

# Older female consumers' quality perception of clothing during pre- and post-purchase decision-making

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**Glória a Deus**

## **ABSTRACT**

During the decision-making process consumers establish expectations regarding the performance of the product under consideration. These expectations are usually connected to certain product attributes inherent to the product, which are evaluated during both the pre- and post-purchase phases of the process. The clothing industry may mistakenly focus on insignificant clothing attributes when aiming to improve clothing quality, or may not have sufficient knowledge regarding the most important clothing attributes. In addition, no literature could be located which pertains to older female consumers' quality perception regarding certain clothing attributes. As older female consumers have been defined as a vulnerable consumer group, research aiding and contributing to the possible improvement of their well-being is essential. If older female consumers' needs are not being fulfilled with regard to clothing quality, recommendations can be made to improve these attributes.

The current study investigated the quality perception of older female consumers with regard to certain clothing attributes during both the pre- and post-purchase phases of decision-making. The objectives of the study were to determine older female consumers' expectations regarding the clothing attributes; as well as to determine the perceived performance of these attributes; and lastly to make recommendations to the clothing industry to improve the relevant attributes based upon the findings regarding their expectations and the perceived performance of the attributes.

An exploratory research approach was followed by means of a quantitative survey in the form of a structured questionnaire. The results indicated that the majority of the respondents rated clothing attribute expectations as being of high importance. However, the performance of the attributes was rated as poor or neutral. Therefore, by indicating high expectations but low performance, older female consumers' needs are not being fulfilled with regard to clothing and negative disconfirmation takes place. Negative disconfirmation often leads to dissatisfaction. There is thus an opportunity available for the SA clothing industry to enhance these clothing attributes in order to improve clothing for these consumers. The clothing industry has the potential to launch a new and improved range just for these consumers. By providing older female consumers with a range specifically tailored to their needs, retailers could potentially gain more loyal customers who will purchase clothing as it is more suitable for them. It can therefore be concluded that this research is not only beneficial to the clothing industry and SA, but more importantly, to older female consumers.

Keywords: Clothing attributes, decision-making, disconfirmation theory, older consumer, quality perception

## OPSOMMING

Tydens die besluitnemingsproses vestig verbruikers verwagtinge rakende die funksionering van die produk wat oorweeg word. Hierdie verwagtinge is gewoonlik gekoppel aan spesifieke produk-kenmerke wat inherent aan die produk is, en wat geëvalueer word tydens die voor- en na-aankoopfasies van die proses. Die klere-industrie mag dalk foutiewelik konsentreer op onbelangrike kledingskenmerke wanneer hulle kyk na die verbetering van die kwaliteit van klere, of hulle mag dalk nie voldoende kennis hê van die belangrikste kenmerke van klere nie. Voeg hierby dat geen literatuur gevind kon word wat verwys na ouer vroulike verbruikers se kleding kwaliteit persepsie met betrekking tot kenmerke van klere nie. Aangesien ouer vroulike verbruikers gedefinieer is as 'n kwesbare verbruikersgroep, is navorsing wat kan bydra tot die moontlike verbetering van hulle welstand noodsaaklik. As ouer vroulike verbruikers se behoeftes nie vervul word wanneer dit kom by kwaliteit van klere nie, moet aanbevelings gemaak word oor hoe hierdie kenmerke verbeter kan word.

Hierdie studie ondersoek die kwaliteitspersepsie van ouer vroulike verbruikers met verwysing na sekere kenmerke van klere tydens die voor- en na-aankoopfasies van besluitneming. Die doelwitte van die studie was om te bepaal wat ouer vroulike verbruikers se verwagtinge is in terme van hierdie kenmerke van klere, en ook om te bepaal wat hulle persepsie is oor die funksionering van hierdie kenmerke, en om uiteindelik aanbevelings aan die klere-industrie te maak oor die verbetering van hierdie kenmerke gebaseer op die bevindings van die studie in terme van hulle verwagtinge en die persepsies oor die funksionering van hierdie kenmerke.

'n Ondersoekende navorsingsbenadering is gevolg by wyse van 'n kwantitatiewe ondersoek bestaande uit 'n gestruktureerde vraelys. Die resultate het aangetoon dat die meerderheid van die respondente klerekenmerkverwagtinge as baie belangrik geag het, maar die beoordeling van kenmerke in terme van funksionaliteit was negatief of neutraal. Dus, in die konteks van hoë verwagtinge maar lae produk-prestasie, is dit duidelik dat ouer vroue se verbruikersbehoefte nie vervul word met verwysing na klere nie, en dus vind negatiewe nie-bevestiging plaas. Negatiewe nie-bevestiging lei dikwels tot ontevredenheid, en daar is dus 'n geleentheid vir die Suid-Afrikaanse klerebedryf om hierdie kenmerke van klere te verbeter met die oog op hierdie spesifieke verbruikers. Die klere-industrie het die potensiaal om 'n nuwe en verbeterde reeks op die mark te bring spesifiek vir hierdie verbruikers. Deur aan ouer vroulike verbruikers 'n reeks te verskaf wat spesifiek vir hulle ontwikkel is, kan kleinhandelaars potensieel meer lojale kliënte lok wat klere sal koop omdat dit meer toepaslik is vir hulle. Die konklusie kan dus gemaak word dat hierdie navorsing nie net tot die voordeel van die klere-industrie en Suid-Afrika kan wees nie, maar belangriker, tot die voordeel van ouer vroulike verbruikers in die algemeen.

