a few language errors, the questionnaire was pre-tested on a select few who had similar characteristics to the population to determine whether they understood all the questions correctly as well as the time needed to complete the questionnaire. Finally, 1950 questionnaires were distributed in selected suburbs in the geographic area, with clear selection criteria to meet certain demographic quotas.

4.3.3 Data collection

The field workers were informed about the purpose and objectives of the study and were trained to collect the data by means of a questionnaire (Wiid & Diggines, 2015:212-214). The fieldworkers were instructed to only hand out questionnaires to potential respondents of the age 25 years or older. Using convenience and snowball sampling, field workers approached potential respondents at places that were convenient to them, including their private homes and workplaces, after having obtained permission to do so.

The consent form that accompanied the questionnaire stated the purpose of the research and provided a guarantee of confidentiality and anonymity, and a plea for the respondents' cooperation, and also emphasised the voluntary nature of participation in completing the questionnaire. Respondents were requested to sign the consent form in the space provided to indicate their informed consent to participate in the study (Wiid & Diggines, 2015:31; Salkind, 2014:150-152). Willing respondents were also requested to provide their cellphone number on of

a tear-off slip, without further identification, to participate in a lucky draw to win a R500 gift voucher at the end of the data collection. These cellphone numbers were also used by a technical assistant to perform spot checks to confirm the content of the questionnaire, ease of completion or area of residence.

The field workers personally distributed and collected the questionnaires from March through to May 2015. The field workers emphasised that participation was voluntary. The questionnaire took approximately 15 minutes to complete. Of the 1950 questionnaires distributed, 1714 were useful for data collection, while the rest of the questionnaires were discarded due to too many missing responses.

4.3.4 Coding and capturing the data

Following the collection of the questionnaires, the responses of the completed questionnaires were edge-coded by the trained field workers under the supervision of the research coordinators. Edge-coding denotes the process of assigning codes to each question in the questionnaire and then writing these codes in the appropriate block provided on the side of each page (Creswell, 2014:197-198; Babbie, 2012:144). The data was captured by a contracted research company. In an attempt to eliminate data-processing errors, data clean-up was performed to ensure that the data recorded was complete and accurate (Matthews & Ross, 2014:323).

4.4 DATA ANALYSIS

The collated data obtained from this study was analysed according to the specific objectives set out for the study. This analysis of data is defined as the systematic process of applying suitable logical and or statistical techniques to evaluate data (Lamb *et al*., 2015:188-189; Creswell, 2014:162; Berndt & Petzer, 2011:34; Hofstee, 2006:117). A statistician of the Department of Statistics (University of Pretoria) assisted with the data analysis, by using descriptive and inferential statistics.

Descriptive statistics, such as frequencies, percentages, means and standard deviations, were calculated and then portrayed in tables and graphs to present the data in a meaningful way (Leedy & Ormrod, 2015:241-248; Wiid & Diggines, 2015:252-253; Creswell, 2014:163; De Vos *et al*., 2011:261-265). Inferential statistics, to draw conclusions or to draw inferences from the data, included exploratory factor analysis and MANOVA (Leedy & Ormrod, 2015:236).

4.5 OPERATIONALISATION

Table 4.2 indicates the statistical procedures, variables, measurement of scale items, dimensions and constructs associated with each objective.

TABLE 4.2: OPERATIONALISATION IN TERMS OF OBJECTIVES, CONCEPTS, DIMENSIONS, INDICATORS AND STATISTICAL METHODS

Objectives	Construct	Dimensions	Measurement of scale items	Questions (V = Variable)	Statistical analysis
Objective 1 To identify and describe the predominant consumer decision-making styles that are prevalent in the following product categories:	Consumer decision-making styles	Perfectionism or high quality consciousness, brand consciousness, price & 'value for money' shopping consciousness, novelty/fashion consciousness, recreational & hedonistic shopping consciousness, confused by over-choice, impulsive/careless, habitual/brand-loyal orientation	Sproles & Kendall (1986) CSI (Consumer Styles Inventory)	Section A: Questions 1.1-1.3	Exploratory Factor Analysis (EFA) and Means, Standard deviation, % Variance explained and Cronbach's Alpha
Sub-objective 1.1 To identify and describe the predominant consumer decision-making styles that are prevalent when purchasing major household appliances, a category which is characterised as a fairly complex purchasing decision		Perfectionism or high quality consciousness Brand consciousness Price & 'value for money' shopping consciousness Novelty/fashion consciousness Recreational & hedonistic shopping consciousness Confused by over-choice Impulsive/careless Habitual/brand-loyal orientation	Sproles & Kendall (1986) CSI (Consumer Styles Inventory)	Section A: Question 1.2 V49,V53,V55,V59,V71,V81,V85 V52,V58,V61,V67,V78,V86 V60,V76,V83 V54,V62,V66,V74,V75 V50,V64,V70,V73,V82 V63,V68,V77,V84 V56,V65,V69,V79,V80 V51,V57,V72,V87	Exploratory Factor Analysis (EFA) and Means, Standard deviation, % Variance explained and Cronbach's Alpha
Sub-objective 1.2 To identify and describe the predominant consumer decision styles that are prevalent when purchasing clothing: workwear or best daywear, which is characterised as a moderate complexity purchasing decision	Consumer decision-making styles	Perfectionism or high quality consciousness Brand consciousness Price & 'value for money' shopping consciousness Novelty/fashion consciousness Recreational & hedonistic shopping consciousness Confused by over-choice Impulsive/careless Habitual/brand-loyal orientation	Sproles & Kendall (1986) CSI (Consumer Styles Inventory)	Section A: Question 1.1 V1,V5,V7,V11, V23,V33,V37 V4,V10,V13,V19,V30,V38 V12,V28,V35 V6,V14,V18,V26, V27 V2,V16,V22,V25, V34 V15,V20,V29, V36 V8,V17,V21,V31, V32 V3,V9,V24,V39	Exploratory Factor Analysis (EFA) and Means, Standard deviation, % Variance explained and Cronbach's Alpha
Sub-objective 1.3 To identify and describe the predominant consumer decision-making styles that are prevalent when purchasing groceries, which is characterised as a low complexity purchasing decision	Consumer decision-making styles	Perfectionism or high quality consciousness Brand consciousness Price & 'value for money' shopping consciousness Novelty/fashion consciousness	Sproles & Kendall (1986) CSI (Consumer Styles Inventory)	Section A: Question 1.2 V97,V101,V103,V107,V119,V129,V133 V100,V106,V109,V115,V126,V134 V108,V124,V131 V102,V110,V114,V122,V123	Exploratory Factor Analysis (EFA) and Means, Standard deviation, % Variance explained and Cronbach's Alpha

Objectives	Construct	Dimensions	Measurement of scale items	Questions (V = Variable)	Statistical analysis
		Recreational & hedonistic shopping consciousness Confused by over-choice Impulsive/careless Habitual/brand-loyalty		V98,V112,V118,V121,V130 V111,V116,V125,V132 V104,V113,V117,V127,V128 V99.V105,V120,V135	
Objective 2 To compare and discuss the most prevalent consumer decision-making styles for consumers with specific demographic characteristics within the three product categories	Demographic characteristic	Gender Age Education level Income level Population group Suburb		Section B: Questions 145-150	MANOVA and descriptive analysis

4.5.1 Explanation of statistical methods

Statistical methods used to analyse the data are discussed in the section below.

4.5.1.1 Exploratory factor analysis

In order to reduce the large number of variables obtained in the study, exploratory factor analysis (EFA) was performed (Yong & Pearce, 2013; Fricker, Kulzy & Appleget, 2012; De Vos *et al*., 2011:242). Exploratory factor analysis is used primarily to enable the researcher to reduce a large set of variables based on shared variance of the original variables (Leedy & Ormrod, 2015:259; Wiid & Diggines, 2015:242,294). EFA uncovers complex patterns by exploring the data set and by testing predictions and variables identified within the matrix (Leedy & Ormrod, 2015:259; Yong & Pearce, 2013; Fricker, Kulzy & Applegat, 2012). Where these variables may be related to one another, it results in fewer factors to explain all of the variables identified within the matrix (Yong & Pearce, 2013; Fricker *et al*., 2012). The various factor scores may then be used as dependent variables.

For the purpose of this study, EFA was deemed suitable, due to the large data set comprised of several factors (i.e. variables) (Yong & Pearce, 2013). In order to identify the factor structures, EFAs were performed (n = 877) on the relevant data sets of each of the three product categories, i.e. clothing: workwear or best daywear (V1-39), major household appliances (V49-87), and groceries (V97-135). Outcomes of the factors that were identified, were based on the respective Scree plots and an Eigenvalue >1 (Wiid & Diggines, 2015:243). Variables which load high on a specific factor show that they are characteristic of that specific factor. Generally, variables must have a factor loading of 0,33 and higher to meet the minimum level of practical significance (Yong & Pearce, 2013; Babbie, 2012:484; Fricker *et al*., 2012). The higher the factor loading of the variable, the more representative of a factor it is held to be (Wiid & Diggines, 2015:243). For interpretation purposes, it is preferred that a variable loads highly on one factor alone, as it means that such a variable can be better explained by that specific factor (Wiid & Diggines, 2015:242).

4.5.1.2 MANOVA

MANOVA (Multivariate Analysis of Variance) is applied to examine whether the means of two or more dependent samples/groups vary significantly. It is primarily used for testing hypotheses concerning variations among numerous dependent groups' means (Leedy & Ormrod, 2015:259; Zikmund & Babin, 2013:396).

MANOVA only indicates that overall differences exist in the means of different groups, but does not provide answers as to what the differences are. Post hoc LSD tests (also known as pairwise comparisons) can therefore be undertaken in order to isolate where the differences are (Leedy & Ormrod, 2015:259). These post hoc outcomes are achieved by calculating a series of pairwise tests for each pair of groups and are only undertaken if the outcome of the MANOVA reflects substantial differences between group means (Leedy & Ormrod, 2015:259; Salkind, 2014:261).

A MANOVA was performed for this study to identify the relationship between consumers' demographic characteristics (gender, age, level of education, monthly household income and population group) (V145-V150) on the one hand, and consumer decision-making styles across products with varying complexity, on the other. Post hoc LSD tests were done to further specify whether significant differences were found, if any.

4.6 QUALITY OF DATA

The quality of the data in terms of validity and reliability is paramount for the success of any research project (Wiid & Diggines, 2015:94; Kumar, 2014:212; Babbie, 2012:187-188).

4.6.1 Validity of data

Validity is all about determining whether the research measured what it was supposed to measure (Leedy & Ormrod, 2015:114; Wiid & Diggines, 2015:64; Koonin in Du Plooy-Cilliers, Davis & Bezuidenhout, 2014:256; Babbie, 2012:191; De Vos *et al*., 2011:172-173). The concept of validity describes the appropriateness or soundness of each step in the research process, i.e. conceptualisation, operationalisation, sampling, data collection and the analysis and interpretation of the data (Mouton, 1996:109-111). Internal validity refers to whether the research method or design will answer the research question accurately, while external validity focuses on the ability to generalise the findings from a specific sample to a larger population (Leedy & Ormrod, 2015:103-105; Wiid & Diggines, 2015:64; Koonin in Du Plooy-Cilliers, Davis & Bezuidenhout, 2014:257; Kumar, 2014:64). As this study employed non-probability sampling, the findings of the study cannot be generalised to the larger population.

4.6.1.1 Theoretical validity

Theoretical validity refers to the extent to which theory is employed to explain occurrences (Cohen, Manion & Morrison, 2011:107). To ensure the attainment of theoretical validity in this study, a thorough and in-depth review of the literature was done on consumer decision-making

styles, the relationship between demographic variables and consumer decision-making styles and consumers' perceptions of the complexity of specific product purchasing decisions. Definitions of the important concepts were derived from theory, with the mental accounting theory (Thaler, 1985) serving as the theoretical framework to guide the research. The questionnaire included questions designed to elicit responses in accordance with the theoretical consumer decision-making styles, and the validity of the measurements in the questionnaire was verified by experienced individuals within the Department of Consumer Science (UP).

4.6.1.2 Measurement validity

Measurement validity is concerned with measuring the degree to which a measurement accurately represents the measurement it is purporting to represent. Measurement validity is represented by four types of measurement: content, criterion, construct and face validity. Content and face validity are determined prior to the collection of data, and construct and face validity are determined after data collection has taken place. Before the data is collected, content and face validity should be established, while construct and criterion validity should be determined after data collection (Leedy & Ormrod, 2015:114-115; Zikmund & Babin, 2013:258).

Content validity refers to the extent to which all facets of a given social construct is represented through a scale, whereas criterion validity measures the ability to predict the outcome of a variable based on other variables' information (Leedy & Ormrod, 2015:115; Kumar, 2014:214; Zikmund & Babin, 2013:258; Babbie, 2012:192; De Vos *et al*., 2011:173). A pre-test study was employed to ensure that the participants clearly understood the questions and/or statements and were able to accurately assign their relevant outcome (Wiid & Diggines, 2015:174; Zikmund & Babin, 2013:302). This process enabled the researcher to ensure that the data collection would provide an accurate representation of the desired outcome.

Face validity refers to the link between the objectives and the research instrument. The questionnaire used in this study was broken down into sections to categorise the questions according to its objectives (Leedy & Ormrod, 2015:115; Koonin in Du Plooy-Cilliers, Davis & Bezuidenhout, 2014:256; Zikmund & Babin, 2013:258; Babbie, 2012:191). Also referred to as logical validity, face validity is a simple form of validity where a superficial and subjective assessment is applied to the study to determine whether the study measures what it purports to measure (Kumar, 2014:215).

Construct validity refers then to the degree to which inferences can legitimately be made from the operationalisations in this study to the theoretical constructs on which those operationalisations

were based (Leedy & Ormrod, 2015:115; Zikmund & Babin, 2013:259-260). To ensure construct validity, multiple indicators were used to measure the dimensions of decision-making styles.

Criterion validity requires that the measuring tool is able to act as an accurate predictor of the theoretical construct being measured. Evidence of criterion validity requires the correlation between the test and the criterion variables held as representative of the construct (Leedy & Ormrod, 2015:115; Koonin in Du Plooy-Cilliers, Davis & Bezuidenhout, 2014:256; Zikmund & Babin, 2013:259). This can be established with multiple measurements such as comparing the scores on the questionnaire with an established and reputable external criterion that measures the same concept. In order to achieve a high degree of criterion validity, different items are used in each question of the questionnaire to measure the same concept, as well as adapting the existing and tested scales to accommodate the objectives of the study (Leedy & Ormrod, 2015:115). In this study, multiple indicators were used to measure the concepts.

4.6.2 Reliability of data

Reliability is about the credibility of one's research and it demands consistency (Koonin in Bezuidenhout, Davis & Du Plooy-Cilliers, 2014:254). When the measuring process employed produces results capable of being reproduced, the measuring instruments is said to be reliable (Leedy & Ormrod, 2015:116; Wiid & Diggines, 2015:64; Kumar, 2014:215-216; Babbie, 2012:188). Care was taken to ensure the reliability of the data collected and collated in this study. The scale items used in the questionnaire were derived from established scales that have proven to be reliable. The Cronbach's Alpha values of the factors resulting from the EFA were interpreted to determine the internal reliability of scale items, with Cronbach's Alpha > 0,7 indicating acceptable reliability of the measurement scale. Field workers were trained and were given clear instructions concerning the aims of the study to ensure the reliability of the data. Reliability was also enhanced through the provision of simple, yet clear instructions to facilitate respondents' understanding of the questionnaire (Salkind, 2014:168; Berndt & Petzer, 2011:150).

4.7 ETHICAL ISSUES

Research ethics refers to the "moral principle guiding research, from its inception through to completion and publication of results and beyond" (Matthews & Ross, 2014:71; Babbie, 2012:32). The research was designed and undertaken to ensure honesty and its integrity was upheld.

The consent form accompanying the questionnaire provided a brief description of the objectives of the study; a description of the respondents' responsibilities in terms of participation and the

time estimated to spend in completing the questionnaire; an indication that participation is voluntary; a guarantee of anonymity and confidentiality; the particulars of the research coordinators, names and affiliation to indicate “authority” to conduct the research; and a place for the respondent to sign the from, indicating informed consent to participate (Leedy & Ormrod, 2015:121-122; Wiid & Diggines, 2015:31; Matthews & Ross, 2014:73-75; Babbie, 2012:34).

The field workers explained the objectives of the study to the respondents and stressed that participation in the study is voluntary (Leedy & Ormrod, 2015:121). Respondents were assured that they could withdraw from the study at any time should they choose to. The respondents gave their “informed consent” to participate in the research (Leedy & Ormrod, 2015:121). None of the respondents were coerced into participating or to answering any questions they were uncomfortable with (Salkind, 2014:150). The respondents were not requested to provide their names but were requested to willingly take part in a lucky draw by providing their cellphone number on a tear-off sheet, guaranteeing that their responses would be kept totally confidential. The field workers also assured the respondents that their responses to the questions could not be linked to them in any way (Leedy & Ormrod, 2015:123; Wiid & Diggines, 2015:31; Salkind, 2014:150).

To avoid possible plagiarism, all the sources consulted were cited in the text of the document and stated in a list of references by using an adapted version of the Harvard referencing method. The signed plagiarism declaration as requested by the Department of Consumer Science, University of Pretoria, is provided in Addendum B. Results have been objectively reported and without misinterpretation (Leedy & Ormrod, 2015:123).

The University of Pretoria’s Research Ethics Committee (Faculty of Natural and Agricultural Sciences) approved the research proposal and the questionnaire before commencement of the research (Ethics Approval Number: 2015-01244).

4.8 DATA PRESENTATION

The data conversion is available in both hard copy (researcher’s files) and electronically at the Department of Consumer Science at the University of Pretoria. A discussion of the results of the study can be found in Chapter 5.

4.9 SUMMARY

Careful consideration preceded the selection of the most appropriate research design and methodology. The outcome of the selection has been presented in this chapter to confirm the appropriateness of the research methods employed throughout this study. The survey research design, based on a quantitative approach and a cross-sectional research strategy, was employed. Primary data from both male and female respondents, aged 25 years or older and residing in the Tshwane Metropolitan area (South Africa), was collected by means of a self-administered questionnaire through use of convenience and snowball sampling. After pre-testing, a total of 1950 questionnaires were distributed during the months of March, April and May 2015. A total of 1714 usable questionnaires were yielded. The questionnaire consisted of two sections using Likert-type agreement scales as well as single response options.

Data was analysed with the help of a qualified statistician. Means, percentages and standard deviations were calculated followed by inferential statistics, including exploratory factor analysis and MANOVAs.

Throughout the course of the study, measures were taken to ensure ongoing validity and reliability of the results. Ethical research guidelines were also employed to ensure that the study complied with acceptable standards of research.

Chapter 5 – Results and discussion

The results are presented in this chapter, commencing with the demographic characteristics of the sample, followed by a discussion of the outcomes in accordance with the objectives for the study, whilst incorporating existing literature.

5.1 INTRODUCTION

Descriptive and inferential statistics were employed to describe and summarise the quantitative data that was gathered by means of the structured questionnaire. The descriptive statistics are summarised and presented in tables with numerical summaries such as frequencies, percentages, means and standard deviations, as well as visual presentations in the form of graphs for selected parts of the findings. Inferential statistics were utilised to apply the findings to specific subsets of the sample in accordance with the objectives of the study that are also depicted in the conceptual framework. The demographic profile of the sample, as investigated in Section B of the questionnaire, is presented first.

5.2 DEMOGRAPHIC CHARACTERISTICS OF THE SAMPLE

Two primary prerequisites for the selection of respondents were that they had to reside in the Tshwane Metropolitan area to ensure geographic commonality, and they had to be at least 25 years of age to confirm reasonable purchasing experience in the marketplace and in all the product categories. Demographic information, i.e. gender, age, level of education, average monthly household income, population group as well as the suburb of residence, are depicted in Table 5.1, followed by a brief discussion of each demographic characteristic.

TABLE 5.1: DEMOGRAPHIC CHARACTERISTICS OF THE SAMPLE (N = 1714)

Gender	*n*	%	**Age (Years)**	*n*	%	**Population group**	*n*	%
Male	561	32.8	25-39	1095	63.9	White	1186	69.4
Female	1149	67.2	40-49	305	17.8	Black	411	24.1
			≥50	314	18.3	Indian	49	2.9
						Coloured	51	3.0
						Other	11	0.6
Total	**1710**	**100**	**Total**	**1714**	**100**	**Total**	**1708**	**100**
Household income	*n*	%	**Education**	*n*	%	**Regions (Tshwane)**	*n*	%
<R5000	202	12.0	<Grade 10	13	0.8	North Western	77	4.5
R5000-R9999	248	14.7	Grade 10/11	58	3.4	North Eastern	113	6.7
R10000-R14999	273	16.2	Grade 12	410	24.0	Central Western	567	33.4
R15000-R24999	393	23.3	Grade 12 + Degree/Dipl.	810	47.4	Southern	300	17.6
R25000	573	33.8	Postgraduate	416	24.4	Eastern, Far east	642	37.8
Total	**1689**	**100**	**Total**	**1707**	**100**	**Total**	**1699**	**100**

5.2.1 Gender

Respondents were selected by means of non-random sampling through voluntary participation. An attempt was made to ensure an equal distribution of both genders in this study, but the majority of the respondents (67.2%) were female, indicating a higher measure of willingness to complete the questionnaire, compared to men, as also indicated in prior research (Curtin, Presser & Singer, 2000). The number of men included was nevertheless adequate in terms of anticipated statistical analysis.

5.2.2 Age

Respondents specified their age in an open-ended question in the questionnaire. Ages varied between 25 years and 80 years of age. The data was simplified for analysis purposes into three main age categories, as depicted in Table 5.1. The majority of the sample (63.9% of the respondents) were younger than 40 years, i.e. the Millennial generation. The number of older respondents were nevertheless also sufficient in number to merit statistical procedures and meaningful conclusions.

5.2.3 Education level

The level of education of the respondents was subdivided into five categories. Level of education indicates a person's ability to gain access to information as well as the skill to conduct a thorough information search (Feinstein, Sabates, Anderson, Sorhaindo & Hammond, 2006). Education level may also indicate a respondent's ability to answer the questionnaire with or without difficulty.

The two lower levels of education (<Grade 12) were not well represented – probably due to the sampling method used – but the other categories were large enough for further analysis. It is assumed that consumers with higher qualifications (degree, diploma or postgraduate

qualification) would have acquired skills and knowledge to enable them to function more confidently in the marketplace. They are also more likely to earn more money in their respective positions (Erasmus *et al*., 2014).

5.2.4 Income level

Five income levels were specified in the questionnaire to avoid the intimidation that could be caused by reference to high-, middle- or lower-income levels. However, due to the sensitivity of this category, 25 respondents refrained from indicating their income level. There were still a sufficiently large number of respondents to allow for comparisons across the different income groups. The income level categories as presented in the questionnaire were re-grouped to match the official Tshwane income data, in order to compare the data of the different income groups statistically. The different income categories were well represented, which indicated that sampling across the geographic region was done satisfactorily. The representation of income categories was adequate in terms of statistical inferences.

5.2.5 Population group

Respondents indicated their population group in accordance with the South African Population Equity Act. Table 5.1 indicates that the majority in the sample were Whites (69.4%). Blacks were well represented, although not representative of the population composition of the geographic area, which is an unfortunate negative consequence of convenience sampling. The so-called “other” population groups, which include Coloureds and Asians, unfortunately collectively formed only 6.5% of the sample.