Sleutelwoorden: Besluitneming, klerekenmerke, kwaliteitspersepsie, nie-bevestigingsteorie, ouer verbruiker

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# CHAPTER 1: INTRODUCTION

## 1.1 Background and motivation

Evaluation takes place during the pre-purchase, as well as the post-purchase stage of decision-making and consumers perceive and judge a product's performance based on their expectations (Schiffman & Wisenblit, 2015:123). During these evaluations, certain product attributes are known to be fundamental in the perceived performance of a product and the relative importance of attributes might differ amongst consumers (Hoyer & MacInnis, 2007:197). Concerning clothing items, the clothing industry might mistakenly focus its attention on insignificant clothing attributes if there is a lack of knowledge regarding quality cues used to guide consumer purchasing decisions (Hugo & Van Aardt, 2012:460). Manufacturers, as well as retailers, must ensure that they develop and implement a product-specific consumer-oriented approach (Hoyer & MacInnis, 2007:198), which will improve consumer experience and satisfy consumers' needs (Klaus & Maklan, 2013:227). South African (SA) clothing manufacturers could make use of possible findings and recommendations provided in order to improve clothing specifically for the older female consumer market which could provide them with a competitive advantage over imports (that can only offer foreign sizing). This is necessary as large amounts of clothing imports from China are taking place (Ronan, 2015:1).

Although research regarding the influence of clothing evaluative criteria on SA consumers' decision making process has been done by Hugo and Van Aardt (2012); research pertaining to older SA female consumers' quality perception with regard to clothing attributes could not be located. Changes in the body shapes of female consumers that take place over time (Makhanya *et al.*, 2014:183), as well as female consumers being the principal buyers (De Klerk & Lubbe, 2008:48) has led to the choice of focusing on female consumers. Recommendations from this study might lead to improved clothing in congruence with the expectations of older female consumers, which in turn will increase their consumer well-being.

The proportion of the world population of persons over the age of 60 years is projected to rise from 5% in 2013 to 11% by 2050 (United Nations, 2013:18). The population of older consumers in SA has also grown considerably during the past ten years (Statistics South Africa, 2012:94) (Stats SA) and has been classified as an important part of the economy (Chaston, 2011:371; Cole *et al.*, 2008:356). However, there is a lack of research regarding older female consumers with regard to their decision-making and quality perception of clothing. Exploring quality perception during decision-making could perhaps give an insight into clothing attributes consumers use and prioritise to facilitate the choice of clothing (Dubey, 2014:57). Therefore it is important to explore these facets to ultimately make recommendations to the clothing industry

for improving clothing items. Improvements to clothing attributes which are important to older female consumers might result in bigger financial savings (e.g. clothing that lasts longer), as well as fewer search efforts to find appropriate clothing. Thus the older female population, who are more prone to vulnerabilities such as ill health (Boyle *et al.*, 2012:1; Cole *et al.*, 2008:360) and lack of financial resources (Portacolone, 2013:166) might benefit from this study.

### **1.1.1 The older consumer**

There has been a rise in the average human life expectancy (United Nations, 2013:6) and older consumers are therefore an increasingly large part of the global population (Chaston, 2011:371; Cole *et al.*, 2008:356). Likewise, older consumers, as a segment of the South African (SA) population, have shown a tremendous increase in growth between 2002 and 2012. The total number of older persons had been rising to more than four million in 2012 (7.7% of the population) making it the country with the largest percentage of older persons in Africa (Stats SA, 2012:94).

Older SA consumers, along with children, youth and women, have been classified as vulnerable groups (Stats SA, 2012:1). This classification is possibly due to a lack of social support in the elderly community, which leads to isolation. This group is also more prone to experience physical and mental health problems (Stats SA, 2012:94; Yeh & Sing, 2004:129). Studies indicate that the elderly show an incapacity to independently manage chronic diseases or make appropriate health decisions (Levy & Royne, 2009:369). In addition, older consumers do not have the same amount of financial freedom due to retirement and often experience insecurities (Portacolone, 2013:166). Due to these financial insecurities, older SA consumers often receive old-age grants of R1 500 per month for persons aged 60-74 years and R1 520 for persons aged 75 years and older (SASSA, 2016). However, these grant amounts are small, considering the escalating cost of living, of care-giving and medical expenses, amongst others, and one may assume that little disposable funds remain available for essentials such as clothing. Some older consumers are furthermore increasingly required to play a more active role in the care and support of their households (Stats SA, 2012:94), which possibly burdens this already vulnerable group. It is therefore of great importance that older consumers receive the most value for their money when buying essential items such as clothing.

Even though other studies have defined age in terms of a cognitive state of mind (Birtwistle & Tsim, 2005:458; Nam *et al.*, 2006:102) older persons in SA are defined chronologically by the Older Persons' Act, No. 13 of 2006, as persons who are 65 years or older (for males), and 60 years or older (for females). However, this was amended through the Social Assistance Amendment Act, No. 6 of 2008 (revised again in 2010), stating that all persons over the age of

60 are defined as older persons (Stats SA, 2012:93). Thus for the purpose of this study, older consumers are defined by their age and are considered to be consumers who are 60 years and older.

### **1.1.2 Decision-making and quality perception**

Age creates variances regarding the decision-making process as older consumers process information in ways that differ from younger adults due to more decisions about vital health, financial, and other personal issues (Cole *et al.*, 2008:361). Age-related declines in the efficiency of deliberative processes (linked with health problems) predict that consumers might make inferior quality decisions as they age (Boyle *et al.*, 2012:1; Cole *et al.*, 2008:360; Yeh & Sing, 2004:129). However, as mentioned before, consumers can also be defined by a cognitive state of mind. Motivations and quality-of-life orientation (such as new age elderly and traditional elderly), which can sometimes have consumers feeling much younger than their chronological age (Birtwistle & Tsim, 2005:458), should also be taken into consideration. The actions, feelings and thought process of the new-age and traditional elderly persons differ (Schiffman & Wisenblit, 2015:334) and this may have an impact on how the segments within the elderly market make purchasing decisions. One could therefore assume that for the new-age elderly, fashion trends concerning fabric type, fit and colour might be important during decision-making, whereas for the traditional elderly, an attribute such as price might be most important. Although the study will focus on chronological age, the findings may show trends pertaining to age groups within the study.