5.2.6 Geographic area of residence

Respondents indicated their area of residence, i.e. the suburb, to confirm that they resided in the Tshwane Metropolitan area. For this investigation, the geographic area was divided into five categories for the purpose of data collection, in an attempt to include a diverse sample in terms of socioeconomic status. Inevitably, certain geographic areas were more difficult to reach by the field workers, indicating a smaller representation of respondents in two of the northern regions of Tshwane.

5.3 RESULTS AND DISCUSSION

Results obtained from the data gathered in section A1.1 to A1.3 in the questionnaire are relevant, and are presented and discussed according to the objectives of the study.

5.3.1 Predominant consumer decision-making styles across the different product categories (Objective 1)

Exploratory factor analysis (EFA) was used to distinguish consumers' decision-making styles per product category and to identify the items relating to each factor. The Statistical Package for the Social Sciences (SPSS) was employed to perform the EFA, specifically Principal Axis Factoring, using an Oblimin rotation with Kaiser Normalisation. Factor loadings, represented by the relationship coefficients between the factors and the variables, equal to or greater than 0.33, and were considered acceptable for the purpose of the analysis (Yong & Pearce, 2013; Babbie, 2012:484; Fricker, Kulzy & Appleget, 2012). The subsequent outcome of the EFA procedure provided a five-factor extraction compared to the original eight factors for each product category. These factors were labelled according to the items of each factor. It is important to note that the EFA procedure was done on half of the sample only (n = 857), as the other half was reserved for confirmatory factor analysis (CFA), which will be reported on in a subsequent publication. This study settled on the outcomes of the EFA procedure for further analyses as it was considered appropriate for reporting on a Master's degree level.

5.3.1.1 Major household appliances

5.3.1.1.1 Factor structure: MHA

A clarification of the factors in terms of their content is presented in Table 5.2.

TABLE 5.2: STRUCTURE MATRIX FOR DECISION-MAKING STYLES FOR MAJOR HOUSEHOLD APPLIANCES

	F1	F2	F6	F4	F5
V52: Major Appliances – To me, the higher the price of the product, the better the quality	**0.670**	0.278	0.021	0.092	-0.196
V58: Major Appliances – The more expensive brands are usually my choice	**0.639**	0.380	0.046	0.065	-0.279
V61: Major Appliances – I prefer buying the bestselling brands	**0.622**	0.189	0.123	0.234	-0.302
V86: Major Appliances – I consider the most advertised brands as very good choices	**0.542**	0.234	-0.007	0.279	-0.107
V67: Major Appliances – I prefer well-known brands	**0.540**	0.180	0.118	0.126	-0.424
V54: Major Appliances – I keep my home up-to-date with the changing appliances trends	0.445	**0.676**	0.045	0.220	-0.139
V74: Major Appliances – I usually have one or more appliances in my home that represent new product trends	0.378	**0.572**	0.247	0.122	-0.171
V66: Major Appliances – Purchasing modern appliances is important to me	0.504	**0.570**	0.114	0.158	-0.258
V73: Major Appliances – I enjoy shopping just for the fun of it	0.181	**0.538**	0.446	0.225	-0.001
V69: Major Appliances – I am impulsive when purchasing major appliances	0.278	**0.525**	-0.273	0.433	0.168
V81: Major Appliances – I really don't give my purchases much thought	0.154	**0.518**	-0.305	0.328	0.341
V50: Major Appliances – Shopping for appliances is an enjoyable activity for me	0.203	**0.425**	0.369	0.156	-0.302
V70r*: Major Appliances – Shopping is not a pleasant activity to me	-0.004	0.070	**0.645**	-0.120	-0.141
V82r*: Major Appliances – Shopping around in different stores wastes my time	-0.038	-0.134	**0.517**	-0.149	-0.219
V75: Major Appliances – It's fun and exciting to buy new appliances	0.223	0.463	**0.512**	0.178	-0.297
V64r*: Major Appliances – I do not spend much time on shopping trips	0.093	0.056	**0.508**	-0.125	-0.156
V84: Major Appliances – There are so many brands to choose from that I often feel confused	0.136	0.158	-0.138	**0.705**	0.055
V68: Major Appliances – All the information provided on different appliances confuses me	0.198	0.179	-0.150	**0.635**	0.036
V77: Major Appliances – Sometimes it's hard to choose where (which stores) to shop	0.141	0.228	-0.047	**0.575**	-0.058
V63: Major Appliances – The more I learn about household appliances, the harder it seems to choose the best	0.186	0.141	-0.004	**0.557**	-0.090
V65: Major Appliances – I often make careless purchases I later wish I had not	0.154	0.451	-0.203	**0.473**	0.208
V59: Major Appliances – I usually try to buy the best overall quality	0.272	-0.025	0.216	-0.017	**-0.712**
V56: Major Appliances – I take the time to shop carefully for the appliances that will suit my needs best	0.125	0.015	0.255	-0.008	**-0.677**
V49: Major Appliances – When it comes to purchasing household appliances, I try to get the very best product	0.289	0.084	0.175	-0.050	**-0.638**
V85: Major Appliances – Getting very good quality appliances is very important to me	0.288	-0.026	0.134	0.072	**-0.621**
V71: Major Appliances – My standards for the appliances I buy are very high	0.321	0.129	0.058	-0.005	**-0.538**
V60: Major Appliances – I make an effort to find the best value for money	0.053	-0.134	0.177	0.040	**-0.463**
Mean	3.25	2.75	3.11	2.82	3.89
Standard deviation	0.75	0.71	0.76	0.75	0.63
% Variance explained	19.42	13.63	3.54	6.20	4.41
Cronbach's Alpha	0.74	0.75	0.60	0.72	0.81

***r= Reverse-coded items**

The factors were labelled in accordance with their content, namely:

Factor 1: Heuristics (5 items)

Factor 2: Novelty/Impulsive (7 items)

Factor 4: Confused by over-choice (5 items)

Factor 5: Perfectionism (7 items)

Factor 6: Enjoyment (4 items)

The respective Cronbach's Alpha values of the factors (0.74; 0.75; 0.72; 0.81; 0.60) illustrated internal consistency within the factors (Field & Miles, 2010:583), and thus confirmed that further analyses could be done. The mean values for the different factors varied between *M* = 2.82 and *M* = 3.89 (Max = 5). The percentage variance explained amounted to 47.20, which is held to be an acceptable percentage in terms of explaining variance in the data (Beavers, Lounsbury, Richards, Huck, Skolits & Esquivel, 2013). Standard deviations were acceptable in the range of 0.63 to 0.76 (Salkind, 2014:237-238).

Compared to the original Sproles and Kendall (1986) Consumer Style Inventory, some factors changed slightly, including items from factors that were deleted during EFA, as discussed in the subsequent section(s).

Factor 1: Heuristics

Factor 1 of this study is associated with the original Factor 2 of the Sproles and Kendall (1986) scale (Brand consciousness), and retained the following five of the original items:

- The higher the price of the product, the better the quality (V52)
- The more expensive brands are usually my choice (V58)
- I prefer buying the bestselling brands (V61)
- I prefer well-known brands (V67)
- I consider the most advertised brands as good choices (V86)

The items indicate consumers' association of characteristics such as price and brand with indicating quality, therefore their use of heuristics when purchasing major household appliances. Generally, heuristics pertain to "a rule of thumb" or a good guide or "shortcut" to decision-making, rather than going through an extensive product evaluation (Del Campo, Pauser, Steiner & Vetschera, 2016). In the product type of major household appliances, a heuristic consumer decision-making style would relate to those customers who over time have arrived at the conclusion that well-known, well-advertised brands (within their frame of reference), and more expensive products are of better quality and pose lower risk to the purchaser. Using heuristics is a recognised problem solving strategy when dealing with certain purchase situations. The goal of

heuristics is to develop a simple process that will deliver fairly accurate outcomes over time (Albar & Jetter, 2009).

Factor 2: Novelty/Impulsive

Factor 2 of this study contains seven items, combining three from the original Factor 3 of the Sproles and Kendall (1986) scale (Novelty/fashion consciousness), namely:

- I keep my home up-to-date with the changing appliance trends (V54)
- Purchasing modern appliances is important to me (V66)
- I usually have one or more appliances in my home that represent new product trends (V74)

with four additional items, namely:

- Shopping for appliances is an enjoyable activity for me (V50) from Factor 4: Recreational, hedonistic shopping consciousness
- I am impulsive when purchasing major appliances (V69) from Factor 6: Impulsiveness/carelessness
- I enjoy shopping just for the fun of it (V73) from Factor 4: Recreational, hedonistic shopping consciousness
- I really don't give my purchases much thought (V81) – Reversed question from Factor 1: Perfectionist or high quality consciousness

The final content suggests a need to stay abreast of trends and a subsequent level of impulsiveness, hence the factor was labelled accordingly.

Factor 4: Confused by over-choice

Factor 4 of this study retained four items from the original Factor 7 of the Sproles and Kendall (1986) scale (Confused by over over-choice):

- The more I learn about household appliances the harder it seems to choose the best (V63)
- All the information provided on different appliances confuses me (V68)
- Sometimes it's hard to choose where (which stores) to shop (V77)
- There are so many brands to choose from that I often feel confused (V84)

An additional item was derived from the original Sproles and Kendall (1986) scale Factor 6: Impulsiveness/carelessness, namely:

- I often make careless purchases I later wish I had not (V65)

The item content acknowledges consumers' apparent confusion due to an overload of options and associated doubt which clouds their purchasing decisions.

Factor 5: Perfectionism

Factor 5 of this study is derived from the original Factor 1: Perfectionist or high quality consciousness, of the Sproles and Kendall (1986) scale, where the following five of the original items were retained:

- When it comes to purchasing household appliances, I try to get the very best product (V49)
- I make a special effort to choose the very best quality appliances (V55)
- I usually try to buy the best overall quality (V59)
- My standards for the appliances I buy are very high (V71)
- Getting very good quality appliances is very important to me (V85)

Two items were diverted from Factors 5 and 6 of the original Sproles and Kendall (1986) scale to this factor:

- I make an effort to find the best value for money (V60) from Factor 5: Price and "value for money" shopping consciousness
- I take the time to shop carefully for the appliance that will suit my needs best (V56) – Reversed question from Factor 6 (Impulsiveness/carelessness)

The item content of this factor linked characteristics of the perfectionistic, quality-conscious as well as the price and "value for money" shopping consciousness decision-making style, implying a perfectionistic approach with pertinent demands in terms of quality and good value for money.

Factor 6: Enjoyment

Factor 6 of this study is derived from Factor 4 of the Sproles and Kendall (1986) scale (Recreational, hedonistic shopping consciousness), including the following three of the original items:

- I do not spend much time on shopping trips – reversed question for recreational, hedonistic shopping consciousness (V64)
- Shopping is not a pleasant activity to me – reversed question for recreational, hedonistic shopping consciousness (V70)
- Shopping around in different stores wastes my time – reversed item for recreational, hedonistic shopping consciousness (V82)

All three these items were formulated negatively, indicating petulance rather than enjoyment. An additional item (positively stated) diverted from the original Factor 3: Novelty/fashion consciousness:

- It's fun and exciting to buy new appliances (V75)

This factor provided opportunity to acknowledge the fact that not all consumers necessarily enjoy shopping and that a petulant approach could be real for some consumers, i.e. where a consumer derives no pleasure from the act of shopping for major appliances. In this study, the negative items were reverse-coded and the means were used to interpret the decision-making style as either positive (enjoyment) or negative (petulance).

5.3.1.1.2 Factor means: MHA

For the purpose of interpretation of the means (*M*) of the respective factors (decision-making styles), the following applied:

M≥4: Strong/ predominant consumer decision-making style

M≥3.5<4: Fairly strong decision-making style

M≥2.5<3.5: Moderately strong consumer decision-making style

M<2.5: Weak consumer decision-making style

Means for the five factors are presented in Figure 5.1:

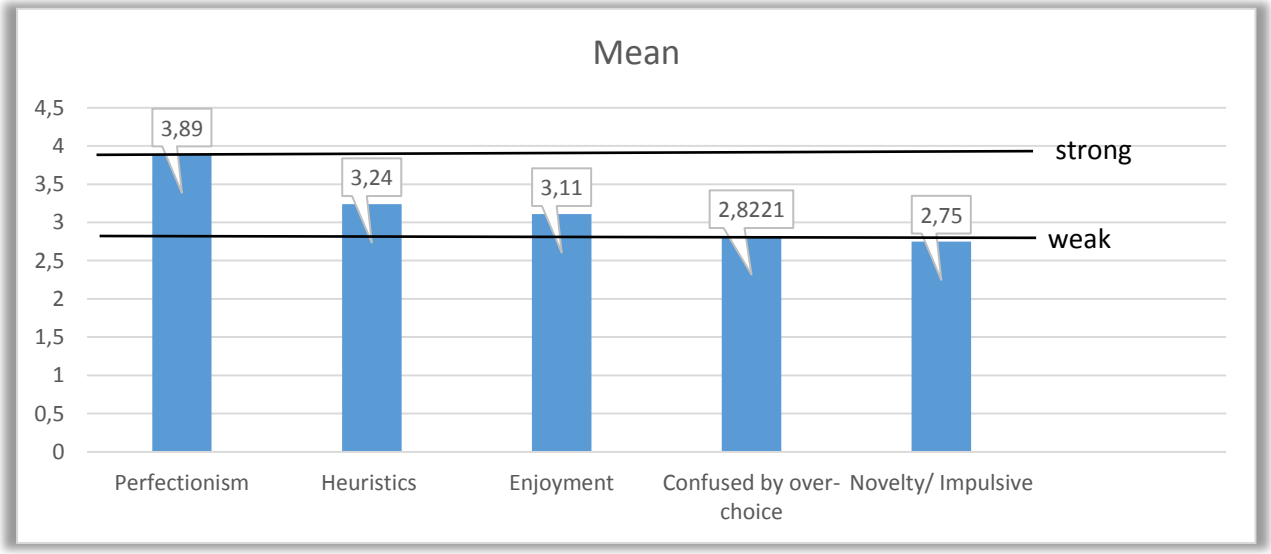

FIGURE 5.1: A VISUAL PRESENTATION OF THE PREVALENCE OF CONSUMER DECISION-MAKING STYLES FOR MHA

Based on the factor means, the **predominant consumer decision-making style, and one that is fairly strong** in directing MHA purchases, is ***perfectionism*** – indicating that consumers' consideration of quality standards, performance and good value for money are highly relevant

during the purchasing process, as is also indicated in previous studies (Potgieter *et al*., 2013; Sproles & Kendall, 1986). Generally, therefore, when purchasing MHA, consumers will strive to purchase the best quality at a price that is within the means they can afford, and will take their time to carefully evaluate different products, comparing aspects such as attributes, warranties, pricing and peer review information (Potgieter *et al*., 2013; Sproles & Kendall, 1986). As the price of major household appliances represents significant risk to the consumer if the product does not meet the expectations of quality and performance, consumers tend to increase the scope and depth of investigation into these products in order to mitigate the risk of a product failing a consumer's expected standards of quality and performance (Erasmus *et al*., 2014).

A heuristic approach, enjoyment, and confused by over-choice are three decision-making styles that seem to be **moderately strong/ moderately relevant** when purchasing MHA ($M \geq 2.75 < 4$). A ***heuristic decision-making style*** means that consumers will rely on characteristics that instil confidence, for example well-known, well-advertised brands, as well as price (generally, higher prices suggest better quality and vice versa) and reputation, to make their decisions easier and to reduce risk perception during the decision process. This finding is consistent with prior studies (Erasmus *et al*., 2014; Potgieter *et al*., 2013; Erasmus *et al*., 2011). Consumers favouring the heuristic decision-making style would typically prefer buying bestselling brands, signifying being comforted by the fact that other people are buying the brand and trust it. The fact that ***enjoyment*** is moderately relevant, means that purchasing MHA is not entirely unpleasant. Although it is probably not pleasant to spend so much on a new appliance and to evaluate so many products in the marketplace, the venture and idea of owning new technology may, in a certain sense, create some excitement. Findings also indicate the reality that, when purchasing MHA, some consumers may experience ***confusion by over-choice***. This may be especially true for less experienced consumers such as first-time purchasers of major household appliances, and because MHA are purchased infrequently due to a relatively long service life. The diversity of products in the marketplace may further aggravate the confusion (Erasmus *et al*., 2014; Lye, Shao & Rundle-Thiele, 2005). Confused consumers may become more confused and disordered when exposed to all the detail when searching and selecting a product to purchase. For the retailer of major home appliances to attract this type of consumer, the ability to simplify and break through the clutter of information regarding features and benefits of the appliance, may be the key to secure a sale (Potgieter *et al*., 2013; Sproles & Sproles, 1990).

The **least relevant** when purchasing MHA seems to be a ***Novelty/impulsive*** decision-making style ($M \leq 2.75$). Prior studies indicate that, due to the relatively high cost and complexity of purchasing major household appliances, consumers would generally spend significant time and effort in assessing all of the available information pertaining to the various products available to them. They would therefore not be prone to submit to novel innovations and impulsive buying as

the associated risk is too high (Erasmus *et al*., 2014; Potgieter *et al*., 2013; Sproles & Kendall, 1986).

5.3.1.2 Clothing: workwear or best daywear (CL)

Data analysis for this product category followed the same principles as for the previous product category, MHA, and the results are presented in the same order.

5.3.1.2.1 Factor structure: CL

A clarification of the factors in terms of their content is presented in Table 5.3.

TABLE 5.3: STRUCTURE MATRIX FOR DECISION-MAKING STYLES FOR CLOTHING: WORKWEAR OR BEST DAYWEAR

	F5	F4	F3	F1	F2
V7: Clothing – I make a special effort to choose the very best quality products	**0.741**	0.089	0.236	-0.382	0.059
V37: Clothing – Getting very good quality clothing is very important to me	**0.676**	0.130	0.213	-0.349	-0.017
V1: Clothing – When it comes to purchasing products, I try to get the very best product	**0.649**	0.027	0.136	-0.271	-0.016
V11: Clothing – I usually try to buy the best overall quality	**0.644**	0.056	0.151	-0.293	-0.087
V23: Clothing – My standards for products I buy are very high	**0.525**	-0.042	0.137	-0.413	-0.016
V8: Clothing – I take the time to shop carefully for the product that will suit my needs best	**0.495**	0.141	0.367	-0.158	-0.075
V36: Clothing – There are so many brands to choose from that I often feel confused	0.013	**0.618**	-0.098	-0.172	0.313
V29: Clothing – Sometimes it's hard to choose where (which shops) to shop	0.038	**0.574**	0.050	-0.134	0.303
V15: Clothing – The more I learn about clothing products, the harder it seems to choose the best	0.141	**0.557**	0.026	-0.209	0.310
V20: Clothing – I tend to be confused by the product label information	-0.052	**0.402**	-0.056	-0.255	0.380
V2: Clothing – Shopping for clothing is an enjoyable activity for me	0.331	0.140	**0.742**	-0.261	0.208
V27: Clothing – It's fun and exciting to buy new clothing	0.282	0.134	**0.715**	-0.253	0.129
V22r: Clothing – Shopping is not a pleasant activity to me	0.149	-0.075	**0.689**	-0.029	-0.032
V25: Clothing – I enjoy shopping just for the fun of it	0.140	0.123	**0.605**	-0.322	0.279
V16r: Clothing – I do not spend much time on shopping trips	0.128	-0.098	**0.561**	-0.138	-0.003
V34r: Clothing – Shopping around in different stores wastes my time	0.123	-0.083	**0.503**	0.095	-0.119
V19: Clothing – I prefer well-known brands	0.341	0.154	0.174	**-0.701**	0.244
V10: Clothing – The more expensive brands are usually my choice	0.406	0.015	0.153	**-0.649**	0.181
V13: Clothing – I prefer buying the best-selling brands	0.352	0.298	0.184	**-0.617**	0.217
V38: Clothing – I consider the most advertised brands as very good choices	0.198	0.342	0.104	**-0.606**	0.266
V4: Clothing – To me, the higher the price of the product, the better the quality	0.310	0.101	0.135	**-0.502**	0.179
V17: Clothing – I often make careless purchases I later wish I had not	-0.119	0.370	-0.024	-0.155	**0.669**
V21: Clothing – I am impulsive when purchasing clothing	-0.009	0.263	0.071	-0.294	**0.666**
V32: Clothing – I should plan my shopping trips more carefully than I do	0.029	0.306	0.094	-0.163	**0.544**
Mean	3.71	2.78	3.18	2.91	2.82
Standard deviation	0.70	0.75	0.87	0.82	0.90
% Variance explained	4.54	5.86	9.80	21.13	11.98
Cronbach's Alpha	0.79	0.63	0.80	0.76	0.66

***r = Reverse-coded items**

The factors were labelled in accordance with their content, namely:

Factor 1: Heuristics (5 items)

Factor 2: Impulsive/careless (3 items)

Factor 3: Recreational (6 items)

Factor 4: Confused by over-choice (4 items)

Factor 5: Perfectionism (6 items)

The respective Cronbach's Alpha values of the factors (0.76; 0.66; 0.80; 0.63; 0.79) illustrated internal consistency within the factors (Field & Miles, 2010:583), and thus confirmed that further analyses could be done. The mean values for the different factors varied between *M* = 2.78 and *M* = 3.71 (Max = 5). The percentage variance explained amounted to 53.31, which is held to be an acceptable percentage in terms of explaining variance in the data (Beavers *et al*., 2013). Standard deviations were acceptable in the range of 0.70 to 0.90 (Salkind, 2014:237-238).

Compared to the original Sproles and Kendall (1986) Consumer Style Inventory, factors changed slightly, including items from factors that were deleted during EFA, as discussed below:

Factor 1: Heuristics

Factor 1 of this study is associated with the original Factor 2 of the Sproles and Kendall (1986) scale (Brand consciousness) and retained the following five of the original terms:

- The higher the price of the product, the better the quality (V4)
- The more expensive brands are usually my choice (V10)
- I prefer buying the bestselling brands (V13)
- I prefer well-known brands (V19)
- I consider the most advertised brands as good choices (V38)

The items indicate consumers' association of characteristics such as price and brand with a perception of quality when purchasing clothing. Generally, heuristics relates to "a rule of thumb" or a guide in which decision-making takes place with regard to the purchasing of clothing (Del Campo *et al*., 2016). Typically, a heuristics decision-making style indicates opting for well-known and highly advertised brands, while perhaps also believing that more expensive products are of superior quality and consequently pose a lower risk. The promotion and positioning of brands provide the framework for the decision making of consumers who rely on heuristics, which aims to cultivate a simple method that would deliver fairly accurate results over time (Albar & Jetter, 2009), or a relatively simple decision-making process to arrive at the desired outcome (Potgieter *et al*., 2013).

Factor 2: Impulsive/careless

Factor 2 of this study is associated with the original Factor 6 of the Sproles and Kendall (1986) scale (Impulsiveness/carelessness), and retained three of the original items:

- I often make careless purchases I later wish I had not (V17)
- I am impulsive when purchasing clothing (V21)

- I should plan my shopping more carefully than I do (V32) – reversed item from the original Factor 6 (Impulsiveness/carelessness)

An impulsive/careless approach to clothing purchases may result in post-purchase regret when the garments fail to perform as expected, for instance due to poor quality or low durability, or to the fact that in hindsight, the product did not meet a consumer's requirements (Potgieter *et al*., 2013; Sproles & Kendall, 1986).

Factor 3: Recreational

Factor 3 of this study is associated with the original Factor 4 of the Sproles and Kendall (1986) scale (Recreational, hedonistic shopping consciousness), and retained five of the original items:

- Shopping for clothing is an enjoyable activity for me (V2)
- I enjoy shopping just for the fun of it (V25)
- I do not spend much time on shopping trips (V16) – reversed item
- Shopping is not a pleasant activity to me (V22) – reversed item
- Shopping around in different stores wastes my time (V34) – reversed item

One additional item diverted to this factor from Factor 3: Novelty/fashion consciousness of the original Sproles and Kendall (1986) scale, namely:

- I do not spend much time on shopping trips (V27) – reversed item

This decision-making style indicates to what extent a consumer enjoys and embraces the shopping experience when purchasing clothing. Prior studies (O'Cass, 2004; 2000) point to the prevalence of this consumer decision-making style amongst certain age groups and income levels for this product category, and even confirm that purchasing of clothing may be a recreational activity for certain consumers (Bakewell & Mitchell, 2006).

Factor 4: Confused by over-choice

Factor 4 of this study is associated with the original Factor 7 of the Sproles and Kendall (1986) scale (Confused by over-choice), and retained the following four of the original items:

- The more I learn about clothing products, the harder it seems to choose the best (V15)
- I tend to be confused by the product label information (V20)
- Sometimes it's hard to choose where (which shops) to shop (V29)
- There are so many brands to choose from that I often feel confused (V36)

The behaviour of consumers who are confused by over-choice in the marketplace does not appear to be tempered by prior purchases, probably because fashion is not static and prior experiences are not always relevant. According to McCormick and Livett (2012), the cyclical nature of fashion dictates that a consumer's prior knowledge and information pertaining to clothing purchases are made redundant and must constantly be renewed. This constant change of new styles, fashions and clothing items, some of which share similar attributes but which may vary in quality and price, creates a platform for possible confusion.

Factor 5: Perfectionism

Factor 5 of this study is associated with the original Factor 1 of the Sproles and Kendall (1986) scale (Perfectionist or high quality consciousness), and retained five of the original items, namely:

- When it comes to purchasing products, I try to get the very best product (V1)
- I make special effort to choose the very best quality products (V7)
- I usually try to buy the best overall quality (V11)
- My standards for products I buy are very high (V23)
- Getting very good quality clothing is very important to me (V37)

One additional item was added from the original Factor 6: Impulsiveness/carelessness of the Sproles and Kendall (1986) scale, namely:

- I take the time to shop carefully for the product that will suit my needs best (V8)

A perfectionist decision-making style means that a consumer will take time to source the best quality clothing products.

5.3.1.2.2 Factor means: CL

For the purpose of the interpretations of the means (*M*) of the different factors, the following applied:

M≥4: Strong/ predominant consumer decision-making style
M≥3.5<4: Fairly strong decision-making style
M≥2.5<3.5: Moderately strong consumer decision-making style
M≤2.5: Weak consumer decision-making style

Means for the five factors are presented in Figure 5.2:

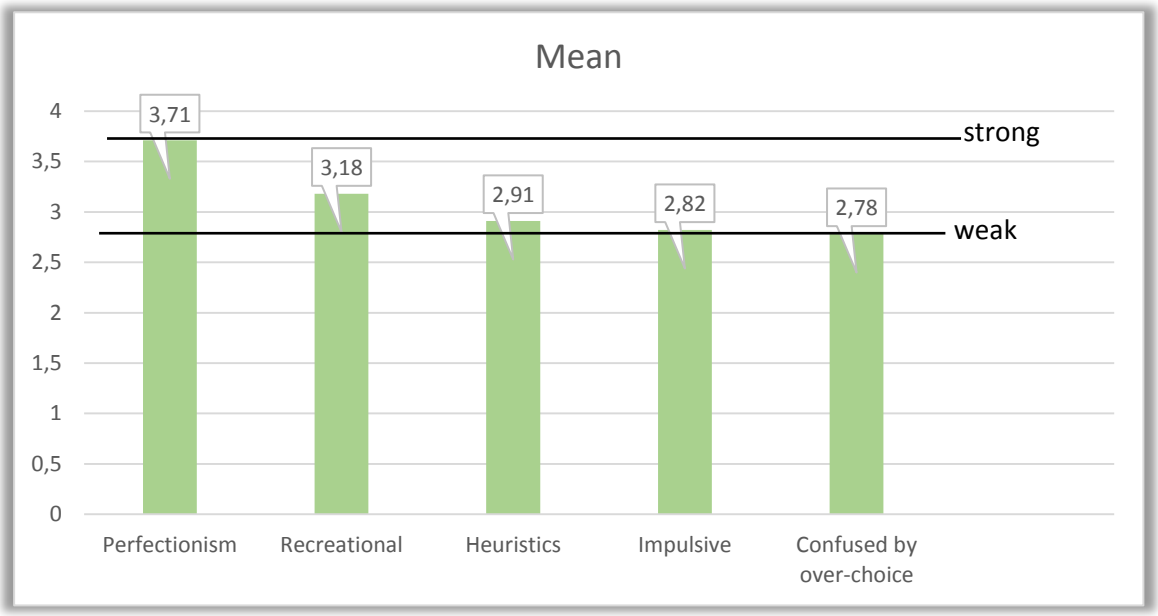

FIGURE 5.2: A VISUAL PRESENTATION OF THE PREVALENCE OF CONSUMER DECISION-MAKING STYLES FOR CLOTHING

Based on the factor means, the **predominant consumer decision-making style**, and one which is **fairly strong** in directing clothing purchases, is ***perfectionism*** – indicating a regard for product quality, good performance and good value for money (Potgieter *et al*., 2013; Sproles & Kendall, 1986). These consumers will thus strive to purchase the best quality, often at a price that is within their range of affordability, and will take time to evaluate and compare different product attributes such as durability, textile quality, pricing and peer review information (Erasmus, 2013:250). For expensive clothing, consumers tend to increase the scope and depth of investigation to mitigate risk (Erasmus *et a*l., 2014).

Decision-making styles that signify a ***recreational*** approach, the use of ***heuristics*** and ***impulsive/careless*** shopping are decision-making styles that seem to be **moderately strong/relevant** when purchasing clothing ($M \geq 2.78 < 4$). Consumers with such styles who are shopping for clothing would therefore largely enjoy the shopping venture (Potgieter *et al*., 2013). For the so-called generation Y in particular (those consumers born between 1977 and 1995), shopping is no longer regarded as a straightforward act of purchasing goods but is seen to be part of a wider recreational and social interaction (O'Cass & Choy, 2008). Consumers favouring the ***heuristic*** decision-making style rely on certain brands signifying assurance that they have proven themselves and can be trusted (Van Staden & Van Aardt, 2011). South Africa is described as an aspirational society, with brands as a means of depicting one's social status and standing (Erasmus *et al*., 2011; Van Staden & Van Aardt, 2011). Brand loyalty, an important characteristic of a heuristics decision-making style, is derived from careful learning experiences from the past purchases with positive outcomes, reinforcing specific behaviour (Potgieter *et al*., 2013; Fan &

Xiao, 1998). ***Impulsive, careless*** shoppers do not plan their shopping beforehand and are relatively blasé about how much they spend (Potgieter *et al*., 2013; Sproles & Kendall, 1986). These consumers are more susceptible to negative post-purchase evaluation as they often regret the purchase afterwards. The consumer is likely to make a purchase based on impulse, embracing any number of attributes or factors that may appeal to the consumer at the time of making the purchase, such as the right colour, right size, and right style or being on sale (Potgieter *et al*., 2013; O'Cass, 2004; Sproles & Sproles, 1990).

The **least relevant** when purchasing clothing, is the ***confused by over-choice*** decision-making style ($M \leq 2.78$), which refers to a consumer feeling confused or overwhelmed by an overly large variety when searching for an appropriate item of clothing. With clothing, this does not seem to be highly prevalent.

5.3.1.3 Groceries (GROC)

Data analysis and interpretation for this product category followed the same route as for the previous two product categories, namely MHA (5.3.1.1) and CL (5.3.1.2).

5.3.1.3.1 Factor structure: GROC

A clarification of the factors in terms of their content is presented in Table 5.4.

The factors were labelled in accordance with their content, namely:
Factor 1: Heuristics (7 items)
Factor 3: Recreational (4 items)
Factor 4: Confused by over-choice (6 items)
Factor 5: Perfectionism (7 items)
Factor 6: Enjoyment (5 items)

The respective Cronbach's Alpha values of the factors (0.80; 0.83; 0.80; 0.81; 0.65) illustrated internal consistency within the factors (Field & Miles, 2010:583), and thus confirmed that further analyses could be done. The mean values for the different factors varied between $M = 2.63$ and $M = 3.78$ (Max = 5). The percentage variance explained amounted to 42.83, which is held to be an acceptable percentage in terms of explaining variance in the data (Beavers *et al*., 2013). Standard deviations were acceptable in the range of 0.65 to 0.94 (Salkind, 2014:237-238).

TABLE 5.4: STRUCTURE MATRIX FOR DECISION-MAKING STYLES FOR GROCERIES

	F1	F5	F3	F4	F6
V106: Groceries – The more expensive brands are usually my choice	**0.665**	-0.290	-0.294	0.210	0.212
V100: Groceries – To me, the higher the price of the product, the better the quality	**0.659**	-0.242	-0.343	0.185	0.205
V109: Groceries – I prefer buying the best-selling brands	**0.652**	-0.321	-0.238	0.283	-0.032
V134: Groceries – I consider the most advertised brands as very good choices	**0.588**	-0.215	-0.249	0.280	0.170
V115: Groceries – I prefer well-known brands	**0.585**	-0.404	-0.180	0.175	0.094
V102: Groceries – I keep my home up-to-date with the changing grocery trends	**0.504**	-0.236	-0.500	0.385	0.230
V114: Groceries – Purchasing grocery products that are novel or impressive are important to me	**0.463**	-0.139	-0.455	0.427	0.222
V103: Groceries – I make a special effort to choose the very best quality groceries	0.439	**-0.736**	-0.312	0.068	-0.015
V133: Groceries – Getting very good quality grocery products is very important to me	0.283	**-0.683**	-0.080	-0.051	-0.140
V97: Groceries – When it comes to purchasing groceries (foods), I try to get the very best product	0.354	**-0.648**	-0.232	0.003	0.017
V107: Groceries – I usually try to buy the best overall quality	0.284	**-0.625**	-0.090	-0.022	-0.149
V104: Groceries – I take the time to shop carefully for the groceries that will suit my needs best	0.252	**-0.623**	-0.289	0.132	-0.175
V119: Groceries – My standards for the groceries I buy are very high	0.406	**-0.582**	-0.178	-0.010	0.070
V108: Groceries – I make an effort to find the very best value for the money	0.063	**-0.433**	-0.006	0.004	-0.228
V123: Groceries – It's fun and exciting to buy new groceries	0.330	-0.232	**-0.801**	0.202	-0.188
V98: Groceries – Grocery shopping is an enjoyable activity for me	0.359	-0.298	**-0.787**	0.222	-0.123
V121: Groceries – I enjoy shopping just for the fun of it	0.336	-0.152	**-0.728**	0.268	-0.066
V122: Groceries – I usually have one or more grocery products in my home that represent new product trends	0.400	-0.217	**-0.571**	0.288	0.048
V132: Groceries – There are so many brands to choose from that I often feel confused	0.248	0.001	-0.125	**0.733**	0.224
V111: Groceries – The more I learn about grocery products, the harder it seems to choose the best	0.302	-0.063	-0.185	**0.725**	0.229
V116: Groceries – All the information provided on different grocery products confuses me	0.245	0.032	-0.154	**0.654**	0.226
V125: Groceries – Sometimes it's hard to choose where to shop	0.277	-0.047	-0.290	**0.590**	0.212
V113: Groceries – I often make careless purchases I later wish I had not	0.256	0.008	-0.214	**0.572**	0.421
V117: Groceries – I am impulsive when purchasing groceries	0.324	0.012	-0.239	**0.511**	0.383
V129: Groceries – I really don't give my purchases much thought	0.283	0.152	-0.171	0.375	**0.571**
V101: Groceries – I shop quickly and tend to buy the first product that seems good enough	0.144	0.174	0.110	0.247	**0.520**
V112: Groceries – I do not spend much time on shopping trips	0.002	0.114	0.261	0.191	**0.487**
V118: Groceries – Grocery shopping is not a pleasant activity to me	-0.026	0.133	0.442	0.192	**0.450**
V130: Groceries – Shopping around in different stores wastes my time	0.037	0.121	0.266	0.111	**0.437**
Mean	3.00	3.78	2.96	2.63	3.00
Standard deviation	0.73	0.65	0.94	0.77	0.74
% Variance explained	22.44	3.79	8.13	5.11	3.36
Cronbach's Alpha	0.80	0.81	0.83	0.80	0.65

***r: Reverse-coded items**

Compared to the original Sproles and Kendall (1986) Consumer Style Inventory, several factors changed slightly, including items from factors that were deleted during EFA, as discussed below:

Factor 1: Heuristics

Factor 1 of this study is associated with the original Factor 2 (Brand consciousness) of the Sproles and Kendall (1986) scale, and retained the following five of the original items:

- To me the higher the price of the product, the better the quality (V100)
- To me the more expensive brands are usually my choice (V106)
- I prefer buying the bestselling brands (V109)
- I prefer well-known brands (V115)
- I consider the most advertised brands as good choices (V134)

Two additional items were included, both diverting from the original Factor 3 (Novelty/fashion consciousness), namely:

- I keep my home up-to-date with the changing grocery trends (V102)
- Purchasing grocery products that are novel or impressive is important to me (V114)

In terms of a decision-making style that relies on the use of heuristics, the important influencing variables that guide consumers' grocery purchasing decisions were found to be: price, branding and novelty and trends, which show similar results to former studies (Bandura, 2014; Koch *et al*., 2008; Carrigan & Attalla, 2001; Bettman *et al*., 1998). A consumer decision-making style that is characterised by the use of heuristics, therefore, relies on characteristics that serve as a shortcut, for example perceiving certain brands as of a better quality, rather than meticulously evaluating products. A heuristics decision-making style is an uncomplicated approach to purchasing decisions (Potgieter *et al*., 2013).

Factor 3: Recreational

Factor 3 of this study is associated with the original Factor 4 (Recreational, hedonistic shopping consciousness) of the Sproles and Kendall (1986) scale, and Factor 3 (Novel/fashion consciousness) where two of the original items were retained from each factor, namely:

- Shopping for grocery products is an enjoyable activity for me (V98) from Factor 4: Recreational, hedonistic consciousness
- I enjoy shopping just for the fun of it (V121) from Factor 4: Recreational, hedonistic consciousness

The additional items added from Factor 3: Novelty/fashion consciousness, were:

- I usually have one or more grocery products in my home that represent new product trends (V122)
- It's fun and exciting to buy new groceries (V123)

Generally, the purchasing of novel or trendsetting products enhances the recreational experience for this particular consumer. Shopping for groceries is often done at large national retailers that are situated within large shopping malls, which also provide leisure and recreational facilities such as restaurants, cinemas, and clothing products. Purchasing groceries, per se, may therefore be evaluated as part of an entire experience, rather than as the act of shopping for groceries only, and will thus be incorporated into the overall recreational experience (Thomas, Price & Schau, 2013; O'Cass & Choy, 2008; O'Cass, 2004).

Factor 4: Confused by over-choice

Factor 4 of this study is associated with the original Factor 7 (Confused by over-choice) of the Sproles and Kendall (1986) scale, and retained four of the original items, namely:

- The more I learn about grocery products, the harder it seems to choose the best (V111)
- All the information provided on different grocery products confuses me (V116)
- Sometimes it's hard to choose where to shop (V125)
- There are so many brands to choose from that I often feel confused (V132)

Two additional items from Factor 6 (Impulsiveness/carelessness) of the original Sproles and Kendall (1986) scale were added, namely:

- I often make careless purchases I often wish I had not (V113)
- I am impulsive when purchasing grocery products (V117)

A consumer who is confused by over-choice and whose confusion is not tempered by prior purchases remains feeling confused, which is stressful (Potgieter *et al*., 2013; Sproles & Sproles, 1990; Sproles & Kendall, 1986). This could instigate impulsive, careless purchasing decisions as is suggested in this investigation. Drichoutis *et al*. (2006) established that highly educated consumers are more likely to have lower involvement with food purchases, which may contribute to confusion by over-choice when they actually shop.

Factor 5: Perfectionism

Factor 5 of this study is associated with the original Factor 1 (Perfectionist or high quality consciousness) of the Sproles and Kendall (1986) scale, and retained the following five of the original items:

- When it comes to purchasing groceries (foods), I try to get the very best product (V97)
- I make a special effort to choose the very best quality groceries (V103)
- I usually try and buy the best overall quality (V107)
- My standards for the groceries I buy are very high (V119)
- Getting very good quality grocery products is very important to me (V133)

Two additional items were added from Factor 5 (Price and "value for money" shopping consciousness) and Factor 6 (Impulsiveness/carelessness) of the original Sproles and Kendall (1986) scale, namely:

- I make an effort to find the best value for money (V108) from Factor 5: Price and "value for money" shopping consciousness
- I take the time to shop carefully for the groceries that will suit my needs best (V104) from Factor 6: Impulsiveness/carelessness – reversed item

Prior research confirms that consumers' lifestyle needs influence their food purchases (Drichoustis *et al*., 2006). As an example, a consumer focused on health may attach more importance to nutritional value and perceived health benefits, resulting in a consumer who spends time and effort in sourcing good quality products (of high nutritional value), which would best suit their particular needs. Erasmus *et al*. (2011) state that consumers in a South African context are increasingly becoming materialistic and are being exposed to a greater variety of brands and products. This could lead to an increased consumption of goods, even groceries. Increasing trends towards image consciousness are leading to growth in so-called "health" foods or healthier alternatives, which are generally more expensive than standard products, attracting the higher income and higher educated consumer (Chen, Liu & Binkley, 2012).

Factor 6: Enjoyment

Factor 6 of this study is associated with the original Factor 4 (Recreational, hedonistic shopping consciousness) of the Sproles and Kendall (1986) scale, and retained three of the original items:

- I do not spend much time on shopping trips – reversed item (V112)
- Shopping is not a pleasant activity to me – reversed item (V118)
- Shopping around in different stores wastes my time – reversed item (V130)

Two additional items from Factor 1: Perfectionist or high quality consciousness consumer were added, namely:

- I shop quickly and tend to buy the first product that seems good enough – reversed item (V101)
- I really don't give my purchases much thought – reversed question (V129)

Reverse-coded items provided the opportunity to also acknowledge a petulant approach, where a consumer derives no pleasure from the act of shopping for groceries. A previous study established that highly educated consumers are more likely to have a low involvement with food. Although no conclusive evidence was produced as to why this was so, the study indicated that higher educated and consequently higher-income consumers may probably be negatively influenced by time pressure, which influences the time spent on grocery/food shopping (Drichoutis *et al*., 2006).

5.3.1.2.2 Factor means: GROC

For the purpose of the interpretations of the means (*M*) of the individual factors, the following applied:

M≥4: Strong/ predominant consumer decision-making style
M>3.5<4: Fairly strong decision-making style
M≥2.5<3.5: Moderately strong consumer decision-making style
M<2.5: Weak consumer decision-making style

Means for the five factors are presented in Figure 5.3:

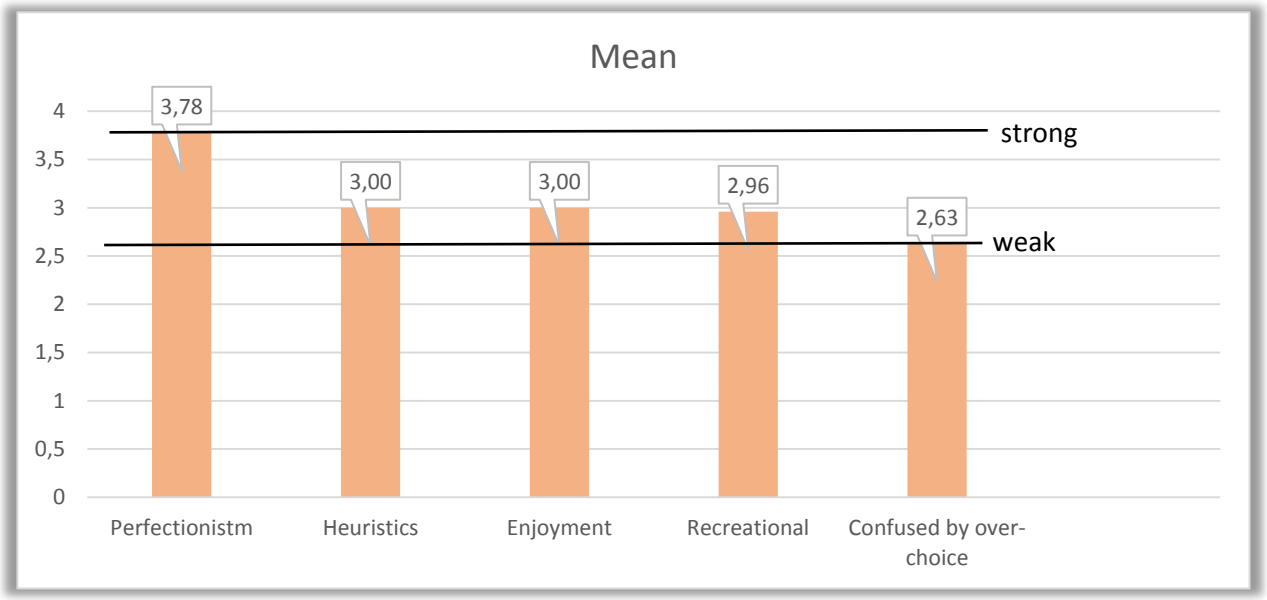

FIGURE 5.3: A VISUAL PRESENTATION OF THE PREVALENCE OF CONSUMER DECISION-MAKING STYLES FOR GROCERIES

Based on the factor means, the **predominant consumer decision-making style, and one which is fairly strong** in directing consumers' grocery purchases, is ***perfectionism*** – indicating that a large percentage of the consumers who participated in the survey regarded high quality standards and the best product as important (Thomas *et al*., 2013). In terms of the evaluation of product quality, price was also relevant (Axelson, 1986).

Decision-making styles that seem moderately relevant when purchasing groceries, are: a ***heuristic, enjoyment*** and ***recreational shopping style*** (Means≥2.63<4). When following a heuristic decision-making style, consumers would attend to well-known, extensively advertised brands, even more expensive products, to reduce perceived risk (Sproles & Sproles, 1990). Rose (1994) and Thayer (1997) support the contention that food product involvement, price, taste, nutrition and ease of preparation play an increasingly important role in the decision-making process, which provides an ideal framework for those who follow a heuristics decision-making style. They might also assume that buying bestselling brands will meet their expectations as other people are buying the brands and are trusting them. A *petulant approach* indicates lack of *enjoyment* and refers to consumers who derive little or no pleasure from the process of shopping for groceries and who might purchase essentially out of necessity (Anic, Rajh & Rajh, 2015). The reason why particular consumers might not like shopping for groceries, is that unlike clothing, which is most strongly reflective of a person's perception of themselves in terms of, inter alia, their status or position in life, groceries may be perceived as a necessity that is not socially visible for others to appreciate. However, this study has found some sense of enjoyment with most consumers (M = 3) when purchasing groceries. A ***recreational decision-making style*** suggests some time spent on/ devoted to the shopping activity. Groceries form part of a low to medium

complexity product range due to the repetitive and regular nature of the product selection process. Increasingly, however, selection of the "right" grocery products could be difficult as the product ranges are vast and because these purchases are a necessity. It is also true that the selection of the best quality grocery brands is important in enhancing the image or status of certain consumer segments and the difficulty in doing so, and spending more time in doing so, may be frustrating (Drichoutis *et al*., 2006). The findings of this study confirm some tolerance with the activity in terms of time spent.