In a study conducted by Twigg and Majima (2014), it was found that younger consumers purchase clothing more frequently than older consumers. This may be as a result of older consumers' decreased mobility and independence, as well as retailers mainly focusing on younger consumers' fashion needs and therefore have a lack of understanding regarding older consumers' needs and expectations (Birtwistle & Tsim, 2005:453). Some older consumers do not follow seasonal fashion trends like younger consumers tend to do and this may have an impact on the frequency of their purchases (Holmlund *et al.*, 2011:109; Law *et al.*, 2004:368). The aforementioned views indicate that older consumers might experience problems in terms of their clothing quality perception and/or satisfaction during decision-making. It is therefore important to explore older female consumers' quality perception of clothing during the pre- and post-purchase decision-making process as consumers' perception of quality are influenced and formed during these different stages of decision-making (De Klerk & Lubbe, 2008:38).

The pre- and post-purchase decision-making process starts when consumers identify a need for a specific product, such as clothing. After identifying a need, consumers seek information with

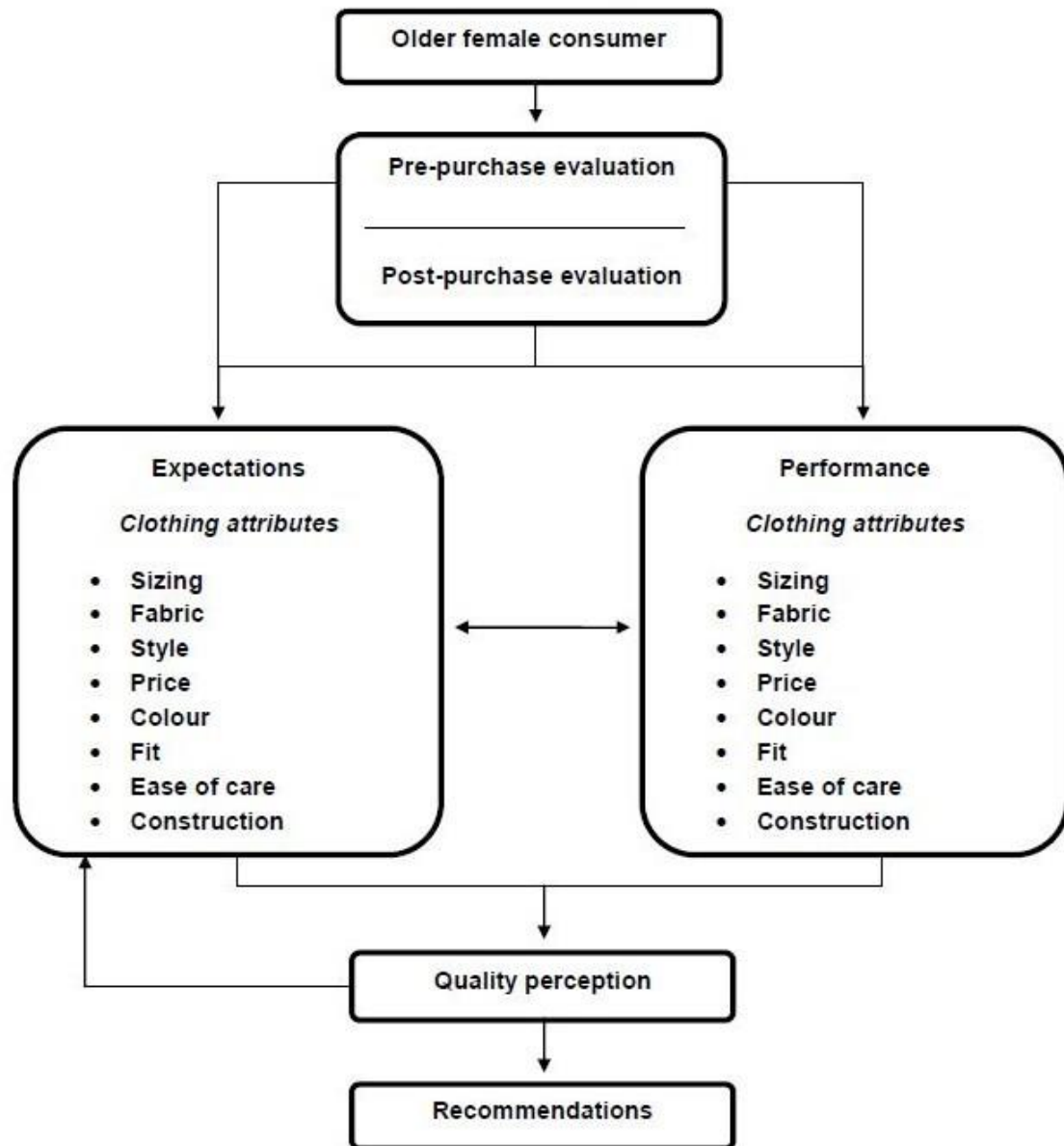
regard to products. During this search for information, consumers might make use of internal sources from memory or external sources such as brand, fabric type and price of clothing (Schiffman & Wisenblit, 2015:371). Concerning quality perception, these external sources (clothing attributes) will be evaluated according to consumers' pre-conceived expectations. Therefore, following information search, consumers will evaluate clothing items based on those attributes or quality cues that consumers identify as important according to their expectations (Chae *et al.*, 2006:25; Schiffman & Wisenblit, 2015:123). Upon evaluation, it is known that consumers make use of an evoked set, consisting of four to five alternatives (Blackwell *et al.*, 2006:82; Solomon, 2013:337). However, the evaluation of clothing attributes was found to change as ageing progresses. Birtwistle and Tsim (2005) found that factors such as comfort became increasingly important to older consumers, possibly as a result of anatomical changes. This might indicate that the alternatives considered by older consumers differ significantly from those of younger consumers during clothing decision-making. Irrespective of these possible differences, when the process of evaluating alternatives is completed, a final decision is made, followed by purchase, usage and then post-purchase evaluation of the product (Solomon, 2013:119).