The least relevant when purchasing groceries seems to be a ***confused by over-choice*** **decision-making style** (*M*≤2.63), indicating that, although there are many product ranges to choose from, confusion due to the plethora of brands and stores from which to choose from, is not highly prevalent. In essence, a consumer may also become confused due to too much detail that complicates a product search (Potgieter *et al*., 2013). Based on the mean (*M* = 2.63) it is however clear that confusion is commonly prevalent when purchasing groceries.

5.3.1.4 Summary of consumers' decision-making styles across the three product categories

A visual presentation of consumers' decision-making styles across the three product categories is presented in Figure 5.4. As shown, it is clear that for three of the consumer's decision-making styles, namely: *heuristics*, *confused by over-choice* and *perfectionism,* a measure of congruence exists across the three product categories. Furthermore, consumers' application of the three decision-making styles is fairly similar for the different products, i.e. ***perfectionism*** being the most pertinent decision-making style (fairly strong); followed by decision-making styles directed by a ***heuristic*** approach, and ***confused due to over-choice*** (both moderately strong).

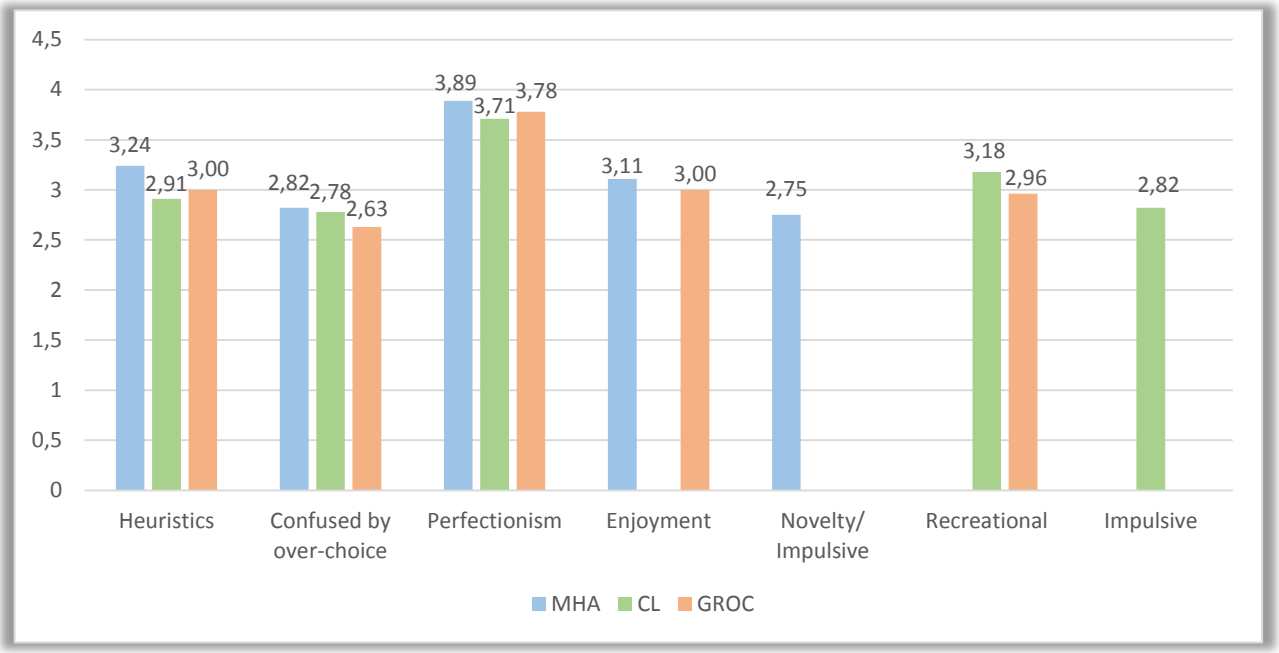

FIGURE 5.4: COMPARISON OF CONSUMERS' DECISION-MAKING STYLES ACROSS THE THREE PRODUCT CATEGORIES

Other decision-making styles were unique to certain product categories. A decision-making style that is moderately strong and only relevant to MHA is a *novelty/impulsive* approach, while a *recreational* approach that entails a consumers' time allocation to the shopping endeavour, is true for clothing as well as groceries, but not for major household appliances (probably due to the complexity and time required to appreciate all the products that are available in terms of brands, models and price ranges that cannot be associated with a recreational experience). An *impulsive* approach to purchasing is relevant for clothing, probably due to the changing nature of fashion and the difficulty to anticipate what to expect in a store. When faced with a complex purchasing decision, a consumer may eventually make an impulsive decision, realising that the product is very important (for example the need for a washing machine or refrigerator) and that the product choices are overwhelming (as confirmed through the relevance of a *confused by over-choice* decision-making style in this product category) (Amirpur & Benlian, 2015).

In conclusion, while some consumer decision-making styles are similar across the product categories, it is probable that decision-making styles can also be both product- and demographic-specific, and therefore cannot be generalised – perhaps due to differences in the complexity of products and also in the associated risk.

5.3.2 Most prevalent consumer decision-making styles in terms of consumers' demographic characteristics across the three product categories (Objective 2)

5.3.2.1 Demographic differences in consumers' decision-making styles for MHA

Consumers' purchasing of major household appliances is regarded as a complex purchasing decision that entails considerable risk (Erasmus *et al*., 2014). Table 5.5 reflects the results of an investigation of consumers' decision-making styles in this product category across different demographic subsets of the sample, with the intention to identify the most pertinent decision-making styles within a specific demographic category and to determine whether this would differ for different demographic subcategories.

TABLE 5.5: DEMOGRAPHIC DIFFERENCES IN CONSUMER DECISION-MAKING STYLES (MHA)

	Factor	Category	Mean	SD	n	p-value
Gender	Heuristics	Male	3.29	0.70	283	0.21
		Female	3.22	0.76	599	
		Total	3.24	0.75	882	
	Novelty/impulsive	Male	2.74	0.69	283	0.86
		Female	2.75	0.72	599	
		Total	2.74	0.71	882	
	Confused by over-choice	Male	2.75	0.74	283	**0.03**
		Female	2.86	0.75	599	
		Total	2.82	0.75	882	
	Perfectionism	Male	3.91	0.62	283	0.55
		Female	3.88	0.63	599	
		Total	3.89	0.63	882	
	Enjoyment	Male	2.99	0.75	283	**0.00**
		Female	3.17	0.76	599	
		Total	3.11	0.76	882	
Age	Heuristics	25-40 years	3.34	0.73	574	**0.00**
		41 years & older	3.06	0.73	310	
		Total	3.24	0.75	884	
	Novelty/impulsive	25-40 years	2.85	0.75	574	**0.00**
		41 years & older	2.56	0.71	310	
		Total	2.75	0.71	884	
	Confused by over-choice	25-40 years	2.83	0.75	574	0.72
		41 years & older	2.81	0.75	310	
		Total	2.82	0.75	884	
	Perfectionism	25-40 years	3.89	0.63	574	0.69
		41 years & older	3.90	0.62	310	
		Total	3.89	0.63	884	
	Enjoyment	25-40 years	3.18	0.77	574	**0.00**
		41 years & older	2.98	0.73	310	
		Total	3.11	0.76	884	

TABLE 5.5: DEMOGRAPHIC DIFFERENCES IN CONSUMER DECISION-MAKING STYLES (MHA) *(Continued)*

	Factor	Category	Mean	SD	n	p-value
Education level	Heuristics	Grades 1-12	3.21	0.78	250	0.68
		Grade 12 + dipl./degree	3.26	0.77	410	
		Postgraduate	3.23	0.66	219	
		Total	3.24	0.75	879	
	Novelty/impulsive	Grades 1-12	2.83	0.75	250	**0.00**
		Grade 12 + dipl./degree	2.77	0.67	410	
		Postgraduate	2.61	0.71	219	
		Total	2.75	0.71	879	
	Confused by over-choice	Grades 1-12	2.94	0.74	250	**0.01**
		Grade 12 + dipl./degree	2.79	0.74	410	
		Postgraduate	2.76	0.77	219	
		Total	2.82	0.75	879	
	Perfectionism	Grades 1-12	3.84	0.65	250	0.33
		Grade 12 + dipl./degree	3.90	0.63	410	
		Postgraduate	3.92	0.59	219	
		Total	3.89	0.62	879	
	Enjoyment	Grades 1-12	3.03	0.75	250	0.16
		Grade 12 + dipl./degree	3.14	0.78	410	
		Postgraduate	3.13	0.74	219	
		Total	3.11	0.76	879	
Population group	Heuristics	White	3.20	0.71	618	0.06
		Black	3.33	0.79	203	
		Other	3.35	0.93	62	
		Total	3.24	0.75	883	
	Novelty/impulsive	White	2.66	0.71	618	**0.00**
		Black	2.95	0.67	203	
		Other	2.94	0.64	62	
		Total	2.75	0.71	883	
	Confused by over-choice	White	2.80	0.73	618	0.26
		Black	2.89	0.79	203	
		Other	2.85	0.79	62	
		Total	2.82	0.75	883	
	Perfectionism	White	3.89	0.60	618	0.49
		Black	3.93	0.68	203	
		Other	3.83	0.72	62	
		Total	3.89	0.63	883	
	Enjoyment	White	3.08	0.76	618	0.15
		Black	3.19	0.77	203	
		Other	3.16	0.73	62	
		Total	3.11	0.76	883	

TABLE 5.5: DEMOGRAPHIC DIFFERENCES IN CONSUMER DECISION-MAKING STYLES (MHA) *(Continued)*

	Factor	Category	Mean	SD	n	p-value
Income level	Heuristics	Less than R10000	3.27	0.77	226	0.33
		R10000-R14999	3.33	0.74	132	
		R15000-R24999	3.22	0.77	212	
		R25000 or more	3.20	0.72	302	
		Total	3.24	0.75	872	
	Novelty/impulsive	Less than R10000	2.90	0.74	226	**0.00**
		R10000-R14999	2.86	0.69	132	
		R15000-R24999	2.71	0.64	212	
		R25000 or more	2.61	0.72	302	
		Total	2.75	0.71	872	
	Confused by over-choice	Less than R10000	3.00	0.79	226	**0.00**
		R10000-R14999	2.88	0.71	132	
		R15000-R24999	2.80	0.71	212	
		R25000 or more	2.67	0.72	302	
		Total	2.82	0.75	872	
	Perfectionism	Less than R10000	3.84	0.68	226	**0.03**
		R10000-R14999	3.87	0.61	132	
		R15000-R24999	3.84	0.62	212	
		R25000 or more	3.98	0.58	302	
		Total	3.89	0.63	872	
	Enjoyment	Less than R10000	3.12	0.74	226	0.88
		R10000-R14999	3.15	0.81	132	
		R15000-R24999	3.11	0.78	212	
		R25000 or more	3.09	0.75	302	
		Total	3.11	0.76	872	

Firstly, a MANOVA test (Wilk's Lambda) was performed on the data in order to determine whether any significant differences existed within demographic categories in terms of their decision styles when purchasing MHA.

5.3.2.1.1 Gender differences

Table 5.5 reveals that *perfectionism* is the **most pertinent,** and a **fairly strong consumer decision style** for men as well as women ($M \geq 3.89$). The **least pertinent consumer decision style** for both men and women, when purchasing MHA ($M \leq 2.74$), is a *novelty/impulsive* decision-making style. The results indicate that for MHA there are no significant gender differences in consumers' application of a *heuristic approach,* a *novelty/impulsive* style, or a *perfectionistic* decision-making style.

Significant gender differences are evident only in terms of two of the five decision-making styles, namely *confused by over-choice* ($p = 0.03$); and *enjoyment* ($p = 0.00$). A *confused by over-choice* decision-making style, although only moderately strong ($M > 2.5 < 3.5$) for both men and women, is significantly more prevalent among females. Similarly, a decision-making style that reflects *enjoyment* is significantly more prevalent for females ($M = 3.17$) compared to their male counterparts ($M = 2.99$), and for both, this decision-making style is moderately strong

(*M*>2.5<3.5). This means that females' decision-making behaviour when purchasing MHA would reflect measures to overcome their confusion, for example relying on trusted brand names and/or higher price as reflective of quality and reliability (Rikhotso, 2004). Although confused, females nevertheless enjoy the shopping experience and would for example, discuss options with friends and family or even interact more extensively with sales personnel in order to not become totally confused in the purchasing process and perhaps become stressed and panic struck (Rikhotso, 2004).

5.3.2.1.2 Age differences

As indicated in Table 5.5, *perfectionism* is the **most pertinent consumer decision-making style**, irrespective of the age category, and for both men and women ($M \geq 3.89$). Overall, the **least pertinent consumer decision-making style** is *novelty/impulsive* ($M \leq 2.75$). However, for the younger consumers (≤40 years), *confused by over-choice* appears to be the least pertinent shopping style.

A Wilks's Lambda t-test detected significant differences between the two broad age categories, namely ≤40 years, i.e. the Millennials, versus the older consumers, within three of the five consumer decision-making styles ($p<0.05$), namely for decision-making styles dominated by use of *heuristics* ($p = 0.00$); a *novelty/impulsive* approach ($p = 0.00$), and *enjoyment* ($p = 0.00$). Interestingly, all three of these consumer decision-making styles were significantly more pertinent among the younger consumers. Therefore, this age group that is less experienced in this product category, is significantly more inclined to:

- use a decision-making style dominated by the use of heuristics (e.g. brand name and price as an indication of quality)
- be persuaded by novelty/impulsiveness that may be typical of less experienced consumers who do not have an experience framework to direct their decisions
- experience enjoyment, which indicates that they do not necessarily feel intimidated by the purchase

Again, these decision-making styles are moderately strong, which explains their pertinence compared to *perfectionism,* which is probably negating the other decision-making styles to some extent. More expensive and complex products such as MHA generally also require of consumers to employ a higher cognitive effort. This may explain why older consumers with more product-related experience may find the process of purchasing MHA less complicated than a younger, more inexperienced consumer (Jobber, 2010:123).

The results indicate that differences in the consumer decision-making styles are not significantly different for younger and older consumers' application of a *confused by over-choice* decision-making *style*, or a *perfectionistic* approach when purchasing MHA. An important finding, however, is that irrespective of how old consumers are, a perfectionistic approach is the most pertinent decision-making style for this product category ($M \geq 3.89$).

5.3.2.1.3 Education level differences

As three level of education categories were specified, a MANOVA test (Wilks's Lambda) was performed on the data to determine possible significant differences among the different educational level categories when purchasing MHA. This was followed by a post hoc Bonferroni test, of which the details are presented in Table 5.6 to specify the differences.

TABLE 5.6: POST HOC BONFERRONI TEST (EDUCATION LEVEL)

Factor	Level of education		Mean difference	Std. error	p-value	95% Confidence level	
	Categories of analysis	Questionnaire categories				Lower Bound	Higher Bound
Novelty/ Impulsive	Grade 1 to 12	Grade 12 & diploma or degree	0.06	0.06	0.87	-0.08	0.20
		Post-graduate	0.22	0.07	**0.00**	0.07	0.38
	Grade 12 & diploma or degree	Grade 1 to 12	-0.06	0.06	0.87	-0.20	0.08
		Post-graduate	0.16	0.06	**0.02**	0.02	0.30
	Postgraduate	Grade 1 to 12	-0.22	0.07	**0.00**	-0.38	-0.07
		Grade 12 & diploma or degree	-0.16	0.06	**0.02**	-0.30	-0.02
Confused by over-choice	Grade 1 to 12	Grade 12 & diploma or degree	0.15	0.06	**0.03**	0.01	0.30
		Post-graduate	0.19	0.07	**0.02**	0.02	0.35
	Grade 12 & diploma or degree	Grade 1 to 12	-0.15	0.06	**0.03**	-0.30	-0.01
		Post-graduate	0.03	0.06	1.00	-0.12	0.18
	Postgraduate	Grade 1 to 12	-0.17	0.07	**0.02**	-0.35	-0.02
		Grade 12 & diploma or degree	-0.03	0.06	1.00	-0.18	0.12

The results indicate that, when purchasing MHA, *perfectionism* is fairly strong/ pertinent, and is the **most pertinent consumer decision-making style** across all the level of education categories ($M \geq 3.89$). The **least pertinent consumer decision-making style** across all level of education categories is a *novelty/impulsive* approach ($M \leq 2.75$). Significant differences were confirmed for two decision-making styles within the level of education categories, namely *novelty/impulsive* and *confused by over-choice* ($p<0.05$), based on a post hoc Bonferroni test, as shown in Table 5.6.

- N*ovelty/impulsive* is the least prevalent decision-making style for consumers in the highest level of education category, and this decision-making style is significantly more pertinent ($p<0.05$) for consumers in the lowest level of education group (i.e. ≤Grade 12: M

= 2.83) compared to consumers with a postgraduate qualification (*M* = 2.61). Similarly, those with a degree or diploma demonstrated *novelty/impulsive* significantly more than (p<0.05) the highest level of education group.

- With respect to *confusion by over-choice*, the least educated consumers (≤Grades 12: *M* = 2.94) demonstrate this decision-making style significantly more than consumers who have higher education levels, i.e. with a degree or diploma (*M* = 2.79) as well as those with a postgraduate qualification (*M* = 2.76). In all cases, this decision-making style is moderately relevant and should therefore be acknowledged as a way to cope with complex purchasing decisions. The difference between consumers who possess post-secondary school and postgraduate qualifications was not significant (p>0.05).

The results suggest that one's level of education has a major influence on the consumer decision-making style that is employed when dealing with more complex purchasing decisions such as MHA (Erasmus *et al*., 2014). Since *impulsiveness* and *confusion by over-choice* are typically associated with non-adaptive learning styles, and also with people who struggle to learn, this suggests that consumers who have trouble engaging in a decision task such as proper purchase planning or information seeking, may be overwhelmed by the array of choices as well as the technical details relating to MHA. They might therefore resort to impulsive purchasing behaviour (Sproles & Sproles, 1990).

5.3.2.1.4 Population group differences

A MANOVA test (Wilks's Lambda) was performed to identify possible significant differences among the three population groups when purchasing MHA. This was followed by a post hoc Bonferroni test, of which the details are presented in Table 5.7.

TABLE 5.7: POST HOC BONFERRONI TEST (POPULATION GROUP)

Factor	Population groups		Mean difference	Std. error	p-value	95% Confidence level	
	Categories of analysis	Questionnaire categories				Lower Bound	Upper Bound
Novelty/Impulsive	White	Black	-0.29	0.06	**0.00**	-0.43	-0.16
		Other	-0.28	0.09	**0.01**	-0.50	-0.05
	Black	White	0.29	0.06	**0.00**	0.16	0.43
		Other	0.02	0.10	1.00	-0.23	0.26
	Other	White	0.26	0.09	**0.01**	0.05	0.50
		Black	-0.02	0.10	1.00	-0.26	0.23

The **most pertinent consumer decision-making style** among all population groups in this product category is *perfectionism. The* **least pertinent consumer decision style** for Whites, is *novelty/impulsive* (*M*≤2.75), while for Black (*M* = 2.89) and other population groups (*M* = 2.85), the least pertinent consumer decision style is *confused by over-choice*. Significant differences among the population groups only came to the fore for the *novelty/impulsive* decision style, with confirmation that differences between Blacks and other population groups are not significant, but that Whites are significantly less inclined (p<0.05) towards *impulsiveness* when purchasing MHA. Various reasons could be offered for this finding, for example that Whites who have had more exposure to MHA due to the socioeconomic position that prevailed prior to the new democracy in South Africa, are more experienced with ownership of major household appliances. They might therefore rather act on factual information than submit to *impulsiveness* or *novelty*. In a study by Nieftagodien and Van der Berg (2007) it was reported that Black consumers in South Africa are inspired by novel appliances because they are now increasingly involved in setting up their own permanent homes, and wish to erase an asset deficit. Subsequently their purchasing approaches may be less rational.

5.3.2.1.5 Income level differences

As four income level categories were specified, a MANOVA t-test (Wilks's Lambda) was performed to determine possible significant differences among the different income level categories when purchasing MHA. This was followed by a post hoc Bonferroni test, of which the details are presented in Table 5.8

TABLE 5.8: POST HOC BONFERRONI TEST (INCOME LEVEL)

Factor	Level of income		Mean difference	Std. error	p-value	95% Confidence level	
	Categories of analysis	Questionnaire categories				Lower Bound	Upper Bound
Novelty/Impulsive	Less than R10000	R10000-R14999	0.04	0.08	1.00	-0.16	0.25
		R15000-R24999	0.20	0.07	**0.02**	0.02	0.38
		R25000 or more	0.29	0.06	**0.00**	0.13	0.45
	R10000-R14999	Less than R10000	-0.20	0.07	**0.02**	-0.38	-0.02
		R15000-R24999	-0.16	0.08	0.27	-0.36	0.05
		R25000 or more	0.25	0.07	**0.00**	0.06	0.44
	R15000-R24999	Less than R10000	-0.20	0.07	**0.02**	0-.38	-0.02
		R10000-R14999	-0.17	0.08	0.27	-0.36	0.05
		R25000 or more	0.09	0.06	0.85	-0.07	0.26
	R25000 or more	Less than R10000	-0.29	0.06	**0.00**	-0.45	-0.13
		R10000-R14999	-0.25	0.07	**0.00**	-0.44	-0.06
		R15000-R24999	-0.09	0.06	0.85	-0.26	0.07
Confused by over-choice	Less than R10000	R10000-R14999	0.12	0.08	0.81	-0.09	0.33
		R15000-R24999	0.20	0.07	**0.02**	0.02	0.39
		R25000 or more	0.33	0.06	**0.00**	0.16	0.50
	R10000-R14999	Less than R10000	-0.12	0.08	0.81	-0.33	0.09
		R15000-R24999	0.08	0.08	1.00	-0.13	0.30
		R25000 or more	0.21	0.08	**0.04**	0.01	0.41
	R15000-R24999	Less than R10000	-0.20	0.07	**0.02**	-0.39	-0.02
		R10000-R14999	-0.08	0.08	1.00	-0.30	0.13
		R25000 or more	0.13	0.07	0.34	-0.05	0.30
	R25000 or more	Less than R10000	-0.33	0.06	**0.00**	-0.50	-0.16
		R10000-R14999	-0.21	0.07	**0.04**	-0.41	-0.01
		R15000-R24999	-0.13	0.06	0.39	-0.30	0.05
Perfectionism	Less than R10000	R10000-R14999	-0.03	0.07	1.00	-0.21	0.15
		R15000-R24999	0.00	0.06	1.00	-0.15	0.16
		R25000 or more	-0.14	0.05	0.08	-0.28	0.01
	R10000-R14999	Less than R10000	0.03	0.07	1.00	-0.15	0.21
		R15000-R24999	0.03	0.07	1.00	-0.15	0.21
		R25000 or more	-0.11	0.07	0.58	-0.28	0.06
	R15000-R24999	Less than R10000	-0.00	0.06	1.00	-0.16	0.15
		R10000-R14999	-0.03	0.07	1.00	-0.21	0.15
		R25000 or more	-0.14	0.06	0.08	-0.29	0.01
	R25000 or more	Less than R10000	0.14	0.05	0.08	-0.01	0.28
		R10000-R14999	0.11	0.07	0.58	-0.06	0.28
		R15000-R24999	0.14	0.06	0.08	-0.01	0.29

The results presented in Table 5.5 indicate that *perfectionism* is **the most pertinent consumer decision-making style** across all income level categories ($M \geq 3.89$) when purchasing MHA, while the **least pertinent consumer decision-making style** is a novelty/impulsive consumer decision style ($M \leq 2.75$).

Through MANOVA, significant differences were confirmed for three decision-making styles within the level of income categories, namely *novelty/impulsive*, *confused by over-choice* and

perfectionism (p<0.05). Based on a post hoc Bonferroni test (shown in Table 5.8) that specifies the significant differences:

- *Novelty/impulsive* is the least prevalent decision-making style for the higher income level categories. Also, *novelty/impulsive* is significantly more pertinent (p<0.05) among consumers in the lowest income group (<R10000: M = 2.90). Similarly, middle-income consumers earning R10000-R14999 monthly, are significantly more prone (p<0.05) to use a *novelty/impulsive* approach compared to the highest income group.

- With respect to a decision-making style that characterises *confusion by over-choice*, consumers in the highest income category are significantly less inclined (p<0.05) to apply this decision-making style compared to those with lower household incomes.

- In terms of *perfectionism*, the post hoc Bonferroni test was unable to specify where the significant differences among the different income levels existed. One can however deduce from the means that consumers with the highest monthly household incomes (M = 3.98) are more inclined to be perfectionistic compared to consumers who earn less than R25000 monthly. Integrating the above findings, it seems that consumers with lower incomes are more likely to act impulsively when purchasing, while higher income consumers are likely to spend time evaluating the offerings, based on quality, performance, features and suitability for purpose before making a decision to purchase a MHA (Erasmus *et al*., 2014).

5.3.2.2 Demographic differences in consumer decision-making styles for Clothing: workwear or best daywear (CL)

Consumers' purchasing of clothing is regarded as a reasonably complex purchasing decision that entails moderate risk (Erasmus *et al*., 2014). Table 5.9 reflects the results of an investigation of consumers' decision-making styles in this product category across different demographic subsets of the sample, with the intention to identify the most pertinent decision-making styles within a demographic category and to determine possible significant differences among subsets of the data.

A MANOVA test (Wilk's Lambda) was performed to determine whether any significant differences existed within the demographic categories in terms of their decision-making styles when purchasing clothing. An indication of significant differences (p<0.05) was followed by a post hoc Bonferroni test to specify the differences.

TABLE 5.9: DEMOGRAPHIC DIFFERENCES IN CONSUMER DECISION-MAKING STYLES (CL)

	Factor	Demographics	Mean	SD	n	p-value
Gender	Heuristics	Male	2.97	0.75	283	0.13
		Female	2.88	0.84	599	
		Total	2.90	0.81	882	
	Impulsive/ careless	Male	2.74	0.86	283	0.07
		Female	2.86	0.91	599	
		Total	2.82	0.90	882	
	Recreational	Male	2.85	0.85	283	**0.00**
		Female	3.33	0.83	599	
		Total	3.18	0.87	882	
	Confused by over-choice	Male	2.73	0.70	283	0.18
		Female	2.80	0.77	599	
		Total	2.78	0.75	882	
	Perfectionism	Male	3.69	0.70	283	0.57
		Female	3.72	0.70	599	
		Total	3.71	0.70	882	
Age	Heuristics	25-40 years	3.03	0.81	574	**0.00**
		41 years & older	2.68	0.77	310	
		Total	2.91	0.82	884	
	Impulsive/ careless	25-40 years	2.87	0.88	574	**0.04**
		41 years & older	2.74	0.94	310	
		Total	2.82	0.90	884	
	F3: Recreational	25-40 years	3.29	0.88	574	**0.00**
		41 years & older	2.98	0.79	310	
		Total	3.18	0.87	884	
	F4: Confused by over-choice	25-40 years	2.77	0.71	574	0.51
		41 years & older	2.80	0.69	310	
		Total	2.78	0.70	884	
	F5: Perfectionism	25-40 years	3.74	0.77	574	0.08
		41 years & older	3.65	0.73	310	
		Total	3.71	0.76	884	
Education level	Heuristics	Grades 1-12	2.94	0.78	250	0.38
		Grade 12 + dipl./degree	2.91	0.84	410	
		Postgraduate	2.84	0.79	219	
		Total	2.90	0.81	879	
	Impulsive/ careless	Grades 1-12	2.92	0.93	250	0.14
		Grade 12 + dipl./degree	2.80	0.86	410	
		Postgraduate	2.76	0.93	219	
		Total	2.82	0.90	879	
	Recreational	Grades 1-12	3.08	0.85	250	0.06
		Grade 12 + dipl./degree	3.25	0.86	410	
		Postgraduate	3.15	0.90	219	
		Total	3.18	0.87	879	
	Confused by over-choice	Grades 1-12	2.95	0.77	250	**0.00**
		Grade 12 + dipl./degree	2.72	0.74	410	
		Postgraduate	2.70	0.71	219	
		Total	2.78	0.75	879	
	Perfectionist	Grades 1-12	3.68	0.75	250	0.76
		Grade 12 + dipl./degree	3.72	0.69	410	
		Postgraduate	3.70	0.67	219	
		Total	3.71	0.70	879	

TABLE 5.9: DEMOGRAPHIC DIFFERENCES IN CONSUMER DECISION-MAKING STYLES (CL) *(Continued)*

	Factor	Demographics	Mean	SD	n	p-value
Population level	Heuristics	White	2.83	0.77	618	**0.00**
		Black	3.13	0.86	203	
		Other	2.93	0.93	62	
		Total	2.91	0.82	883	
	Impulsive/ careless	White	2.75	0.91	618	**0.00**
		Black	3.00	0.87	203	
		Other	3.01	0.84	62	
		Total	2.82	0.90	883	
	Recreational	White	3.11	0.90	618	**0.00**
		Black	3.37	0.76	203	
		Other	3.19	0.71	62	
		Total	3.18	0.87	883	
	Confused by over-choice	White	2.74	0.70	618	**0.02**
		Black	2.82	0.87	203	
		Other	3.00	0.73	62	
		Total	2.78	0.75	883	
	Perfectionism	White	3.66	0.66	618	**0.00**
		Black	3.89	0.75	203	
		Other	3.55	0.82	62	
		Total	3.71	0.70	883	
Income level	Heuristics	Less than R10000	3.00	0.84	226	**0.04**
		R10000-R14999	3.01	0.84	132	
		R15000-R24999	2.84	0.80	212	
		R25000 or more	2.84	0.79	302	
		Total	2.91	0.82	872	
	Impulsive/ careless	Less than R10000	2.99	0.87	226	**0.00**
		R10000-R14999	2.88	0.91	132	
		R15000-R24999	2.83	0.89	212	
		R25000 or more	2.68	0.90	302	
		Total	2.83	0.90	872	
	Recreational	Less than R10000	3.28	0.80	226	**0.00**
		R10000-R14999	3.37	0.92	132	
		R15000-R24999	3.19	0.87	212	
		R25000 or more	3.03	0.86	302	
		Total	3.18	0.86	872	
	Confused by over-choice	Less than R10000	2.98	0.80	226	**0.00**
		R10000-R14999	2.71	0.76	132	
		R15000-R24999	2.79	0.72	212	
		R25000 or more	2.64	0.69	302	
		Total	2.78	0.75	872	
	Perfectionism	Less than R10000	3.75	0.76	226	0.73
		R10000-R14999	3.66	0.73	132	
		R15000-R24999	3.71	0.68	212	
		R25000 or more	3.70	0.66	302	
		Total	3.71	0.70	872	

5.3.2.2.1 Gender differences

P*erfectionism* stood out as **the most pertinent consumer decision-making style** for both men and women ($M \geq 3.71$). The **least pertinent consumer decision-making style** – irrespective of gender – is *confused by over-choice* ($M \leq 2.78$). No significant gender differences could be confirmed for consumers' application of a *heuristic approach; impulsive/careless; confused by over-choice* or *perfectionistic* consumer decision-making styles.

Significant differences were confirmed for only one of the five decision-making styles, namely for the *recreational* approach ($p = 0.00$), which was significantly more prevalent among females, although for both men and women this decision-making style is only moderately strong ($M > 2.5 < 3.5$). For females, the act of purchasing clothing seems to be a recreational activity, with not all purchases being planned, and the process may entail browsing around in several shops, trying on various different styles of clothing before ultimately making the decision to buy a particular product (Wesley *et al*., 2006). These findings broadly correlate with prior studies concerning gender differences relating to clothing products (Bakewell & Mitchell, 2006; Mitchell & Walsh, 2004).

5.3.2.2.2 Age differences

As indicated in Table 5.9, *perfectionism* is the **most pertinent consumer decision-making style** irrespective of the age category ($M \geq 3.71$). **Overall, the least pertinent consumer decision-making style** is *confused by over-choice* ($M \geq 2.78$). However, for the younger consumers, younger than 40 years, the least pertinent consumer decision-making style was a *heuristic* approach ($M = 2.68$), and for older consumers (over 40), the least pertinent consumer decision-making style was *confused by over-choice* ($M = 2.77$).

A Wilks's Lambda t-test detected significant differences between the two broad age categories (40 years and younger, i.e. the Millennials, versus older consumers) within three of the five consumer decision-making styles ($p < 0.05$), namely for decision-making styles dominated by use of *heuristics* ($p = 0.00$); an *impulsive/careless* approach ($p = 0.04$) as well as *recreational* ($p = 0.00$). All three of these consumer decision-making styles were significantly more pertinent for the younger consumers.

Similarly, a study done in India found that young college students living in urban areas shop for pleasure (recreational), are more quality-conscious (perfectionists), more interested in fashionable, stylish products and are price- and brand-conscious (heuristics). Whilst not totally comparable with the findings of this particular investigation, there appears to be some correlation

between the decision-making styles identified for the younger age groups (Tanksale, Neelam & Venkatachalam, 2014).

5.3.2.2.3 Education level differences

Since three level of education categories were specified, a MANOVA test (Wilks's Lambda) was performed to determine whether any significant differences existed between the different education level categories when purchasing clothing. This was followed by a post hoc Bonferroni test, of which the details are presented in Table 5.10.

TABLE 5.10: POST HOC BONFERRONI TEST (EDUCATION LEVEL)

Factor	Level of education		Mean difference	Std. error	p-value	95% Confidence level	
	Categories of analysis	Questionnaire categories				Lower Bound	Higher Bound
Confused by over-choice	Grade 1 to 12	Grade 12 & diploma or degree	0.23	0.06	**0.00**	0.09	0.38
		Postgraduate	0.25	0.07	**0.00**	0.09	0.42
	Grade 12 & diploma or degree	Grade 1 to 12	-0.23	0.06	**0.00**	-0.38	-0.09
		Postgraduate	0.02	0.06	1.00	-0.13	0.17
	Postgraduate	Grade 1 to 12	-0.25	0.07	**0.00**	-0.42	0.09
		Grade 12 & diploma or degree	-0.02	0.06	1.00	-0.17	0.13

The results indicate that *perfectionism* is the **most pertinent consumer decision-making style** across all level of education categories ($M \geq 3.71$) when purchasing clothing, while the **least pertinent consumer decision-making style** is *confused by over-choice* ($M \leq 2.78$). However, for those in the lowest level of education category, the least pertinent consumer decision-making style appeared to be the *impulsive decision-making style* ($M = 2.92$).

Significant differences were confirmed for only one decision-making style within the level of education categories, namely for *confused by over-choice* ($p<0.05$). The post hoc Bonferroni test indicated that consumers in the lowest level of education group are significantly more inclined ($p<0.05$) to apply a *confused by over-choice* decision-making style than consumers with a diploma/ degree ($M = 2.72$) and also those with a postgraduate qualification ($M = 2.70$). The difference between consumers with diplomas or degrees and postgraduate qualifications was not significant ($p>0.05$). The influence of education levels when purchasing clothing produces differing findings amongst authors (Erasmus *et al*., 2014; Koca, Vural & Koç, 2013; Creusen, 2010).

5.3.2.2.4 Population group differences

Three population groups were specified and therefore a MANOVA test (Wilks's Lambda) followed by a post hoc Bonferroni test was done wherever significant differences (p<0.05) were evident, as indicated in Table 5.9. The results are displayed in Table 5.11.

TABLE 5.11: POST HOC BONFERRONI TEST (POPULATION GROUP)

Factor	Population groups		Mean difference	Std. error	p-value	95% Confidence level	
	Categories of analysis	Questionnaire categories				Lower Bound	Upper Bound
Heuristics	White	Black	-0.30	0.07	**0.00**	-0.46	-0.15
		Other	-0.10	0.11	1.00	-0.36	0.16
	Black	White	0.30	0.07	**0.00**	0.15	0.46
		Other	0.20	0.12	0.25	-0.08	0.48
	Other	White	0.10	0.11	1.00	-0.16	0.36
		Black	-0.20	0.12	0.25	-0.48	0.08
Impulsive/careless	White	Black	-0.25	0.07	**0.00**	-0.42	-0.08
		Other	-0.26	0.19	0.08	-0.55	0.02
	Black	White	0.25	0.07	**0.00**	0.08	0.42
		Other	-0.01	0.13	1.00	-0.32	0.30
	Other	White	0.26	0.12	0.08	-0.02	0.55
		Black	0.01	0.13	1.00	-0.30	0.32
Recreational	White	Black	-0.26	0.07	**0.00**	-0.43	-0.09
		Other	-0.07	0.11	1.00	-0.35	0.20
	Black	White	0.26	0.07	**0.00**	0.09	0.43
		Other	0.19	0.12	0.40	-0.11	0.49
	Other	White	0.07	0.11	1.00	-0.20	0.35
		Black	-0.19	0.12	0.40	-0.49	0.11
Confused by over-choice	White	Black	-0.08	0.06	0.50	-0.23	0.06
		Other	-0.27	0.10	**0.02**	-0.51	-0.03
	Black	White	0.08	0.06	0.50	-0.06	0.23
		Other	-0.18	0.11	0.27	-0.44	0.08
	Other	White	0.27	0.10	**0.02**	0.03	0.51
		Black	0.18	0.11	0.27	-0.08	0.44
Perfectionism	White	Black	-0.22	0.06	**0.00**	-0.36	-0.09
		Other	0.11	0.09	0.66	-0.11	0.34
	Black	White	0.22	0.06	**0.00**	0.09	0.36
		Other	0.34	0.10	**0.00**	0.10	0.58
	Other	White	-0.11	0.09	0.66	-0.34	0.11
		Black	-0.34	0.10	**0.00**	-0.58	-0.10

The **most pertinent consumer decision-making style** across all population groups when purchasing clothing, is *perfectionism,* while the **least pertinent consumer decision-making style** is *confused by over-choice* (*M*≤2.78).

Significant differences among the population groups were revealed for all the consumer decision styles ($p<0.05$):

- Based on a post hoc Bonferroni test as shown in Table 5.11, *heuristics, impulsive/careless* and *recreational* approaches are all significantly more prevalent among Black consumers ($p<0.05$) compared to White consumers. For all three decision-making styles, no significant differences could be found between the so-called "other" population groups and Black, or White consumers.

- A *confused by over-choice* decision-making style is significantly more characteristic of "other" population groups ($p<0.05$) than White consumers ($M = 2.74$). In terms of *perfectionism*, White consumers as well as "other" population groups are significantly less inclined ($p<0.05$) to exhibit *perfectionism* than Black consumers.

- No significant differences were found between the White and the other population group category. The closest study in terms of demographic profiling in a South African context yielding similar results showed that Black consumers (Motswana) and other population groups (Chinese) were found to apply a perfectionistic decision-making style.

5.3.2.2.5 Income level differences

As four levels of income categories were specified, a MANOVA t-test (Wilks's Lambda) was performed on the data in order to determine whether any significant differences existed between the different income level categories when purchasing clothing. This was followed by a post hoc Bonferroni test, of which the details are presented in Table 5.12.

TABLE 5.12: POST HOC BONFERRONI TEST (INCOME LEVEL)

Factor	Level of income		Mean difference	Std. error	p-value	95% Confidence level	
	Categories of analysis	Questionnaire categories				Lower Bound	Upper Bound
Heuristics	Less than R10000	R10000-R14999	-0.01	0.09	1.00	-0.25	0.22
		R15000-R24999	0.16	0.08	0.23	-0.04	0.37
		R25000 or more	0.16	0.07	0.18	-0.03	0.34
	R10000 – R14999	Less than R10000	0.01	0.09	1.00	-0.22	0.25
		R15000-R24999	0.17	0.09	0.33	-0.07	0.41
		R25000 or more	0.17	0.08	0.30	-0.06	0.39
	R15000-R24999	Less than R10000	-0.16	0.08	0.23	-0.37	0.04
		R10000-R14999	-0.17	0.09	0.33	-0.41	0.07
		R25000 or more	-0.01	0.07	1.00	-0.20	0.19
	R25000 or more	Less than R10000	-0.16	0.07	0.18	-0.34	0.03
		R10000-R14999	-0.17	0.08	0.30	-0.39	0.06
		R15000-R24999	0.01	0.07	1.00	-0.19	0.20
Impulsive/ Careless	Less than R10000	R10000-R14999	0.11	0.10	1.00	-0.15	0.37
		R15000-R24999	0.16	0.09	0.33	-0.06	0.39
		R25000 or more	0.32	0.08	**0.00**	0.11	0.52
	R10000-R14999	Less than R10000	-0.11	0.10	1.00	-0.37	0.15
		R15000-R24999	0.05	0.10	1.00	-0.21	0.31
		R25000 or more	0.20	0.09	0.17	-0.04	0.45
	R15000-R24999	Less than R10000	-0.16	0.09	0.33	-0.39	0.06
		R10000-R14999	-0.05	0.10	1.00	-0.31	0.21
		R25000 or more	0.15	0.08	0.34	-0.06	0.36
	R25000 or more	Less than R10000	-0.32	0.08	**0.00**	-0.52	-0.11
		R10000-R14999	-0.20	0.09	0.17	-0.45	0.04
		R15000-R24999	-0.15	0.08	0.34	-0.36	0.06
Recreational	Less than R10000	R10000-R14999	-0.09	0.09	1.00	-0.34	0.15
		R15000-R24999	0.09	0.08	1.00	-0.13	0.31
		R25000 or more	0.24	0.08	**0.01**	0.04	0.44
	R10000-R14999	Less than R10000	0.09	0.09	1.00	-0.15	0.34
		R15000-R24999	0.18	0.10	0.33	-0.07	0.44
		R25000 or more	0.34	0.09	**0.00**	0.10	0.58
	R15000-R24999	Less than R10000	-0.09	0.08	1.00	-0.31	0.13
		R10000-R14999	-0.18	0.10	0.33	-0.44	0.07
		R25000 or more	0.15	0.08	0.23	-0.05	0.36
	R25000 or more	Less than R10000	-0.24	0.08	**0.01**	-0.44	-0.04
		R10000-R14999	-0.34	0.09	**0.00**	-0.58	-0.10
		R15000-R24999	-0.15	0.08	0.27	-0.36	0.05
Confused by over-choice	Less than R10000	R10000-R14999	0.28	0.08	**0.00**	0.06	0.49
		R15000-R24999	0.19	0.07	**0.04**	0.01	0.38
		R25000 or more	0.34	0.06	**0.00**	0.17	0.52
	R10000-R14999	Less than R10000	-0.28	0.08	**0.00**	-0.49	-0.06
		R15000-R24999	-0.08	0.08	1.00	-0.30	0.13
		R25000 or more	0.07	0.08	1.00	-0.14	0.27
	R15000-R24999	Less than R10000	-0.19	0.07	**0.04**	-0.38	0.01
		R10000-R14999	0.08	0.08	1.00	-0.13	0.30
		R25000 or more	0.15	0.07	0.13	-0.02	0.33
	R25000 or more	Less than R10000	-0.34	0.06	**0.00**	-0.52	-0.17
		R10000-R14999	-0.07	0.08	1.00	-0.27	0.14
		R15000-R24999	-0.15	0.07	0.13	-0.33	0.02

The results presented in Table 5.9 firstly indicate that *perfectionism* is **the most pertinent consumer decision-making style** across all level of income categories ($M \geq 3.71$) when purchasing clothing. The **least pertinent consumer decision-making style** for all income level categories is *confused by over-choice* ($M \leq 2.78$).

Significant differences were confirmed for four decision-making styles within the level of income categories, namely *heuristics*, *impulsive/careless*, *recreational* and *confused by over-choice* ($p<0.05$).

- In terms of *heuristics*, the post hoc test could not indicate where significant differences between the various income levels were evident; however, one can deduce from the mean scores that consumers earning lower incomes are slightly more inclined towards a heuristic approach than those earning higher incomes.
- Based on a post hoc Bonferroni test, as shown in Table 5.12, *Impulsive/careless* is the weakest decision-making style for consumers in the higher income category, and it became clear that this decision-making style is significantly more pertinent ($p<0.05$) for consumers in the lowest level of income group (<R10000: $M = 2.99$).
- Similarly, those earning lower incomes are significantly more likely ($p<0.05$) to apply a *recreational* decision-making style compared to consumers in the highest income category ($M = 3.03$).
- With respect to *confusion by over-choice*, consumers earning the lowest incomes are significantly more inclined ($p<0.05$) to apply this decision-making style, compared to those earning any other level of income. Despite South Africa being termed a developing country, the relevant categories of consumer decision-making styles pertaining to clothing are more in line with those of developed countries, as opposed to developing countries (Tanksale *et al*., 2014; Lysonski *et al*., 1996), despite the major income variances across the population.

5.3.2.3 Demographic differences in consumer decision-making styles (GROC)

Consumers' purchasing of groceries is regarded as a low complex purchasing decision that entails limited risk (Erasmus *et al*., 2014). Table 5.13 reflects the results of an investigation of consumers' decision-making styles in this product category across different demographic subsets of the sample, with the intention to identify the most pertinent decision-making styles within a demographic category and to determine whether this would differ across different demographic subcategories.