During the post-purchase evaluation stage, consumers judge a product's performance according to their expectations. According to the disconfirmation paradigm, when expectations exceed performance, negative disconfirmation occurs which leads to negative quality perception or dissatisfaction, whereas in the case where performance exceeds expectations, positive disconfirmation occurs which leads to positive quality perception or satisfaction (Hawkins *et al.*, 2010:648; Hoyer & MacInnis, 2007:199; Oliver, 1980:460). Consumer expectations are formed due to past experience and/or recommendations from others (Solomon, 2013:379). This means that attributes evaluated after purchasing clothing (during use), can have an influence on consumers' quality perception during pre-purchase decision-making. For the purposes of this study, older female consumers' perception of clothing quality during pre- and post-purchase decision-making will be investigated. Each consumer identifies product attributes that are important when evaluating products during the decision-making process, which may become increasingly difficult with age (Cole *et al.*, 2008:360), therefore it is essential to investigate older consumers' expectations (in terms of attribute importance), perceived performance and consequent quality perception of clothing attributes. This will allow for recommendations to be made on how to improve clothing attributes according to older consumers' expectations, which might also lead to less effort being expended during decision-making. The improvement to these clothing attributes could possibly increase consumer well-being (e.g. better quality clothing implies clothing that will be more durable which will save consumers money).

### 1.1.3 Clothing attributes

Attributes of clothing are criteria that have an influence on consumers' evaluation of clothing, which would include care requirements and product composition (Hugo & Van Aardt, 2012:9) as well as physical, and performance features (Brown & Rice, 2001:418). These clothing attributes can be divided into four main categories, namely: intrinsic, extrinsic, appearance and performance attributes (Brown & Rice, 2001:418). Intrinsic attributes include physical features of a product that cannot be changed without modifying the manufactured product, (e.g. sizing or fabric) (Brown & Rice, 2001:418), whereas extrinsic attributes have features that can be changed without modifying the product (brand and price) (Brown & Rice, 2001:415; Swinker & Hines, 2006:219). Appearance attributes are features that affect the product's appearance (e.g. colour, fit) and performance attributes relate to how the product functions (e.g. ease of care) (Swinker & Hines, 2006:219). However, in the study conducted by Hugo and Van Aardt (2012) fit, colour, fabric and ease of care were grouped together under intrinsic attributes. Moreover, these studies do not take price or sizing into account, which has been listed as important in a study conducted by MacDonald *et al.* (2009). Therefore this study will focus on attributes within the four categories as laid out by Swinker and Hines (2006), which encompasses a variety of attributes, namely sizing and fabric (intrinsic); brand and price (extrinsic); colour and fit (appearance); and ease of care (functional performance).

Very few studies on SA female consumers' application of attributes to assess clothing quality could be found. International studies focused on the evaluative criteria women use with regard to clothing (Swinker & Hines, 2006; Bennur & Jin, 2013). As a result, older female consumers' needs with regard to certain clothing attributes are not known and this could possibly mean that their needs are not being completely fulfilled. When consumer needs are not met, their well-being is compromised. Therefore a need exists to investigate these consumers in SA with regard to criteria applied when evaluating clothing for purchasing purposes (Hugo & Van Aardt, 2012:461). This may then lead to making recommendations to the clothing industry in order to improve certain clothing attributes, which, when applied, could possibly lead to consumers' needs being satisfied and therefore an increase in consumer well-being can be effected.



**Figure 1-1: Conceptual framework of older female consumers' quality perception during pre- and post-purchase decision-making, with regard to clothing attributes**

## 1.2 Conceptual framework

The conceptual framework of this study as presented in Figure 1-1 was constructed by using existing literature. The framework consists of older female consumers in the context of purchasing clothing, the pre- and post-purchase phases of decision-making, and the quality perception these consumers experience concerning certain clothing attributes. Consumers' quality perception is not only linked to one phase of the decision-making process, but to both

the pre- and post-purchase evaluation phases. Before consumers make a purchasing decision they have expectations which have already been formed regarding the product. However, during post-purchase evaluation, the performance of one product will influence future expectations regarding other products (quality perception). The final phase of the conceptual framework can be completed after the attributes with the highest expectations and lowest performance ratings have been identified.

### **1.3 Previous research**

Each aspect of this study has previously been researched to some extent. A number of international studies (including in the United States of America and Canada) have been conducted regarding consumers' perception of clothing quality (Bennur & Jin, 2013; Swinker & Hines, 2006:218). However, De Klerk and Lubbe (2006) explored SA consumers' evaluation of clothing quality in order to determine the importance of aesthetics. While the study did encompass aspects of clothing attributes, it mainly focused on aesthetic attributes and a general consumer population. Factors such as ease of care, fit, colour and fabric comfort have also been investigated by Hugo and Van Aardt (2012). Nonetheless, neither of these studies focused on older female consumers' expectations and perceived quality with regard to these attributes. Research results and advice has been based mainly on younger consumers (Cole *et al.*, 2008:361), as seen in the research by Swinker and Hines (2006) which focused on students' perception of clothing quality. Therefore, research that focuses on older adults may have beneficial implications for clothing retailers and manufacturers, especially given our growing older adult population. This includes the prospect of recommendations being provided to the clothing industry, thereby improving products for older consumers.

### **1.4 Problem statement**

Some older consumers are considered vulnerable as a result of a number of them experiencing a lack of finances, age-related changes in body shape, being more prone to sickness and being isolated from the larger society. Due to their vulnerability, older consumers might have very specific needs, which are often neglected by industry role players such as clothing retailers and manufacturers. These consumers also comprise a large segment of the population (Chaston, 2011:371; Stats SA, 2012:94). This study therefore aims to explore older female consumers' perception of clothing quality during decision-making through the lens of the disconfirmation paradigm. From the literature it is evident that most research on the subject of older female consumers with regard to clothing decision-making has been done in countries other than SA (Bennur & Jin, 2013; Cole *et al.*, 2008; Swinker & Hines, 2006). There has also been extensive research concerning general consumers' decision-making with regard to clothing attributes that

influence their clothing purchases (Hugo & Van Aardt, 2012; Lambert-Pandraud, 2010), but there is very little literature available on older consumers in this respect. This study focuses on older female consumers' expectations and the perceived quality of clothing with regard to certain attributes identified in previous studies. By recommending improvements to the clothing industry, those clothing attributes that are perceived to perform poorly by older female consumers, can be enhanced. The improvement of these attributes could not only increase older female consumers' satisfaction, but also shorten their decision-making process as the amount of effort needed to find clothing, in congruence with their expectations, might be reduced. These improvements to clothing attributes could ultimately save them time and money thereby improving older female consumers' well-being.