TABLE 5.13: DEMOGRAPHIC DIFFERENCES IN CONSUMER DECISION-MAKING STYLES (GROC)

	Factor	Categories	Mean	SD	n	p-value
Gender	Heuristics	Male	2.97	0.68	283	0.46
		Female	3.01	0.75	598	
		Total	3.00	0.73	881	
	Recreational	Male	2.78	0.92	283	**0.00**
		Female	3.05	0.94	598	
		Total	2.96	0.94	881	
	Confused by over-choice	Male	2.65	0.75	283	0.58
		Female	2.62	0.77	598	
		Total	2.63	0.77	881	
	Perfectionism	Male	3.71	0.62	283	**0.03**
		Female	3.81	0.66	598	
		Total	3.78	0.65	881	
	Enjoyment	Male	3.14	0.72	283	**0.00**
		Female	2.93	0.73	598	
		Total	3.00	0.74	881	
Age	Heuristics	25-40 years	3.11	0.72	573	**0.00**
		41 years & older	2.81	0.71	310	
		Total	3.00	0.73	883	
	Recreational	25-40 years	3.04	0.94	573	**0.00**
		41 years & older	2.83	0.92	310	
		Total	2.96	0.94	883	
	Confused by over-choice	25-40 years	2.67	0.77	573	**0.02**
		41 years & older	2.55	0.76	310	
		Total	2.63	0.77	883	
	Perfectionism	25-40 years	3.80	0.66	573	0.26
		41 years & older	3.75	0.64	310	
		Total	3.78	0.65	883	
	Enjoyment	25-40 years	2.97	0.76	573	0.09
		41 years & older	3.06	0.70	310	
		Total	3.00	0.74	883	
Education level	Heuristics	Grades 1-12	3.00	0.76	249	0.07
		Grade 12 + dipl./degree	3.05	0.72	410	
		Postgraduate	2.91	0.70	219	
		Total	3.00	0.72	878	
	Recreational	Grades 1-12	3.00	0.92	249	0.09
		Grade 12 + dipl./degree	3.00	0.92	410	
		Postgraduate	2.84	0.98	219	
		Total	2.96	0.94	878	
	Confused by over-choice	Grades 1-12	2.80	0.79	249	**0.00**
		Grade 12 + dipl./degree	2.58	0.75	410	
		Postgraduate	2.52	0.75	219	
		Total	2.63	0.77	878	
	Perfectionism	Grades 1-12	3.71	0.68	249	0.11
		Grade 12 + dipl./degree	3.82	0.63	410	
		Postgraduate	3.79	0.65	219	
		Total	3.78	0.65	878	
	Enjoyment	Grades 1-12	3.06	0.72	249	**0.04**
		Grade 12 + dipl./degree	2.92	0.74	410	
		Postgraduate	3.05	0.72	219	
		Total	3.00	0.73	878	

TABLE 5.13: DEMOGRAPHIC DIFFERENCES IN CONSUMER DECISION-MAKING STYLES (GROC) *(Continued)*

	Factor	Categories	Mean	SD	n	p-value
Population group	Heuristics	White	2.93	0.70	618	**0.00**
		Black	3.13	0.74	203	
		Other	3.24	0.85	61	
		Total	3.00	0.72	882	
	Recreational	White	2.88	0.95	618	**0.00**
		Black	3.10	0.89	203	
		Other	3.39	0.85	61	
		Total	2.96	0.94	882	
	Confused by over-choice	White	2.55	0.73	618	**0.00**
		Black	2.81	0.84	203	
		Other	2.88	0.78	61	
		Total	2.63	0.77	882	
	Perfectionism	White	3.77	0.62	618	0.26
		Black	3.78	0.73	203	
		Other	3.91	0.61	61	
		Total	3.78	0.65	882	
	Enjoyment	White	3.02	0.71	618	0.57
		Black	2.96	0.84	203	
		Other	2.95	0.66	61	
		Total	3.00	0.74	882	
Income level	Heuristics	Less than R10000	3.14	0.80	226	**0.00**
		R10000-R14999	3.09	0.66	131	
		R15000-R24999	2.96	0.71	212	
		R25000 or more	2.89	0.70	302	
		Total	3.00	0.73	871	
	Recreational	Less than R10000	3.14	0.80	226	**0.00**
		R10000-R14999	3.09	0.66	131	
		R15000-R24999	2.98	0.71	212	
		R25000 or more	2.77	0.69	302	
		Total	2.97	0.73	871	
	Confused by over-choice	Less than R10000	2.85	0.85	226	**0.00**
		R10000-R14999	2.71	0.75	131	
		R15000-R24999	2.60	0.69	212	
		R25000 or more	2.46	0.72	302	
		Total	2.63	0.77	871	
	Perfectionism	Less than R10000	3.79	0.71	226	0.53
		R10000-R14999	3.78	0.63	131	
		R15000-R24999	3.73	0.63	212	
		R25000 or more	3.82	0.63	302	
		Total	3.78	0.65	871	
	Enjoyment	Less than R10000	2.99	0.84	226	0.21
		R10000-R14999	2.90	0.72	131	
		R15000-R24999	2.99	0.71	212	
		R25000 or more	3.06	0.68	302	
		Total	3.00	0.74	871	

Initially, a MANOVA test (Wilk's Lambda) was performed to determine possible significant differences within demographic categories in terms of their decision-making styles when purchasing groceries. An indication of significant differences (p<0.05) was followed by a post hoc Bonferroni test to specify the differences.

5.3.2.3.1 Gender differences

Table 5.13 reveals that *perfectionism* is **the most pertinent consumer decision-making style** for both men and women ($M \geq 3.78$) in this product category, while the **least pertinent decision-making style** is *confused by over-choice* ($M \leq 2.63$). Gender differences in consumers' application of a *heuristic* and *confused by over-choice* approaches were not significant ($p > 0.05$).

Significant differences were found in terms of three of the five decision-making styles, namely *recreational* ($p = 0.00$), perfectionism ($p = 0.03$) and *enjoyment* ($p = 0.00$).

- A *recreational* decision-making style is significantly more prevalent among females, although for both men and women, this decision-making style is only moderately strong ($M > 2.5 < 3.5$).

- Similarly, a decision-making style that reflects *perfectionism* confirms that females are significantly more predisposed to a perfectionistic approach than males, and for both, this decision-making style is fairly strong ($M > 3.5 < 4$).

- Interestingly, *enjoyment* as a decision-making style was more prevalent for males ($M = 3.14$) than for their female counterparts ($M = 2.93$); however, for both, this decision-making style is still only moderately strong ($M > 2.5 < 3.5$).

The results suggest that females are more focused on quality and value for money than men when purchasing grocery products. Men's stronger inclination towards *enjoyment* as a decision-making style was unexpected, given the outcomes of the other product categories, but appears to be in line with emerging trends (PYMNTS, 2016).

5.3.2.3.2 Age differences

As indicated in Table 5.13, *perfectionism* is the **most pertinent consumer decision-making style**, irrespective of the age category, for both men and women ($M \geq 3.78$). **The least pertinent consumer decision-making style** across all age categories is *confused by over-choice* ($M \leq 2.63$).

A Wilks's Lambda t-test identified significant differences between the two broad age categories (40 years and younger, i.e. the Millennials, versus older consumers) within three of the five consumer decision-making styles ($p < 0.05$), i.e. for decision-making styles dominated by *heuristics* ($p = 0.00$), *recreational* approach ($p = 0.00$) and *confused by over-choice* ($p = 0.02$). All

three consumer decision-making styles were significantly more pertinent for the younger age group. This shows that younger, more educated consumers tend to be recreational in their approach and to make an outing of the daily, weekly or monthly chore of purchasing grocery products. Due to their relative inexperience with particular products and brands, they do tend to be confused by over-choice but as recreational shoppers do not necessarily feel intimidated by their purchases. As with their purchases of clothing products, when purchasing grocery products, younger consumers are strongly influenced by brands and their peers' views on particular brands, tending to rely initially on peers until they have developed sufficient experience in terms of which particular brands would suit their individual requirements (Prinsloo, 2016). Recreational, heuristic, and confused by over-choice decision-making styles are all moderately relevant across all age groups for this product type, while the *perfectionist* decision-making style is more pertinent ($M \geq 3.78$) and dominates the consumer decision-making styles of consumers across all age groups. Other studies suggest that older consumers do not necessarily make better decisions than younger consumers; it is just that their more extensive experience with grocery purchases negates confusion as they have already developed their own sense of what constitutes quality grocery products (Carpenter & Yoon, 2012).

5.3.2.3.3 Education level differences

MANOVA (Wilks's Lambda) was performed to determine possible significant differences among the different educational level categories when purchasing groceries (see Table 5.13). This was followed by a post hoc Bonferroni test, of which the details are presented in Table 5.14.

TABLE 5.14: POST HOC BONFERRONI TEST (EDUCATION LEVEL)

Factor	Level of education		Mean difference	Std. error	p-value	95% Confidence level	
	Categories of analysis	Questionnaire categories				Lower Bound	Higher Bound
Confused by over-choice	Grade 1 to 12	Grade 12 & diploma or degree	0.21	0.06	**0.00**	0.06	0.36
		Postgraduate	0.27	0.07	**0.00**	0.10	0.44
	Grade 12 & diploma or degree	Grade 1 to 12	-0.21	0.06	**0.00**	-0.36	-0.06
		Postgraduate	0.06	0.06	0.99	-0.09	0.22
	Postgraduate	Grade 1 to 12	-0.27	0.07	**0.00**	-0.44	-0.10
		Grade 12 & diploma or degree	-0.06	0.06	0.99	-0.22	0.09
Enjoyment	Grade 1 to 12	Grade 12 & diploma or degree	0.13	0.06	0.08	-0.01	0.27
		Postgraduate	0.01	0.07	1.00	-0.15	0.17
	Grade 12 & diploma or degree	Grade 1 to 12	-0.13	0.06	0.08	-0.27	0.01
		Postgraduate	-0.12	0.06	0.14	-0.27	0.02
	Postgraduate	Grade 1 to 12	-0.01	0.07	1.00	-0.17	0.15
		Grade 12 & diploma or degree	0.12	0.06	0.14	-0.02	0.27

The results presented in Table 5.13 firstly indicate that *perfectionism* is the **most pertinent consumer decision-making style** across all level of education categories ($M \geq 3.78$) when purchasing groceries, with the **least pertinent consumer decision-making style** being *confused by over-choice* ($M \leq 2.62$). Significant differences were confirmed for two decision-making styles within the level of education categories, namely *confused by over-choice* and *enjoyment* ($p<0.05$).

- Based on a post hoc Bonferroni test as shown in Table 5.14, *confused by over-choice* is the weakest decision-making style for consumers in the higher level of education categories, and it became clear that this decision-making style is significantly more pertinent ($p<0.05$) for consumers in the lowest level of education group (≤Grade 12: $M = 2.79$), who thus experience a bewildering array of products which look the same or are similar in content.

- With respect to *enjoyment*, the Bonferroni test could not confirm significant differences among the level of education categories ($p>0.05$). However, previous studies indicate an increasing trend towards so-called interactive shopping, which includes, inter alia, good quality indoor and outdoor public space, ease of movement and the provision of areas for relaxation such as coffee shops and restaurants, which enhance shopping enjoyment (Prinsloo, 2016).

5.3.2.3.4 Population group differences

Three population categories were specified, and therefore MANOVA (Table 5.13) was followed by a post hoc Bonferroni test wherever significant differences (p<0.05) were evident. The results are displayed in Table 5.15.

TABLE 5.15: POST HOC BONFERONI TEST (POPULATION GROUP)

Factor	Population groups		Mean difference	Std. error	p-value	95% Confidence level	
	Categories of analysis	Questionnaire categories				Lower Bound	Upper Bound
Heuristics	White	Black	-0.19	0.58	**0.00**	-0.33	-0.05
		Other	-0.30	0.10	**0.01**	-0.53	-0.07
	Black	White	0.19	0.58	**0.00**	0.05	0.33
		Other	-0.11	0.10	0.91	-0.36	0.14
	Other	White	0.30	0.10	**0.01**	0.07	0.53
		Black	0.11	0.10	0.91	-0.14	0.36
Recreational	White	Black	-0.22	0.08	**0.01**	-0.40	-0.03
		Other	-0.51	0.12	**0.00**	-0.81	-0.21
	Black	White	0.22	0.08	**0.01**	0.04	0.40
		Other	-0.29	0.14	0.09	-0.62	0.03
	Other	White	0.51	0.12	**0.00**	0.21	0.81
		Black	0.29	0.14	0.09	-0.03	0.62
Confused by over-choice	White	Black	-0.26	0.06	**0.00**	-0.41	-0.11
		Other	-0.33	0.10	**0.00**	-0.58	-0.09
	Black	White	0.26	0.06	**0.00**	0.11	0.41
		Other	-0.07	0.11	1.00	-0.34	0.19
	Other	White	0.33	0.10	**0.00**	0.09	0.58
		Black	0.07	0.11	1.00	-0.19	0.34

Firstly, the **most pertinent consumer decision-making style** across all population groups when purchasing groceries is *perfectionism,* and the **least pertinent consumer decision-making style** is *confused by over-choice* (M≤2.63). Significant differences among the population groups came to the fore for three of the decision-making styles, namely *heuristics*, *recreational* and *confused by over-choice.* All three consumer decision-making styles were significantly more pertinent (p<0.05) for Blacks and the so-called “other” population groups, compared to White consumers. Differences between Blacks and “other” population groups were not statistically significant (p>0.05). Chase, Legoete and Van Wamelen (2010) concur that significant differences exist in consumer decision-making styles, particularly between Black and White consumers. However, due to the scarcity of available South African specific research in terms of consumer decision-making styles of different population groups when purchasing grocery products, one is unable to determine whether the findings of these particular results correlate with former studies in this regard.

5.3.2.3.5 Income level differences

A MANOVA (Wilks's Lambda) was performed on the four levels of income to determine possible significant differences in their shopping styles when purchasing groceries. This was followed by a post hoc Bonferroni test, of which the details are presented in Table 5.16.

TABLE 5.16: POST HOC BONFERONI TEST (INCOME LEVEL)

Factor	Level of income		Mean difference	Std. error	p-value	95% Confidence level	
	Categories of analysis	Questionnaire categories				Lower Bound	Upper Bound
Heuristics	Less than R10000	R10000-R14999	0.05	0.08	1.00	-0.16	0.26
		R15000-R24999	0.18	0.07	**0.05**	0.00	0.36
		R25000 or more	0.25	0.06	**0.00**	0.08	0.42
	R10000 – R14999	Less than R10000	-0.05	0.08	1.00	-0.26	0.16
		R15000-R24999	0.13	0.08	0.58	-0.08	0.34
		R25000 or more	0.20	0.08	**0.05**	0.00	0.40
	R15000- R24999	Less than R10000	-0.18	0.07	**0.05**	-0.37	-0.00
		R10000-R14999	-0.13	0.08	0.58	-0.34	0.08
		R25000 or more	0.07	0.06	1.00	-0.10	0.24
	R25000 or more	Less than R10000	-0.25	0.06	**0.00**	-0.42	-0.08
		R10000-R14999	-0.20	0.08	**0.05**	-0.40	-0.00
		R15000-R24999	-0.07	0.06	1.00	-0.24	0.10
Recreational	Less than R1000	R10000-R14999	0.05	0.10	1.00	-0.22	0.32
		R15000-R24999	0.16	0.09	0.45	-0.08	0.39
		R25000 or more	0.37	0.08	**0.00**	0.15	0.58
	R10000-R14999	Less than R10000	-0.05	0.10	1.00	-0.32	0.22
		R15000-R24999	0.11	0.10	1.00	-0.16	0.38
		R25000 or more	0.32	0.10	**0.01**	0.06	0.57
	R15000- R24999	Less than R10000	-0.16	0.09	0.45	-0.39	0.08
		R10000-R14999	-0.11	0.10	1.00	-0.38	0.16
		R25000 or more	0.21	0.08	0.08	-0.01	0.43
	R25000 or more	Less than R10000	-0.37	0.08	**0.00**	-0.58	0.15
		R10000-R14999	-0.32	0.10	**0.01**	-0.57	-0.06
		R15000-R24999	-0.21	0.08	0.08	-0.43	0.01
Confused by over-choice	Less than R10000	R10000-R14999	0.14	0.08	0.52	-0.08	0.36
		R15000-R24999	0.26	0.07	**0.00**	0.07	0.45
		R25000 or more	0.40	0.07	**0.00**	0.22	0.57
	R10000-R14999	Less than R10000	-0.14	0.08	0.52	-0.36	0.08
		R15000-R24999	0.12	0.08	1.00	-0.11	0.34
		R25000 or more	0.25	0.08	**0.01**	0.05	0.46
	R15000-R24999	Less than R10000	-0.26	0.07	**0.00**	-0.45	-0.07
		R10000-R14999	-0.11	0.08	1.00	-0.34	0.10
		R25000 or more	0.14	0.07	0.24	-0.04	0.32
	R25000 or more	Less than R10000	-0.40	0.07	**0.00**	-0.57	-0.22
		R10000-R14999	-0.25	0.08	**0.01**	-0.46	-0.05
		R15000-R24999	-0.14	0.07	0.24	-0.32	0.04

The results indicate that *perfectionism* is **the most pertinent consumer decision-making style** across all level of income categories ($M \geq 3.78$) when purchasing groceries. **The least pertinent consumer decision-making style** across all income level categories is *confused by over-choice* ($M \leq 2.63$).

Significant differences were confirmed for three decision-making styles within the level of income categories, namely *heuristics*, *recreational* and *confused by over-choice* ($p<0.05$). Based on a post hoc Bonferroni test as shown in Table 5.16, *heuristics* is the weakest decision-making style for consumers in the higher level of income categories, and it became clear that this decision-making style is significantly more pertinent ($p<0.05$) for consumers in the lowest level of income group (<R10000: $M = 3.14$). Those with lower incomes are significantly more likely ($p<0.05$) to use *heuristics* compared to consumers in the highest income category ($M = 2.77$). With regard to *confusion by over-choice*, consumers in the lowest income categories are significantly more inclined ($p<0.05$) to apply a style signified by *confusion due to over-choice,* compared to those earning higher incomes. Similarly, those in the middle income category – earning between R10000 and R14999 – are significantly more prone ($p<0.05$) to apply this decision-making style than those earning higher incomes ($M = 2.46$). No conclusive comparative South African study could be traced to explain or support this finding; however, a study done in South Eastern Europe provided some similarities, which reflected in the dependence on *heuristic, recreational* and *confused by over-choice* approaches among lower income consumers, with *perfectionism* more typical across all income groups (Anic *et al*., 2015).

5.4 SUMMARY

This study confirms that consumer decision-making styles vary across product category and show some marked and subtle differences per category across the various demographic variables.

In terms of the overall pertinent consumer decision-making style across all three product types, congruence across product types of varying complexity exists for *heuristics, confused by over-choice* and *perfectionism*. The representation of these three consumer decision-making styles across the three product types appears similar across the different products. *Perfectionism* is the most pertinent decision-making style across the product types, followed by a *heuristic approach* and *confused by over-choice*. *Perfectionism* is shown as a fairly strong decision-making style and *heuristics* and *confused by over-choice* both as moderately strong.

With regard to **MHA** in particular, the following consumer decision-making styles indicated significant differences across the demographic profile. In respect of female consumers, a

confused by over-choice decision-making style was more likely to be employed compared to male consumers. Younger consumers (≤ 40 years old) were more likely to adopt a *heuristic, novelty/impulsive* and *enjoyment* decision-making style, compared to older consumers (≥ 40 years old). Lower educated consumers are more likely to employ a *novelty/impulsive* and *confused by over-choice* decision-making style. In terms of population groups, the *novelty/impulsive* decision-making style are more likely to be used by the Black and other population groups compared to the White population group. A *novelty/impuls*ive and *confused by over-choice* decision-making style are prevalent decision-making styles adopted by the lower income groups, compared to those earning in the higher income brackets who have a bias towards a *perfectionistic* decision-making style. Overall, this suggests that *heuristics, novelty/impulsive, confused by over-choice* and *an enjoyment* decision-making style are pertinent decision-making styles for younger, female, lower educated and lower income consumers from the Black and other population groups when purchasing MHA.

Significant differences in respect of **clothing** products (best daywear and workwear) illustrated an inclination towards a *recreational* consumer decision-making style amongst younger, lower income black female consumers, while a *heuristic* and *impulsive/careless* decision-making style is more prevalent amongst younger, lower income black consumers. A *confused by over-choice* decision-making style is more prevalent for consumers that have lower education as well as lower income levels.

Grocery products reflect significant differences in the *recreational* decision-making style which is more prevalent amongst female consumers when compared to male consumers and more prevalent amongst Black and other population groups earning lower incomes. A *heuristic* decision-making style reflects more strongly amongst Black and other population groups, younger and lower income level categories. A *confused by over-choice* decision-making style is more pertinent amongst Black and other population groups and younger, lower educated consumers earning lower income levels. Other significant differences in consumer decision-making styles exist between female and male consumers, with female consumers being more inclined to use a *perfectionistic* decision-making style, and male consumers being more inclined towards an *enjoyment* decision-making style.

Amongst all product categories across the demographic variables, *confused by over-choice* is more prevalent amongst younger (≤40 years old), black, lower educated and lower income consumers when compared to older (≥40 years old), white, higher educated and higher income consumers. In respect of *heuristics*, the decision-making style is more pertinent amongst black, younger consumers, lower educated and lower income consumers when compared to white, older consumers with higher educational levels and higher income levels.

Such significant differences in consumer decision-making styles would render it very important for retailers or product suppliers to understand the demographic profile it is serving in a particular area. This is true for all of the products across the complexity spectrum. While there is congruence of the most pertinent and least pertinent consumer decision-making styles across the product categories, the significant differences which exist at a demographic level across the product complexity continuum are relevant and should be considered by marketers, manufacturers, retailers and academics alike. The above-mentioned differences in consumer decision-making styles per product category are expanded on in Chapter 6.

Chapter 6 - Conclusions

This chapter presents the conclusions of the study, the theoretical contributions, practical implications, limitations as well as recommendations for future research.

6.1 INTRODUCTION

In the following section, the conclusions are presented in the order of the objectives of the study. In the discussion of the results, the predominance of the different consumer decision-making styles across the selected product categories are attended to, namely major household appliances, clothing (workwear or best daywear), and groceries. This is followed by conclusions about significant differences in consumers' decision-making styles based on consumers' demographic characteristics across the different product categories. The theoretical contribution of the study, the practical implications and limitations of the study, as well as recommendations for future research are also discussed.

6.2 PREDOMINANT CONSUMER DECISION-MAKING STYLES ACROSS THE DIFFERENT PRODUCT CATEGORIES

This study used an adapted version of the Sproles and Kendall (1986) Consumer Style Inventory (CSI) to explore consumer decision-making styles across three different product categories that consumers are generally involved with, namely major household appliances, clothing (workwear or best daywear), as well as groceries. Assuming that the consumer decision-making styles might not necessarily be the same across the different product categories that also represented different levels of decision complexity, the analysis commenced with an exploratory factor analysis (EFA) to identify the factors (consumer decision-making styles) for the different product categories. The EFA procedure provided a five-factor extraction for each product category, which differed from the original Sproles and Kendall (1986) eight-factor consumer style inventory (CSI). The respective factor extraction procedures are presented in Tables 5.2, 5.3 and 5.4 in Chapter 5 and discussed thereafter. It is important at this stage to note that the five factors were not necessarily exactly the same across the three product categories. Detailed explanations are provided in the relevant sections. The factors that were extracted were:

- Major household appliances: Heuristics, Novelty/Impulsive, Confused by over-choice, Perfectionism, Enjoyment
- Clothing (workwear or best daywear): Heuristics, Impulsive/careless, Recreational, Confused by over-choice, Perfectionism
- Groceries: Heuristics, Recreational, Confused by over-choice, Perfectionism, Enjoyment

In the next section, the predominant consumer decision-making styles for the respective product categories are discussed, firstly individually (*6.2.1–6.2.3*) and thereafter coherently in section 6.3. Lastly, demographic differences in consumer decision-making styles across the different product categories are discussed in section 6.4.

6.2.1 Predominant and least prevalent consumer decision-making styles for major household appliances (MHA)

Based on the analysis of the factor means, the predominant consumer decision-making style, which is fairly strong, in directing purchases of major household appliances (MHA) is **perfectionism.** This indicates that consumers' consideration of quality standards, performance and good value for money is highly relevant during this fairly complex purchasing process, which is in line with previous studies conducted by Potgieter *et al.* (2013) and Sproles and Kendall (1986). The results of the current study show that, when purchasing major household appliances, consumers will probably strive to purchase the best quality product at a price that they can afford, and that they will probably take time and invest effort to carefully evaluate products by comparing product attributes, warranties, prices as well as their peers' recommendations. As the pricing of major household appliances entails significant financial risk should the appliance fail to meet consumers' expectations of quality and performance, they would probably more diligently engage in a pre-purchase search for additional product information to mitigate the effect of the possible disconfirmation of expectations (Erasmus *et al*., 2014).