## **1.5 Aim and objectives**

### **1.5.1 Aim**

The aim of this study was to explore and describe older female consumers' quality perception of clothing during pre- and post-purchase decision-making to ultimately recommend improvements to specific clothing attributes.

### **1.5.2 Objectives**

- Objective 1: To explore and describe older female consumers' expectations concerning clothing attributes during pre- and post-purchase decision-making;
- Objective 2: To explore and describe the perceived performance of clothing attributes during pre- and post-purchase decision-making of older female consumers;
- Objective 3: To make recommendations to the clothing industry based on older female consumers' expectations and perceived performance to improve clothing attributes.

## **1.6 Structure of dissertation**

This dissertation is presented in the article format. **Chapter 1** serves as an introductory chapter and includes the background and motivation of the study, as well as the conceptual framework, problem statement, aim and objectives. **Chapter 2** encompasses literature regarding the consumer decision-making process, the older female consumer, clothing attributes, quality perception and the disconfirmation paradigm. An in-depth description of the research methodology is provided in **Chapter 3**. The study followed an exploratory design and made use of questionnaires, and the design was explained and motivated in this chapter. **Chapter 4** provides the complete results obtained in the study, whereas the most important results can be

found in the research article in **Chapter 5**. The article was written and is to be submitted to the *International journal of consumer studies*. This article contains an overview of the study, as well as the results, with the format and references done in accordance with the journal’s editorial and referencing guidelines (Annexure D). The dissertation concludes in **Chapter 6** with a summary of the results of the study. Limitations of the study, as well as recommendations for future research are provided within this chapter. Each of the chapters also contains a reference list, which is written according to the Harvard referencing style, as required by the North-West University. Additional information, findings and results are attached in **Annexures** for comprehensiveness.

### 1.7 Contributions

The study reported in this thesis was planned and executed by a team of researchers and the contribution of each researcher is given in the table below:

Name	Role in the study
DC Coelho	First author – responsible for the literature research, collecting and interpretation of the data, analysis and preparation of the dissertation.
E Botha N van der Colff	Supervisors and co-authors – supervising of the analysis and interpretation of the data, as well as the completion of the thesis. Also assisted the researcher in finding and organising sponsorships and funds in order to make the study possible.

This is a statement from the co-authors to confirm their individual roles in the study and provide their permission that the article may form part of the dissertation.

*I declare that I have read and approved the article which is included in this dissertation and that my role, as indicated above, represents my actual contribution to the study. I hereby give my consent that the article may be published as part of the Master in Consumer Sciences dissertation of Ms DC Coelho.*

\_\_\_\_\_

**Danielle C Coelho** (Researcher)

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**E Botha** (Supervisor)

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**N van der Colff** (Co-supervisor)

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## CHAPTER 2: LITERATURE STUDY

### 2.1 Introduction

Consumers' quality perception is influenced and formed during various stages of decision-making (De Klerk & Lubbe, 2008:38) where various product attributes are involved during both the pre-purchase and post-purchase stages (Bennur & Jin, 2013:306). Researchers therefore use intrinsic (such as fabric and construction) and extrinsic attributes (such as price) to investigate consumers' overall judgments of clothing items. However, a lack of research is evident with regard to older SA female consumers' quality perception of clothing attributes. There are numerous reasons that substantiate the importance of focusing on female consumers, one of which is that as female consumers age, changes in body shapes occur (Makhanya *et al.*, 2014:183) which may lead to these older female consumers' needs and decision-making changing with regard to clothing and important attributes. Another important aspect is that female consumers are seen as the principal buyers (De Klerk & Lubbe, 2008:48), meaning that they are primarily responsible for shopping. In this review of literature, the following concepts are discussed: quality perception; the consumer decision-making process; older female consumers and their decision-making; and clothing attributes.

### 2.2 Perception

Perception is the process of exchanging sensory input and becoming aware of the environment in order to understand it, as well as being congruent with an individual's frame of reference (Cant *et al.*, 2009:193; Schiffman & Wisenblit, 2015:114). Perception is subjective as it is based on each individual's own experiences (Schiffman & Wisenblit, 2015:116). Perception is also influenced by post-buying learning. After buying a product, consumers will evaluate the product, thus discovering something about it and then storing this new information in their long-term memory, which prepares them for the next decision-making process with an improved knowledge base (Cant *et al.*, 2009:202).

The process of perception involves exposure to a stimulus, after which consumers pay attention to it and then interpret meaning in order to generate a response (Cant *et al.*, 2009:115). A stimulus is defined as any unit of input that influences any of the senses and includes packaging, brand name, products and advertisements (Schiffman & Wisenblit, 2015:116). The sensory functions of a consumer are used to receive the stimuli (hearing, seeing, tasting, touching) during the purchase, use and evaluation of the product.

The process of perception encompasses four steps (Rousseau, 2007:161):

1. Observation
2. Selection
3. Organisation
4. Reaction

Observation begins when consumers are exposed to a stimulus (exposure) (Schiffman & Wisenblit, 2015:117). Most of the stimuli to which individuals are exposed to are considered to be 'self-selected', which means that consumers mentally block messages that they do not want to perceive and therefore deliberately ignore messages that pose no interest (Cant *et al.*, 2009:116). Perceptual selection takes place after observation and occurs when consumers subconsciously select aspects of their environment (Schiffman & Wisenblit, 2015:124). The selection of stimuli depends on various factors with regard to consumers and the stimulus itself. External factors regarding the stimulus are defined as characteristics (e.g. quality of the displayed product) and with regard to consumers, and are characterized as internal factors (e.g. consumer needs, expectations, previous experience) (Cant *et al.*, 2009:117; Schiffman & Wisenblit, 2015:125). Perceptual organisation is the next step in the process of perception and involves consumers grouping stimuli together in order to interpret it (Swinker & Hines, 2006:220). After consumers have been exposed to the stimulus and have gone through the process of selection, interpretation takes place. Individuals will interpret the information according to existing beliefs, attitudes and their general disposition and experiences, which makes this step subjective (Cant *et al.*, 2009:118).

### **2.2.1 Quality perception**

Perceived quality is defined as the judgment of a product based on a variety of product attributes (Schiffman & Wisenblit, 2015:138) by combining sensory outputs (Blythe, 2008:91). Nevertheless, each consumer perceives stimuli within their unique psychological make-up (Schiffman & Wisenblit, 2015:116) and consumers from different countries might even differ in their quality perception, as some consumers from developing countries have lower quality expectations than those in developed countries (Jin & Bennur, 2015:38). Regardless, of consumers' heritage, all consumers judge the quality of a product based on the intrinsic (physical attributes) and the extrinsic cues (attributes that are not inherent to the product) (Schiffman & Wisenblit, 2015:138). Concerning apparel, quality can be defined by aesthetic, functional, mechanical and also physiological properties of wear, such as the feeling of well-being in its wearing, as well as proper drape and fit (Solomon & Rabolt, 2004:366).

Consumers who perceive products to be insufficient to satisfy their needs, will probably not purchase those products, regardless of any objective evidence (Schiffman & Wisenblit,

2015:137) and this suggests that an evaluation of quality occurs before the actual purchase. However, after a purchase, consumers also perceive value, which is defined as the overall assessment and evaluation of the utility of the product based on consumers' perceptions of what is given and received (Wu *et al.*, 2014:2769). Perceived value is measured by assessing consumers' experience and the discrepancy between actual cost and perceived benefit (Schiffman & Wisenblit, 2015:140). Clearly, this evaluation of perceived quality according to expectations of intrinsic and extrinsic attributes, occurs during the pre-purchase as well as post-purchase stage of the decision-making process.

### **2.2.2 Quality perception and customer satisfaction**

In the following sections, the evaluation of expectations and perceived performance will be described through the disconfirmation paradigm. Usually, the disconfirmation paradigm is associated and widely recognised in consumer satisfaction research. For the purpose of this study it is, however, necessary to clearly distinguish between satisfaction and quality perception – two closely related and inter-dependent concepts. Satisfaction is defined as an emotion that is a direct result of making a positive assessment or feeling pleased with a decision that was made (Hoyer *et al.*, 2013:273). Quality perception refers to the discrepancy between expectations and perceived performance while consumer satisfaction is seen as a collective post-purchase emotional evaluation derived from the latest consumption experience (Lee *et al.*, 2000:220). Thus, quality perception (the actual evaluation) therefore leads to feelings of satisfaction/dissatisfaction (Cronin & Taylor, 1992; Spreng & MacKoy, 1996) and is embedded within the process of satisfaction, as illustrated in the disconfirmation paradigm.

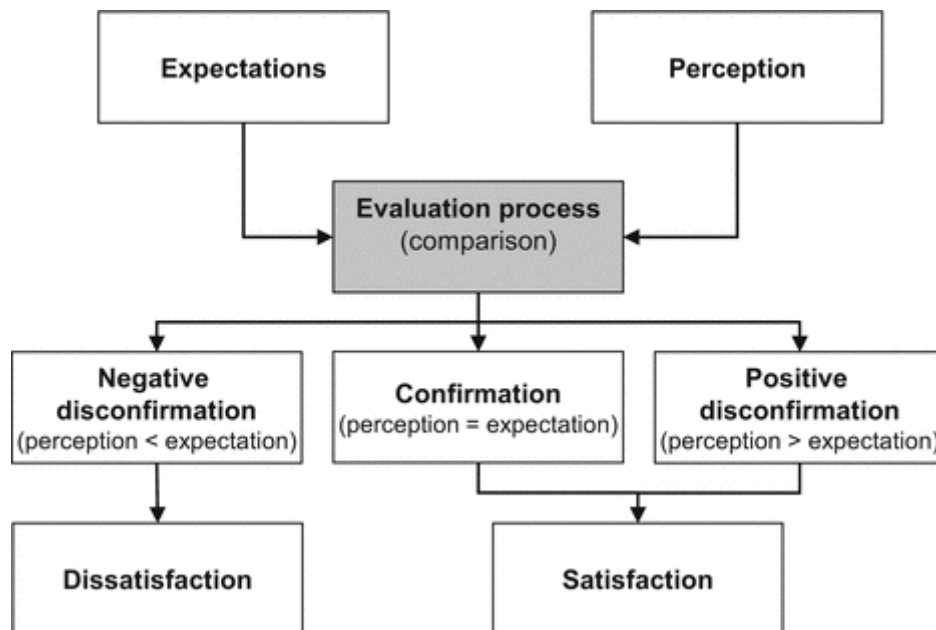
### **2.2.3 Disconfirmation paradigm**

Consumer satisfaction is a positive emotion that arises from consumers making a positive evaluation regarding a product, or feeling pleased with a purchasing decision (Hoyer *et al.*, 2013:275). It can also be seen as positive disconfirmation (or confirmation) taking place as a result of the performance of a product, meeting (Watson & Yan, 2013:152) or exceeding the consumers' expectations (Schiffman & Wisenblit, 2015:374).

The following is a result of the decision-making process in terms of the disconfirmation paradigm (Figure 2-1):

- **Confirmation** – when the performance of the product matches what consumers expect, which leads to satisfaction (Watson & Yan, 2013:152) and most likely to repeat purchases.

- **Negative disconfirmation** – when products perform worse than consumers' expectations, which causes dissatisfaction (Hawkins *et al.*, 2010:633).
- **Positive disconfirmation** – when the performance of the product exceeds consumers' expectations, which leads to satisfaction (Hoyer *et al.*, 2013:276) and most likely repeat purchases and possibly brand commitment (Hawkins *et al.*, 2010:622).