The least prevalent decision-making style when purchasing major household appliances is **novelty/impulsiveness,** meaning that consumers generally would not make impulsive appliance purchases and would not necessarily be motivated by the novelty associated with particular major household appliances. As consumers would generally spend significant time and effort to investigate the available product alternatives when purchasing expensive and complex appliances, they would be unlikely to submit to novel product innovations and impulsive buying behaviour due to the associated risk. Assisting with this information gathering is the plethora of online sites available that allow consumers to compare a variety of appliance brands or different models of the same brand. Consumers with access to these internet sites are even able to obtain peer reviews for appliances brands and can get access to their particular product offerings,

including information on pricing, performance features, reliability, durability, and after sales servicing.

6.2.2 Predominant consumer decision-making styles for clothing: workwear or best daywear (CL: workwear or best daywear)

The predominant consumer decision-making style employed by consumers when purchasing clothing products (workwear or best daywear) is **perfectionism,** which is held to be a fairly strong/relevant decision-making style for this product category. This indicates a regard for product quality and durability. Consumers using this particular decision-making style will probably strive to purchase good quality clothing, and will probably take time to evaluate and compare different product attributes such as durability, textile characteristics, ease of care, comfort, fit and aesthetic appeal. When purchasing more expensive items of clothing, consumers will probably increase the scope and depth of their pre-purchase investigation to mitigate perceived risk (Erasmus *et al*., 2014). Previous studies' findings pertaining to clothing and consumers' decision-making styles do not yield similar findings – probably due to the different contexts in which they were executed, i.e. developed versus developing economies, where differences in consumer sophistication and demographics have to be acknowledged.

The least relevant consumer decision-making style in terms of clothing purchases is **confused by over-choice.** The results suggest confusion in the mind of the consumer when searching for a specific item of clothing; this confusion is created due to an overwhelming array of choices that are offered by multiple retailers. When searching for workwear and/or best daywear, consumers are probably guided by the norms of their particular employer. Generally, workwear is more expensive than casual wear, which increases the perception of risk.

6.2.3 Predominant consumer decision-making styles for groceries (GROC)

Based on the factor means, the predominant consumer decision-making style for groceries is **perfectionism**, rated as fairly strong. This indicates that the consumers in this study regarded quality standards very highly, although in their evaluation of quality, price is also relevant. Considering budgetary constraints, perfectionistic consumers probably appreciate high quality, value for money grocery products that would meet their expectations. For example, health-conscious consumers might value grocery food products with specific quality indicators, including health claims such as "low fat", "gluten free" or "sugar free".

The least relevant consumer decision-making style for grocery products is **confused by over-choice**, indicating that amidst the relatively wide variety of grocery products and brands that are

nowadays available in supermarkets and grocery stores, consumers are apparently not overwhelmed by the multiple options in a store. Possibly grocery consumers generally engage in repeat purchase behaviour, which limits confusion. Personal choice, which may be derived either through consumer socialisation over time, or from personally developed tastes and income limitations, could exert considerable influence and thus limit consumers' selection of grocery products to an array that they are comfortable to deal with.

6.3 SUMMARY OF CONSUMER DECISION-MAKING STYLES ACROSS THE VARIOUS PRODUCT CATEGORIES

Through the EFA procedure, data pertaining to consumers' decision-making styles was reduced to between 18 and 28 items per product category, which were distributed among five factors for each product category. Of the five factors, three factors showed similar results across the product categories in terms of item content. Congruence was evident across the three product categories with regard to the **perfectionist** consumer decision-making style, the **confused by over-choice** decision-making style, and the **heuristic** decision-making style. **Perfectionism** was identified as the most pertinent (fairly strong), **heuristics** being the second most pertinent, and **confused by over-choice** being the least pertinent across the three product categories.

Suppliers/retailers of all three these product categories, which represented different levels of complexity in terms of the consumer decision-making process, should therefore ensure that they offer good quality products, which are in accordance with perfectionists' expectations, who are furthermore also concerned about getting value for money when purchasing major household appliances or groceries. In addition, consumers generally use price and brand as heuristics (mental shortcut) to deduce quality, and this holds true across all three product categories.

Ideally, marketers should take cognisance of all the possible consumer decision-making styles, as some are unique to certain product categories and irrelevant to others. Marketers have to acknowledge different consumer decision-making styles, particularly in terms of market segmentation in different product categories to outwit their competitors in terms of a better understanding of consumers' behaviour in the marketplace. The study found that certain consumer decision-making styles, for example the *confused by over-choice* decision-making style, seem to be product-specific. This study's respondents confessed *confusion by over-choice* when purchasing appliances, although the same was not true for clothing or groceries. Also, in this study, the *novelty/impulsive* consumer decision-making style is unique to the major household appliances product category, while a *recreational* decision-making style is relevant for clothing as well as groceries but not for major household appliances, possibly due to the perceived

expensiveness and complexity of the purchasing process for the latter. An *impulsive* decision-making style is relevant for clothing purchases, possibly due to the fickle nature of fashion that is difficult to predict.

An investigation of demographic differences in consumers' decision-making styles across the three product categories enabled a better understanding of the different market segments.

6.4 DEMOGRAPHIC DIFFERENCES IN CONSUMERS' DECISION-MAKING STYLES

MANOVA, using Wilks's Lambda, was performed to determine whether any significant demographic differences could be confirmed in terms of the relevance of the consumer decision-making styles that were identified to be relevant across the three product categories. Demographic variables with more than two categories were subjected to post hoc Bonferroni tests to specify the nature of significant differences. In all instances, $p<0.05$ was used as an indication of a statistically significant level of significance.

6.4.1 Demographic differences in consumers' decision-making styles for major household appliances (MHA)

Gender: Significant differences were evident between males and females for certain consumer decision-making styles in the MHA product category:

- The *confused by over-choice* decision-making style seems significantly more prevalent among females, compared to their male counterparts (see section *5.3.2.1.1*).
- A shopping style characterised by *pleasure and enjoyment* during MHA purchases, was significantly more prevalent among females than males, suggesting that females derive considerable more pleasure from the shopping encounter than men.
- Gender differences in the *novelty/impulsive* decision-making style, which appeared to be the least pertinent decision-making style for both men and women when purchasing MHA, did not differ statistically significantly.

Age: Whereas *perfectionism* is the predominant decision-making style for this product category in general, the relevance of *heuristics, novelty/impulsive* and the *enjoyment* decision-making styles are moderately strong. Significant differences in consumer decision-making styles existed across various age categories. Millennials (≤40 years) identified the *heuristic, novelty/impulsive* as well as the *enjoyment* decision-making style as significantly more pertinent when purchasing MHA than their older (>40 years) counterparts (see section *5.3.2.1.2*). The latter could indicate that more expensive and complex products such as MHA require more cognitive effort during the

decision-making process, meaning that older, more experienced consumers might find the process of purchasing MHA less complex than younger consumers.

- Millennials are generally less experienced in purchasing major household appliances, and are subsequently significantly more inclined to use a decision-making style dominated by *heuristics* such as brand name and price as an indicator of quality.
- Also, a *novelty/impulsive* approach is significantly more characteristic of the younger age cohort, indicating that younger, less experienced consumers are still formulating a frame of reference to direct their purchasing decisions more rationally (Jobber, 2010:123).
- Younger consumers were found to enjoy purchasing MHA more than older consumers, probably due to the novelty associated with first-time ownership versus the replacement of major household appliances, which is probably the case for older consumers. This finding partially supports previous findings that fun and enjoyment in life become less important to consumers as their cognitive age increase (Cleaver & Muller, 2002; Sudbury & Simcock, 2009).

Younger consumers have an inherent advantage when it comes to utilising technology that negates to some extent their lack of experience when purchasing MHA. They would be more likely to search and employ websites on the internet to guide their evaluation of particular appliance brands or models and to obtain information on pricing, after sales service and the like. The growing trend of employing social media platforms to seek opinions and the advice of peers could be useful to reduce the confusion caused by over-choice (Stephen, 2016). However, no significant differences could be found among the various age groups for the *confused by over-choice* decision-making style.

Education level: Level of education seems to be significant in terms of the decision-making style that is employed when purchasing MHA. The relevance of two decision-making styles, namely *novelty/impulsive* and *confused by over-choice*, differed significantly across education levels.

- Consumers with lower levels of education (those with a Grade 12 and lower, and those with a Grade 12 and degree/diploma), were found to use a *novelty/impulsive* decision-making style significantly more so than consumers with a postgraduate qualification. This indicates that a lower level of education can be associated with an increased tendency to revert to *novelty/impulsiveness* when purchasing these relatively complex products.
- *Confused by over-choice* also emerged as a decision-making style that is more prevalent among consumers with the lowest education level (i.e. schooling up to Grade 12), compared to those with higher education levels (refer to *5.3.2.1.3* and Table 5.6 for results). In all cases, the *confused by over-choice* decision-making style is moderately prevalent and seems to be a coping mechanism that consumers employ when purchasing complex products such as major household appliances.

As *impulsive* and *confused by over-choice* decision-making styles are approaches typically associated with non-adaptive learning styles or with consumers who struggle to learn, consumers who struggle to engage in decision-making tasks such as purchase planning and information seeking, may be confused by the seemingly endless choices as well as the perceived complexity of the technical details relating to the purchasing of MHA. These days, provided consumers are relatively literate or that they have access via friends and family who are literate enough to access feedback reports, blogs or sites, technology provides well packaged reporting across a variety of relevant aspects that are easily accessible. Access to technology could improve the quality and depth of the information available to consumers upon which decision making is based (Stephen, 2016). The above-mentioned findings also indicate the importance of appropriate in-store assistance to facilitate less educated consumers' decision-making when purchasing major household appliances.

Population group: *Perfectionism* seems the predominant decision-making style across all population groups when purchasing MHA. The findings suggest that Whites who have had more exposure to the purchasing of major household appliances considering the former socio-political dispensation, benefited from the socioeconomic position that prevailed prior to the new democracy. Subsequently, Whites are currently still more inclined to make rational purchasing decisions based on factual information, compared to Black and other population groups who are now setting up permanent homes and wish to erase a so-called asset deficit (Nieftagodien & Van der Berg, 2007).

- Whites seem significantly less inclined to use a novel or impulsive decision-making style when purchasing MHA, compared to Black and other population groups (refer to *5.3.2.1.4* and Table 5.7 for results).

Appliance retailers and marketers should provide emerging consumers with appropriate product information to increase their product knowledge and subsequent self-confidence, to facilitate informed decision-making with a stronger inclination towards a perfectionist decision-making style.

Income level: Although consumers in the higher income groups seem more inclined to apply a perfectionistic decision-making style when purchasing MHA, it could not be confirmed as statistically different compared to lower income consumers.

- Although the *novelty/impulsive* decision-making style seems less prevalent, lower income consumers (those earning <R15 000 monthly) seem significantly more prone to employ this decision style compared to higher income consumers.
- Lower income consumers seem more inclined to use a *confused by over-choice* decision-making style than upper income consumers.

The findings hence suggest that lower income consumers would be more likely to employ a *novelty/impulsive* or a *confused by over-choice* decision-making style when purchasing MHA, which both imply non-rational decision-making in this complex high risk product category. This is probably due to limited product exposure of low income consumers compared to upper income consumers who have had more opportunity to gain experience with these products and who can consider wider options due to affordability. Higher income consumers may therefore be better equipped to evaluate the various product alternatives in this product category.

6.4.2 Demographic differences in consumers' decision-making styles for clothing: workwear or best daywear (CL: workwear or best daywear)

Gender: *Perfectionism* seems the predominant consumer decision-making style for males as well as females, while the least relevant consumer decision-making style seems to be *confused by over-choice* (refer to *5.3.2.2.1* in Chapter 5 for results).

- Differences between males and females are not statistically significant for *heuristics, impulsiveness/carelessness, confused by over-choice* or the *perfectionist* consumer decision-making styles.
- Significant differences seem evident in respect of *recreational* consumer decision-making, with females being significantly more inclined to be recreational shoppers than males. For females, the act of purchasing clothing appears to be a recreational activity, where not all purchases are planned and the process itself may include browsing through many different retail outlets and trying on different styles of outfits in a casual and fun way, before ultimately making the choice to buy a particular product (Wesley *et al*., 2006). This is apparently not true for men.

Age: Significant differences among the different age cohorts were mostly related to non-rational consumer decision-making endeavours.

- Statistically significant differences emerged in terms of *heuristic, impulsive/careless* and *recreational* decision-making styles for CL purchases across the different age groups, with all three of these consumer decision-making styles being significantly more pertinent among younger consumers (<40 years) than older consumers.

In other related studies conducted internationally (Tanksale *et al*., 2014) there appeared to be some similarities among younger Indian consumers and the younger consumers in this study. However, it should be noted that Tanksale *et al*. (2014) did not do a comparison with older consumers as was done in this study. The findings of this study as well as other studies that investigated the consumer decision-making styles of younger clothing consumers (across varying demographic factors) indicate an increased congruence among younger consumers in a global context. This is primarily due to the influence of amongst others, social media platforms, the

internet and search engine technology that expands consumers' exposure incrementally. Changes in fashion that are often promoted by well-known personalities in the fields of entertainment or sport are almost instantaneously made available globally (with perhaps the poorer, undeveloped countries still being the exception). This is particularly true for Millennials who are described as technologically savvy, trendsetters, early-adaptors, impatient and demanding authenticity (Duh & Struwig, 2015), which distinguish them from more mature consumer segments (Valentine & Powers, 2013).

Education level:

- Significant differences emerged with regard to the *confused by over-choice* consumer decision-making style across education level categories. The lowest level of education group (schooling up to Grade 12) seems more likely to apply a *confused by over-choice* decision-making style when purchasing clothing than consumers with higher education levels (refer to *5.3.2.2.3* and Table 5.10 for results).
- Differences in the consumer decision styles that are used by consumers with a post-secondary school qualification are not statistically significant. It should, however, be remembered that lower levels of education generally also imply lower income levels, which all contribute to problems during the consumer decision-making process, for example, lack of money, limited access to product information, and limited access to alternative outlets.

Vulnerable consumer groups, i.e. those with lower education levels and lower incomes, could be assisted by providing appropriate product information that would increase their product knowledge, enable informed consumer decision-making, and reduce their confusion.

Population group: In the clothing product category, significant differences among the population groups became evident for all of the consumer decision-making styles. By contrast, in the MHA product category, the only significant difference that emerged in terms of the consumer decision-making styles of the three population categories was with regard to a *novelty/impulsive* approach. This indicates that population group and product category play a noteworthy role in the decision-making style that is employed, further indicating the possible influence of level of product complexity as well as product experience.

- *Perfectionism* seems the most pertinent consumer decision-making style across all population groups, while the *confused by over-choice* decision-making style seems the least pertinent.
- Black consumers seem significantly more *perfectionistic* than White consumers and "other" population groups.
- Significant differences came to the fore between the Black and White population groups regarding the *heuristic, impulsive/careless* and *recreational* consumer decision-making

styles. Black consumers seem significantly more likely to employ these decision-making styles than White consumers (refer to *5.3.2.2.4* and Table 5.11 for results).

- Contrary to the comparison between Black and White population groups, differences in the application of *heuristic, impulsive/careless* and *recreational* consumer decision-making styles are not statistically significant when compared to the so-called "other" population group and Black consumers, or when comparing the "other" population group to White consumers.
- White consumers also seem significantly less *confused by over-choice* when purchasing clothing, compared to "other" population groups.

Aside from population group differences, age and income level also exerted significant influences in terms of clothing decision-making styles. Technology plays a significant role in influencing consumer trends as a growing number of online retailers such as Superbalist, Spree and Zando provide consumers with product images together with pricing, sizes, colours and care guides for the garments. Comparative sites such as Price Check also allow a viewer to undertake an upfront comparison of cost of particular styles of clothing before selecting a particular retailer. These and other online sites may encourage eager but inexperienced consumers to shop impulsively and even carelessly, driven by the appearance of well-known brands set against inviting lifestyle backdrops. However, with increased access and use of technology across a broader range of the population, significant differences in consumer decision-making styles may diminish among younger age and higher income groups, possibly also reducing significant differences among different population groups.

Income level: The most pertinent decision-making style was *perfectionism* and the least pertinent consumer decision-making style was *confused by over-choice*. Significant differences were identified in four consumer decision-making styles, namely a *heuristic, impulsive/careless, recreational* and *confused by over-choice* consumer decision-making style (refer to *5.3.2.2.5* and Table 5.12 for results).

- Consumers with lower incomes were slightly more inclined towards a *heuristic* approach than those with higher incomes. Consumers in the lowest income group (earning <R10 000 per month) seem to be significantly more impulsive than consumers in the highest income category (≥R25 000 per month).
- Similarly, the lower income consumers seem more likely to apply a *recreational* consumer decision-making than high income consumers (≥R25 000 per month).
- Consumers in the lower income categories were significantly more inclined to apply the *confused by over-choice* consumer decision-making style than those in the higher income categories.

The findings indicate a lack of rational decision-making across the low income consumer category, even though *perfectionism* seems the most pertinent consumer decision-making style for consumers for clothing in general.

6.4.3 Demographic differences in consumers' decision-making styles for groceries (GROC)

Gender: Generally *perfectionism* is the predominant consumer decision-making style for GROC, while a *confused by over-choice* decision-making style is the least prevalent (refer to Table 5.13 for results). Significant differences existed between males and females regarding three of the five consumer decision-making styles, namely *recreational, perfectionism* and *enjoyment*.

- A recreational decision-making style seems more prevalent among females, although for males as well as females, this decision-making style is only moderately strong.
- Females are significantly more disposed towards a perfectionistic consumer decision-making style when purchasing GROC, suggesting that they may be more focused on quality, value for money and the functional value of grocery products than male consumers.
- Significant differences exist between males and females regarding the enjoyment consumer decision-making style. Results showed that males enjoy grocery shopping more than females, even though overall, the enjoyment decision-making style was only moderately strong. However, the stronger affinity towards the enjoyment decision-making style among male consumers is in line with emerging trends (PYMNTS, 2016). In addition, grocery shopping could be seen as a goal- and task-driven activity, explaining why men would enjoy it more than women – men often focus on how well they are able to accomplish a task and find what they are looking for (Kotzé, North, Stols & Venter, 2012).

Age: For GROC, *perfectionism* was the predominant consumer decision-making style across all age categories, while the least prominent decision-making style seems to be *confused by over-choice*.

- Significant differences existed between the Millennials and older consumers regarding the *heuristic, recreational* and *confused by over-choice* decision-making styles (refer to Table 5.13 for results), with these styles being more prevalent amongst the Millennials. As Millennials are generally considered to be trendsetters and open to new ideas (Duh & Struwig, 2015; Valentine & Powers, 2013), the *heuristic* decision-making style with a focus on price, branding, novelty and trendiness would be more appealing to them than older consumers.
- The findings also suggest that compared to older consumers, Millennials would rather employ a *recreational* shopping style and may also become more easily *confused by over-choice*.

Education levels: *Perfectionism* was the predominant consumer decision-making style across all educational levels, while *confused by over-choice* was the least prevalent. Significant differences exist among the different education level groups regarding the *confused by over-choice* and the *enjoyment* decision-making styles (refer to *5.3.2.3.3* and Table 5.14 for results).

- Consumers with a lower level of education (≤Grade 12) seem more inclined to apply the *confused by over-choice* decision-making style than those with higher education levels, implying that a low level of education can be associated with a higher level of uncertainty when confronted with an over-choice. Consumers with a low level of education may struggle to differentiate between the array of grocery products due to a lack of product experience or of product-related socialisation.
- Although significant differences seemed apparent among the different level of education categories for the enjoyment decision-making style, it could not be confirmed statistically.

Population group: As indicated before, the most pertinent consumer decision-making style for GROC is *perfectionism,* while the least pertinent consumer decision-making style is *confused by over-choice*.

- Significant differences exist among the population groups with regard to the *heuristic, recreational* and *confused by over-choice* decision-making styles. In all three instances, these styles seem more prevalent among Black and the "other" population groups compared to the White group (refer to *5.3.2.3.4* and Table 5.15 for results).
- Differences in the consumer decision styles between the Black and the "other" population groups are not statistically significant, which shares similar results to previous research (Chase *et al*., 2010).

Retailers need to realise the important role that population affiliation plays in decision-making styles with regard to grocery shopping. For example, the importance of brands (heuristics) as signifier of status and quality cannot be underestimated among communities who have historically been considered "less important" market segments based on lack of personal wealth and buying power. For grocery shoppers with a recreational decision-making style, grocery shopping may form the core of a family day out, where the shopping experience may include food and drink and entertainment such as movies. As emerging consumers gain more exposure to product variety they may become confused by the over-choice. Retailers should therefore provide these consumers with ample product information to overcome confusion.

Income levels: Significant differences existed between the different income levels with regard to the *heuristic, recreational* and *confused by over-choice* decision-making styles (refer to *5.3.2.3.5* and Table 5.16 for results).

- The findings show that consumers with lower income levels are more inclined to apply *heuristic, recreational* and *confused by over-choice* decision-making styles than those with higher levels of income, probably to overcome a lack of ability to rationally deliberate product differences.

6.5 SUMMARY OF DEMOGRAPHIC DIFFERENCES IN CONSUMERS' DECISION-MAKING STYLES ACROSS VARYING PRODUCT CATEGORIES

Overall, the results show that *perfectionism* was the predominant consumer decision-making style for all product categories investigated, and *confused by over-choice* was the least pertinent. Across all three of the product categories, consumers with a low level of educational attainment and Millennials (younger consumers) seem more likely to apply the *confused by over-choice* decision-making style as well as the *heuristic* decision-making style. It therefore appears that *confusion by over-choice* seemed significantly more pertinent challenge for the lowest income consumers who have limited resources to deal with the market complexity. In addition, younger consumers are significantly more prone to use a *heuristic* shopping style that indicates a need to expand their ability to make informed purchasing decisions. The pertinence of the above-mentioned decision-making styles indicates the need for more support in retail to prevent post-purchase dissatisfaction.

With regard to major household appliances, the *enjoyment* decision-making style was more prevalent among females and Millennials, while the *confused by over-choice* decision-making style was more prevalent among low income consumers, consumers with a low level of educational attainment and females. The *novelty/impulsive* decision-making style was more prevalent among lower income consumers, Blacks and Millennials, which indicate a lack of rationality that may result in post-purchase dissatisfaction. However, this also indicates some form of excitement, which should be optimised to inform and educate consumers.

For clothing, the *recreational* decision-making style was more prevalent among females, Millennials, Blacks and lower income consumers. In addition, Blacks and Millennials were more impulsive and reliant on *heuristics*, while lower income consumers also seem reliant on *heuristics* rather than factual information. In light of the continual growth of the black middle class, clothing retailers should take note of Black consumers' preference for specific consumer decision-making styles.

For groceries, the least complex product category, the *recreational* decision-making style was more prevalent among Millennials, Blacks as well as the "other population group" and lower

income consumers, while men seem to enjoy grocery shopping more than females. In addition, the *confused by over-choice* decision-making style seems more prevalent among Millennials, Blacks and other population groups, consumers with a lower level of education, and lower income consumers, while the Millennials, Blacks and "other population group", and lower income consumers seem more brand-conscious, thus relying on *heuristics*.