**Figure 2-1: Disconfirmation paradigm by Oliver (1980)**

Consumer expectations are formed due to past experience, which means that attributes evaluated after purchasing clothing (during use), will possibly have an influence on consumers' quality perception during pre-purchase decision-making (Kim, 2012:225). This is also stated by Abraham (1992:68) who states that at the point of purchase certain attributes are important as indicators of future performance of the product, however, when the product is being used it enables consumers to assess the actual performance thereof. These post purchase judgements will affect consumers' intentions during purchasing decisions in future. After using a product, consumers compare the expectations they had to the actual performance of the product, which is an important indicator with regard to consumer satisfaction (Kim, 2012:222).

### 2.2.3.1 Expectations

Expectations can be described as desired product outcomes (pre-consumption beliefs) and can be defined as predictions regarding the performance of a product based on previous experiences with a similar product (Hamilton, 2014:iii; Kim, 2012:222). When a product is

purchased, consumers have expectations regarding the future performance of the product. These expectations are a forecast relating to the type and level of performance consumers will receive from the product (Kim, 2012:222). During usage of the product consumers compare actual performance with their expectations (Hoyer *et al.*, 2013:275) and determine the extent to which their expectation is met which will influence their satisfaction (Kim, 2012:222).

### **2.2.3.2 Performance**

Performance can be either an objective (actual performance), or a subjective (based on individual feelings) measure of the expected outcomes consumers had (Hoyer *et al.*, 2013:276). The performance of the product is measured in terms of the absolute level of performance regarding specific product attributes and the extent of achievement of the product compared to the expectations of consumers (Blackwell *et al.*, 2006:92). Understanding consumers' perceived performance with regard to these attributes is important in order for the apparel industry to ensure better product design. If recommendations can be made to the clothing industry based on the perceived quality of attributes, clothing could possibly be improved and satisfy consumer needs more effectively. This could lead to consumer satisfaction.

### **2.2.3.3 Satisfaction and dissatisfaction**

Consumers purchase products in order to fulfil their needs and to seek greater satisfaction (Cant *et al.*, 2009:202), which means that satisfaction is the desired end result of the decision-making process. It is an emotional state of being, after a judgment (quality perception) that has been made. However, satisfaction is not only linked to the post-purchase stage of the consumer decision-making process, but can also influence pre-purchase decision-making. Satisfaction can also take place during the evaluation of alternatives when certain product attributes are present, which consumers regard as important and consequently, are found (Chae *et al.*, 2006:29).

When consumers are satisfied, they are more likely to purchase the same product again. This is either repeat buying behaviour, or brand loyalty. Repeat buying behaviour refers to the pattern of brand choice over time, which can be with or without psychological commitment (Cant *et al.*, 2009:200). However, brand loyalty is defined as a behavioural response where consumers consistently choose to purchase one brand over a number of others (Hawkins *et al.*, 2010:641) and requires some degree of psychological commitment to the brand (Schiffman & Wisenblit, 2015:374).

When consumers are dissatisfied it causes a negative evaluation and thus they feel unhappy (Hoyer *et al.*, 2013:274), which may lead to regret. Regret occurs when consumers believe that an alternative decision could have produced a better outcome (Blackwell *et al.*, 2006:222).

When consumers experience dissatisfaction, the general outcome is negative word-of-mouth (spreading negative rumours about the product/brand) which is a verbal response and can lead to the switching of brands (Cant *et al.*, 2009:204; Hawkins *et al.*, 2010:622). With regard to dissatisfaction, the performance of the product is the most important determinant (Cant *et al.*, 2009:203). However, dissatisfaction experienced by consumers is not solely dependent upon the performance of the chosen product, but also on the expected performance of the products that were not chosen (Schiffman & Wisenblit, 2015:374). This will have a negative impact on consumers' quality perception when making future purchases of the same type of product. This is evident within the disconfirmation paradigm (Figure 2-1), which provides a more detailed explanation. Changes in emotion regulation that increase with aging may influence older consumers' brand attachment, causing increased attachment (Jahn *et al.*, 2012:445), which could suggest they remain more brand loyal. This is supported by a habit mechanism suggesting that habits become stronger with age, which is why older consumers may be more likely to prefer long-established options (Lambert-Pandraud & Laurent, 2010:104).

### **2.3 The consumer decision-making process**

The consumer decision-making process is a progressive and repetitive set of activities (physical and psychological) which ranges from need recognition to post-purchase behaviour (Cant *et al.*, 2009:193). There are various stages that take place during the decision-making process as depicted in Figure 2-2. The consumer decision-making process includes pre-purchase decision-making (need recognition, information search, alternative evaluation); purchase and usage; as well as post-purchase decision-making (satisfaction/dissatisfaction, repurchase intention, brand loyalty/switching, word-of-mouth); and divestment. Although the consumer decision-making process consists of all these phases (Figure 2-2), for the purposes of this study, the focus is only on pre- and post-purchase decision-making as the researcher aims to explore older female consumers' quality perception with regard to expectations (pre-purchase) versus the actual performance of the product (post-purchase).