The outcomes of this study demonstrate the relevance of consumer decision-making styles during consumers' product purchases, also indicating that consumers' decision-making styles differ across different product categories and that the same consumer does not necessarily apply the same consumer decision style throughout. Also, every consumer decision-making style indicates the relevance of other product characteristics and different approaches during the product evaluation phase with different levels of rationality, anxiety and confusion. Particularly important is the decision-making styles of young consumers and the emerging Black middle market who will represent the major share of the market in the near future.

6.6 CONTRIBUTION TO THEORY

In the South African context, studies have focused on the application of consumer decision-making styles for specific (single) product categories, for example general major household appliances (Erasmus *et al*., 2014), products in general (Potgieter *et al*., 2013), and clothing (Radder *et al*., 2006). Extending these studies, this study shows that consumers' application of consumer decision-making styles differs across different product categories, even though some consumer decision-making styles such as *perfectionism* seem mutually relevant. The application of decision-making styles across the different products also differs for different demographic groups, for example gender differences and population differences within the same product category. This has not been shown before. The research therefore contributes to existing theory on consumer decision-making styles across products of varying complexity as well as the significant differences in the consumer decision-making styles across selected demographic variables per product category.

6.7 IMPLICATIONS OF THE STUDY

This study provides a relatively rare insight into the consumer decision-making styles across products of varying complexity, namely major household appliances, clothing (workwear or best daywear), and groceries. The findings of the study could improve the understanding of interested parties, including researchers, marketers, brand managers and appliance, clothing or grocery

retailers, of the role of demographics in consumer decision-making styles across these products. An understanding of South African consumer decision-making styles across products of varying complexity may facilitate retailers and marketers to further refine their marketing strategies, taking into account the various demographics of the consumer population.

The results show that consumers are fairly perfectionistic in their purchasing endeavours, especially for major household appliances and clothing. Perfectionistic consumers are also concerned about value for money when it comes to groceries and major household appliances. Clearly manufacturers and retailers need to carefully position their respective products by focusing on quality and value for money where applicable. Consumers of these products are also price- and brand-conscious. Overall, the *confused by over-choice* decision-making style was the least dominant across the product categories. It appears that the *confused by over-choice* decision-making style is dependent on the product category, as appliance consumers were more confused than clothing and grocery consumers. Marketers and retailers should acknowledge that specific decision-making styles are product-specific. For example, the *novelty/impulsive* consumer decision-making style is unique to the major household appliances product category, the *impulsive/careless* decision-making style is unique to clothing purchases, while a *recreational* decision-making style is relevant for clothing and groceries.

Across all three of the product categories, consumers with a low level of educational attainment and Millennials were respectively more likely to apply the *confused by over-choice* decision-making style and the *heuristic* decision-making style, which suggests a lack of rationality; this causes some concern in terms of informed consumer decisions. In addition, depending on the product category and demographic factors, specific consumer decision-making styles were more prominent. For example, females enjoyed appliance shopping more than males, males enjoyed grocery shopping more than females, and for females the *recreational* decision-making style was more relevant for clothing purchases than for males. An understanding of these differences will allow the development of marketing strategies that are meant to suitably address consumers' needs in a rapidly evolving consumer environment.

6.8 LIMITATIONS OF THE STUDY

In this study the product categories, namely major household appliances appliance, clothing (workwear or best daywear), and groceries, were carefully selected based on Erasmus *et al*'s (2014) mapping of broad categories of products and services that seem similar in complexity on a complexity continuum. However, the findings of the current study can only be applied to these specific broad product categories, implying that one cannot for example distinguish between

specific grocery products such as perishable foods, non-perishable foods, detergents and toiletries. In addition, although the current study measured respondents' decision-making styles across product categories with varying complexity, the shopping context, e.g. brick-and-mortar shopping or online shopping, was not specified. The findings of the study can therefore only be applied in the general shopping context.

This study explored differences in consumers' prevalent decision-making styles based on specific demographics. Although not the purpose of the study, differences in decision-making styles per product category were not explored based on a combination of demographic factors, for example, differences in decision-making style of black female millennials with higher education and income levels compared to White female millennials with higher education and income levels. However, this could be reported on in a subsequent publication.

In addition, due to time and financial constraints, convenience sampling was used to recruit respondents in the Tshwane metropolitan area, limiting the sample to one geographic area. The majority of the sample consisted of Whites, while Blacks and the other population groups respectively accounted for only 24.1 and 6.5%, implying that the sample was not representative of the population composition of the geographic area.

6.9 RECOMMENDATIONS FOR FUTURE RESEARCH

In light of the conclusions and limitations of the study, some recommendations and suggestions for future research are given below.

This study provides the basis for further application of the measurement of consumer decision-making styles in different product contexts. The investigation could be extended to other product categories representing more complex purchasing decisions, including motor vehicles, homes and financial services. In addition, specific product categories could be refined to distinguish between specific products rather than product categories, for example distinguishing groceries in terms of perishables, non-perishables and toiletries, or to distinguish clothing purchases more specifically in terms of formal, informal and underwear.

The interpretation of consumer decision-making styles is complex, as variables other than demographics and the product category could determine consumers' choice of decision-making style. As personal values guide what is important to us in our lives (Schwartz, 2006, 2012), and as a result, affect our judgements, preferences and choices, research on the combined effect of personal values, demographics and product category on consumer decision-making styles could

shed some light on the antecedents to consumer decision-making styles in the multicultural society of South Africa.

For future research, a larger geographical area should be covered, in order to include a large sample from different ethnic groups in South Africa. Due to value shifts and changes in lifestyle, the decision-making styles of urban and rural consumers may differ, necessitating more research on the topic, especially pertaining to black urban consumers who are exposed to an individualistic way of life and black rural consumers who tend to hold collectivistic values.

Further research could focus on differences in consumer decision-making styles when purchasing products of varying complexity in specific purchase contexts such as online shopping or brick-and-mortar shopping. Due to the relative speed at which consumers are being influenced by changing technology and the plethora of information available, it is recommended that the study be replicated in a few years' time to compare consumer decision-making styles associated with specific demographic and product categories to develop marketing strategies and to better understand consumer needs.

6.10 CONCLUSION

The conclusions based on the findings of the study were presented in this chapter. The findings of the study broaden our understanding the demographic differences in consumers' choice of consumer decision-making styles across product categories of varying complexity. The findings have practical implications for retailers, marketers and consumer facilitators. A number of limitations were identified and recommendations were made for future research.

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Addendum A: Consent form and questionnaire

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Natural and Agricultural Sciences
Department of Consumer Science
+27 012 420 2488/ 2575
25 March 2015

Dear respondent

RESEARCH PROJECT: An investigation of consumers' shopping styles when dealing with specific types of purchase decisions

Thank you for considering participation in this research project that the final year students in the Department of Consumer Science have to execute as part of an investigation that has been on-going for the past three years. Our research has attracted the interest of prominent industries in South Africa, as part of a specific research focus in our department. Students have to submit their contributions in the form of a scientifically documented research script as part of the prerequisites for obtaining their B Consumer Science degrees.

The purpose of the 2015 research endeavour is to gain a better understanding of consumers' shopping styles when dealing with specific types of purchase decisions. It will take approximately 15 minutes of your time to complete this questionnaire. All information will be dealt with anonymously and it will not be possible to eventually trace your information back to you in any way as the questionnaires are completed anonymously and are returned in sealed envelopes. If, for any reason, you wish to withdraw anyway, please feel free to inform the student. Respondents may provide their cell phone details voluntarily on the tear off strip below and enter it into a separate envelope for participation in a lucky draw to win a gift voucher to the value of R500 at the closure of data collection. Three names will be drawn, and the winner will be notified telephonically.

Please read the questions carefully and give your honest opinion throughout. Thank you for your participation!

RESEARCH COORDINATORS: DR S DONOGHUE AND PROF ALET C ERASMUS –
CONTACT: 012 420 2488/ 012 420 2575

_____

IF YOU WISH TO PARTICIPATE IN THE LUCKY DRAW, PLEASE PROVIDE YOUR CELL NUMBER ONLY AND PLACE THE STRIP IN THE ENVELOPE WHEN RETURNING YOUR COMPLETED QUESTIONNAIRE.
CELL NUMBER:_____

Please follow the instructions for each question very carefully. There are no correct or incorrect answers and you will remain anonymous. Your identity can therefore not be retrieved and disclosed in any way.

Section A - This section investigates your shopping style when purchasing specific products. Please respond to every item and indicate your answer with an X in the adjacent column.	Respondent Number						
1.1: In terms of clothing purchases, specifically clothing suitable as work wear or as your best day wear.....	Clothing					Office use	
	Strongly disagree	Disagree	Undecided/Neutral	Agree	Strongly agree		
When it comes to purchasing products, I try to get the very best product.	1	2	3	4	5	V1	
Shopping for clothing is an enjoyable activity for me.	1	2	3	4	5	V2	
I frequently change brands in this product category.	1	2	3	4	5	V3	
To me, the higher the price of the product, the better the quality.	1	2	3	4	5	V4	
I shop quickly and tend to buy the first product that seems good enough.	1	2	3	4	5	V5	
I keep my wardrobe up-to-date with the changing clothing trends.	1	2	3	4	5	V6	
I make special effort to choose the very best quality products.	1	2	3	4	5	V7	
I take the time to shop carefully for the product that will suit my needs best.	1	2	3	4	5	V8	
I go to the same stores each time I shop.	1	2	3	4	5	V9	
The more expensive brands are usually my choice.	1	2	3	4	5	V10	
I usually try to buy the best overall quality.	1	2	3	4	5	V11	
I make effort to find the best value for the money.	1	2	3	4	5	V12	
I prefer buying the best-selling brands.	1	2	3	4	5	V13	
To get variety, I shop at different stores.	1	2	3	4	5	V14	
The more I learn about clothing products, the harder it seems to choose the best.	1	2	3	4	5	V15	
I do not spend much time on shopping trips.	1	2	3	4	5	V16	
I often make careless purchases I later wish I had not.	1	2	3	4	5	V17	
Purchasing clothing that is in fashion is important to me.	1	2	3	4	5	V18	
I prefer well-known brands.	1	2	3	4	5	V19	
I tend to be confused by the product label information.	1	2	3	4	5	V20	
I am impulsive when purchasing clothing.	1	2	3	4	5	V21	
Shopping is not a pleasant activity to me.	1	2	3	4	5	V22	
My standards for products I buy are very high.	1	2	3	4	5	V23	
Once I find a brand I like, I stick with it.	1	2	3	4	5	V24	
I enjoy shopping just for the fun of it.	1	2	3	4	5	V25	
I usually have one or more outfits that represent new product trends.	1	2	3	4	5	V26	
It's fun and exciting to buy new clothing.	1	2	3	4	5	V27	
I buy as much as possible at sale prices.	1	2	3	4	5	V28	
Sometimes it's hard to choose where (which stores) to shop.	1	2	3	4	5	V29	
Established retail chains such as Edgars, Woolworths, Truworths, and Foschini offer me the best products.	1	2	3	4	5	V30	
I carefully watch how much I spend.	1	2	3	4	5	V31	
I should plan my shopping more carefully than I do.	1	2	3	4	5	V32	
I really don't give my purchases much thought.	1	2	3	4	5	V33	
Shopping around in different stores wastes my time.	1	2	3	4	5	V34	
The lowest price products are usually my choice.	1	2	3	4	5	V35	
There are so many brands to choose from that I often feel confused.	1	2	3	4	5	V36	
Getting very good quality clothing is very important to me.	1	2	3	4	5	V37	
I consider the most advertised brands as very good choices.	1	2	3	4	5	V38	
I have favorite brands I buy over and over.	1	2	3	4	5	V39	
I am generally concerned about the possible physical harm or danger that clothing products might cause.	1	2	3	4	5	V40	
I am generally concerned about other people's opinion about my clothing choices.	1	2	3	4	5	V41	
I am inclined to worry about the possibility that clothing products might not meet my performance expectations.	1	2	3	4	5	V42	
I am generally concerned about the possibility that clothing products might require a lot of my time during use or maintenance.	1	2	3	4	5	V43	
I am generally concerned about possible financial loss as a result of my specific product choice.	1	2	3	4	5	V44	
I am inclined to worry about the possibility that the clothing products that I have chosen might not be consistent with the perception/ idea/ belief that I have of myself.	1	2	3	4	5	V45	
I am usually the first to own new products in my group of friends.	1	2	3	4	5	V46	
I usually buy clothing brands that I have been satisfied with.	1	2	3	4	5	V47	
I am generally concerned about the time required to search for suitable clothing products.	1	2	3	4	5	V48	

1.2: In terms of household appliance purchases, specifically major appliances such as refrigerators, washing machines, dishwashers, tumble dryers..... Please respond to every item. Mark the most appropriate option with an X	Major appliances					Office use	
	Strongly disagree	Disagree	Undecided/Neutral	Agree	Strongly agree		
When it comes to purchasing household appliances, I try to get the very best product.	1	2	3	4	5	V49	
Shopping for appliances is an enjoyable activity for me.	1	2	3	4	5	V50	
I frequently change brands in this product category.	1	2	3	4	5	V51	
To me, the higher the price of the product, the better the quality.	1	2	3	4	5	V52	
I shop quickly and tend to buy the first product that seems good enough.	1	2	3	4	5	V53	
I keep my home up-to-date with changing appliance trends.	1	2	3	4	5	V54	
I make a special effort to choose the very best quality appliances.	1	2	3	4	5	V55	
I take the time to shop carefully for the appliance that will suit my needs best.	1	2	3	4	5	V56	
I go to the same stores each time I shop.	1	2	3	4	5	V57	
The more expensive brands are usually my choice.	1	2	3	4	5	V58	
I usually try to buy the best overall quality.	1	2	3	4	5	V59	
I make effort to find the best value for the money.	1	2	3	4	5	V60	
I prefer buying the best-selling brands.	1	2	3	4	5	V61	
To get variety, I shop at different stores.	1	2	3	4	5	V62	
The more I learn about household appliances, the harder it seems to choose the best.	1	2	3	4	5	V63	
I do not spend much time on shopping trips.	1	2	3	4	5	V64	
Often I make careless purchases I later wish I had not.	1	2	3	4	5	V65	
Purchasing modern appliances is important to me.	1	2	3	4	5	V66	
I prefer well-known brands.	1	2	3	4	5	V67	
All the information provided on different appliances confuses me.	1	2	3	4	5	V68	
I am impulsive when purchasing major appliances.	1	2	3	4	5	V69	
Shopping is not a pleasant activity to me.	1	2	3	4	5	V70	
My standards for the appliances I buy are very high.	1	2	3	4	5	V71	
Once I find a brand I like, I stick with it.	1	2	3	4	5	V72	
I enjoy shopping just for the fun of it.	1	2	3	4	5	V73	
I usually have one or more appliances in my home that represent new product trends.	1	2	3	4	5	V74	
It's fun and exciting to buy new appliances.	1	2	3	4	5	V75	
I buy as much as possible at sale prices.	1	2	3	4	5	V76	
Sometimes it's hard to choose where (which stores) to shop.	1	2	3	4	5	V77	
Major retail chains such as Game, Makro, House & Home, Hirsch's etc. offer me the best appliances	1	2	3	4	5	V78	
I carefully watch how much I spend on appliances.	1	2	3	4	5	V79	
I should plan my shopping more carefully than I do.	1	2	3	4	5	V80	
I really don't give my purchases much thought.	1	2	3	4	5	V81	
Shopping around in different stores wastes my time.	1	2	3	4	5	V82	
The lowest price products are usually my choice.	1	2	3	4	5	V83	
There are so many brands to choose from that I often feel confused.	1	2	3	4	5	V84	
Getting very good quality appliances is very important to me.	1	2	3	4	5	V85	
I consider the most advertised brands as very good choices.	1	2	3	4	5	V86	
I have favorite brands I buy over and over.	1	2	3	4	5	V87	
I am generally concerned about the possible physical harm or danger that appliances might cause.	1	2	3	4	5	V88	
I am generally concerned about other people's opinion about my appliance choices.	1	2	3	4	5	V89	
I am inclined to worry about the possibility that appliances might not meet my performance expectations.	1	2	3	4	5	V90	
I am generally concerned about the possibility that appliances might take up a lot of my time during use.	1	2	3	4	5	V91	
I am generally concerned about possible financial loss as a result of my specific product choice.	1	2	3	4	5	V92	
I am inclined to worry about the possibility that the appliances that I have chosen might not be consistent with the perception/ idea/ belief that I have of myself.	1	2	3	4	5	V93	
I am usually the first to own new products in my group of friends.	1	2	3	4	5	V94	
I usually buy appliance brands that I have I have been satisfied with.	1	2	3	4	5	V95	
I am generally concerned about the time required to search for suitable appliances.	1	2	3	4	5	V96	

1.3: In terms of all foods related grocery purchases (excluding cleaning products and toiletries)... Please respond to every item. Mark the most appropriate option with an X	Groceries					Office use	
	Strongly disagree	Disagree	Undecided/ Neutral	Agree	Strongly agree		
When it comes to purchasing groceries (foods), I try to get the very best product.	1	2	3	4	5	V97	
Grocery shopping is an enjoyable activity for me.	1	2	3	4	5	V98	
I frequently change brands in this product category.	1	2	3	4	5	V99	
To me, the higher the price of the product, the better the quality.	1	2	3	4	5	V100	
I shop quickly and tend to buy the first product that seems good enough.	1	2	3	4	5	V101	
I keep my home up-to-date with changing grocery product trends.	1	2	3	4	5	V102	
I make a special effort to choose the very best quality groceries.	1	2	3	4	5	V103	
I take the time to shop carefully for the groceries that will suit my needs best.	1	2	3	4	5	V104	
I go to the same stores each time I shop.	1	2	3	4	5	V105	
The more expensive brands are usually my choice.	1	2	3	4	5	V106	
I usually try to buy the best overall quality.	1	2	3	4	5	V107	
I make effort to find the best value for the money.	1	2	3	4	5	V108	
I prefer buying the best-selling brands.	1	2	3	4	5	V109	
To get variety, I shop at different stores.	1	2	3	4	5	V110	
The more I learn about grocery products, the harder it seems to choose the best.	1	2	3	4	5	V111	
I do not spend much time on shopping trips.	1	2	3	4	5	V112	
Often I make careless purchases I later wish I had not.	1	2	3	4	5	V113	
Purchasing grocery products that are novel or impressive are important to me.	1	2	3	4	5	V114	
I prefer well-known brands.	1	2	3	4	5	V115	
All the information provided on different grocery products confuses me.	1	2	3	4	5	V116	
I am impulsive when purchasing groceries.	1	2	3	4	5	V117	
Grocery shopping is not a pleasant activity to me.	1	2	3	4	5	V118	
My standards for the groceries I buy are very high.	1	2	3	4	5	V119	
Once I find a brand I like, I stick with it.	1	2	3	4	5	V120	
I enjoy shopping just for the fun of it.	1	2	3	4	5	V121	
I usually have one or more grocery products in my home that represent new product trends.	1	2	3	4	5	V122	
It's fun and exciting to buy groceries.	1	2	3	4	5	V123	
I buy as much as possible at sale prices.	1	2	3	4	5	V124	
Sometimes it's hard to choose where (which stores) to shop.	1	2	3	4	5	V125	
Well-known supermarkets such as Woolworths, Checkers, Pick & Pay, and Spar offer me the best products	1	2	3	4	5	V126	
I carefully watch how much I spend.	1	2	3	4	5	V127	
I should plan my shopping more carefully than I do.	1	2	3	4	5	V128	
I really don't give my purchases much thought.	1	2	3	4	5	V129	
Shopping around in different stores wastes my time.	1	2	3	4	5	V130	
The lowest price products are usually my choice.	1	2	3	4	5	V131	
There are so many brands to choose from that I often feel confused.	1	2	3	4	5	V132	
Getting very good quality grocery products is very important to me.	1	2	3	4	5	V133	
I consider the most advertised brands as very good choices.	1	2	3	4	5	V134	
I have favorite brands I buy over and over.	1	2	3	4	5	V135	
I am generally concerned about possible physical harm or danger that grocery products might cause.	1	2	3	4	5	V136	
I am generally concerned about other people's opinion about my grocery product choices.	1	2	3	4	5	V137	
I am inclined to worry about the possibility that grocery products might not meet my performance expectations	1	2	3	4	5	V138	
I am generally concerned about the possibility that grocery products might take up a lot of my time during food preparation.	1	2	3	4	5	V139	
I am generally concerned about possible financial loss as a result of my specific product choice.	1	2	3	4	5	V140	
I am inclined to worry about the possibility that the groceries that I have chosen might not be consistent with the perception/ idea/ belief that I have of myself.	1	2	3	4	5	V141	
I am usually the first to own new products in my group of friends.	1	2	3	4	5	V142	
I usually buy grocery brands that I have been satisfied with.	1	2	3	4	5	V143	
I am generally concerned about the time required to search for suitable grocery products.	1	2	3	4	5	V144	

Section B PLEASE TELL US MORE ABOUT YOURSELF Answer every question and mark every relevant answer with an X												Office use	
What is your gender?				Male	1	Female	2					V145	
What is your age?								Years				V146	
What is your highest level of education?	Lower than grade 10	1	Grade 10 or 11	2	Grade 12	3	Grade 12 + Degree/ diploma	4	Post graduate	5		V147	
What is your approximate total monthly	Less than R5000	1	R5000 to R9999	2	R10000 to R14999	3	R15000 to R24999	4	R25000 or more	5		V148	
What population group do you belong to according to the SA Population Equity Act?													
White	1	Black	2	Indian	3	Coloured	4	Other:			5	V149	
What is the name of the suburb where you live in Tshwane? Please specify.												V150	

Thank you for your participation!

Addendum B: Plagiarism form

UNIVERSITY OF PRETORIA
FACULTY: Agriculture
DEPARTMENT: Consumer Science

The Department of Consumer Science places specific emphasis on integrity and ethical behaviour with regard to the preparation of all written work submitted for academic evaluation.

Although academic personnel will provide you with information regarding reference techniques as well as ways to avoid plagiarism, you also have a responsibility to fulfil in this regard. Should you at any time feel unsure about the requirements, you must consult the lecturer concerned before you submit any written work.

You are guilty of plagiarism when you extract information from a book, article or web page without acknowledging the source and pretend that it is your own work. In truth, you are stealing someone else's property. This doesn't only apply to cases where you quote verbatim, but also when you present someone else's work in a somewhat amended format (paraphrase), or even when you use someone else's deliberation without the necessary acknowledgement. You are not allowed to use another student's previous work. You are furthermore not allowed to let anyone copy or use your work with the intention of presenting it as his/her own.

Students who are guilty of plagiarism will forfeit all credit for the work concerned. In addition, the matter can also be referred to the Committee for Discipline (Students) for a ruling to be made. Plagiarism is considered a serious violation of the University's regulations and may lead to suspension from the University.

For the period that you are a student at the Department of Consumer Science, the declaration below must accompany all written work to be submitted. No written work will be accepted unless the declaration has been completed and attached.

I (full names):	**Shayan Lee Olyott**
Student number:	**12262162**
Subject of the work:	**Differences in consumers' decision-making styles across product categories with varying complexity: A South African perspective**

Declaration

1. I understand what plagiarism entails and am aware of the University's policy in this regard.
2. I declare that this dissertation is my own, original work. Where someone else's work was used (whether from a printed source, the internet or any other source), due acknowledgement was given and reference was made according to departmental requirements.
3. I did not make use of another student's previous work and submitted it as my own.
4. I did not allow and will not allow anyone to copy my work with the intention of presenting it as his or her own work.

SIGNATURE