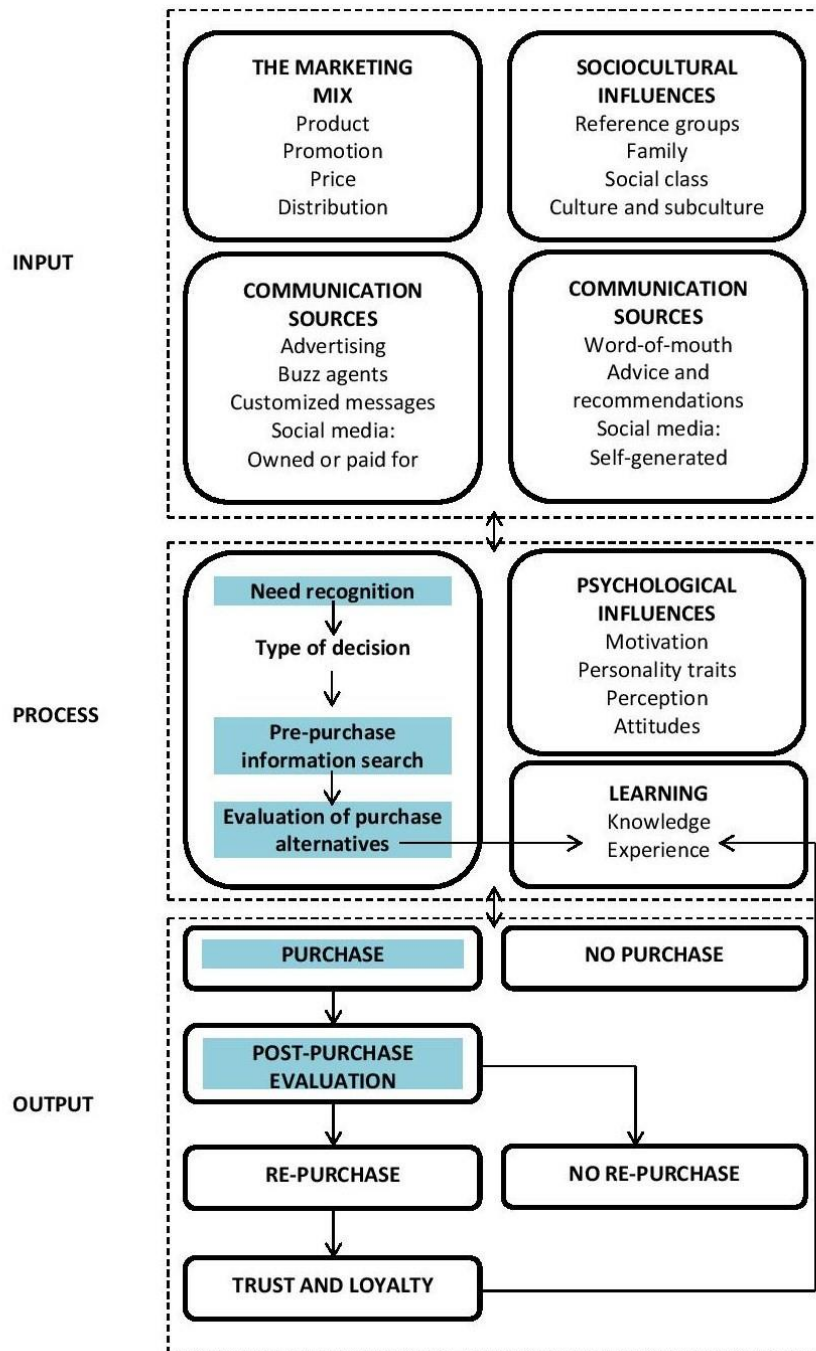


Figure 2-2: Consumer decision-making process by Schiffman and Wisenblit (2015)

### 2.3.1 Pre-purchase decision-making

The first stage in the consumer decision-making process is need recognition (Figure 2-2). Need recognition is the perceived difference between the consumer's ideal (situation they would like to be in – e.g. a skirt that fits well and is comfortable to wear) and actual state (the real situation for example a skirt that does not fit any more) and is a critical state as it motivates consumers to

take action (Hoyer *et al.*, 2013:185). In the case of older female consumers, the need may be for better fitting clothing brought about by changes in body shapes.

### 2.3.1.1 Need recognition

Maslow's hierarchy classifies needs from most important to less important (Schiffman & Wisenblit, 2015:90). A description of these needs (as described in bullet form by Schiffman & Wisenblit, 2015:90-92), as well as examples of how clothing is evident at every level have been included:

- **Physiological needs**, which are associated with the body's physical needs – this can be considered as clothing needed by older female consumers to cover the body, e.g. for protection against the elements such as the cold.
- **Safety and security needs** which are a psychological requirement – it can be described as clothing needed to cover their body in order for them not to feel embarrassed and to be accepted by society (norms and values).
- **Social needs** include the need to belong, for love, affection and acceptance – perhaps certain clothing will have older female consumers feeling more affiliated with others.
- **Ego needs** are seen as the need for maintaining a favourable image and impression of one's self – this may be like buying certain clothing in order to show prestige or status.
- **Self-actualization needs** involve personal ambition, fulfilment and the need for aesthetics – for example, purchasing clothing to enhance or complement personal features or purchasing designer clothing.

Aging can cause difficulties for consumers as physical changes occur with an increase in age. Many older consumers struggle with everyday activities that have become increasingly difficult such as opening jars (Schiffman & Wisenblit, 2015:334), which can possibly be attributed to a decline in motor control. This decline in motor control may also cause older consumers to have trouble fastening buttons on clothing or pulling up zippers. Older consumers also experience changes with regard to their body shape (Makhanya *et al.*, 2014:183), such as arching spines or having a smaller posture. These factors may make it difficult for older consumers to find clothing that meets their fit or sizing needs. Thus, age may have an impact on the attributes that are found to be most important and the perceived performance thereof.

After a need has been identified, consumers will seek information with regard to the product (Figure 2-2). This is known as information search and can be defined as the mental and physical search for information that aids a specific purchase decision, either internally or from external sources (Cant *et al.*, 2009:195; Hoyer *et al.*, 2013:186).

### 2.3.1.2 Internal information search

An internal search, when consumers use past experience and memory recall to access information regarding a certain product (Blackwell *et al.*, 2006:109) (Figure 2-2), has an influence on consumers' quality perception. It is the primary source used by most consumers regularly (Hawkins *et al.*, 2010:524). This process is used in order to shorten an otherwise lengthy decision-making process (Cant *et al.*, 2009:193). Consumers will attempt to recall more information when involvement, perceived risk, or need recognition is high (Hoyer *et al.*, 2013:189).

There are two types of involvement namely high and low involvement. When the product is not considered to be significantly important to consumers' belief system it is classified as low involvement, and *vice versa* (Cant *et al.*, 2009:199). For example, when purchasing a winter coat (which may cost significantly more than a blouse) older female consumers may find it to be a high involvement purchase, whereas a blouse would be a low involvement. This could be as a result of the blouse costing less money and not needing to be as durable as a winter coat which could be expected to last for numerous seasons. These consumers' belief system might therefore encompass needing to get value for money (pay more money for a more durable item). Consumers' previous experience with similar trade-offs may influence future purchases and thus their quality perception.

Consumers have a limited capacity for information processing and memory can decay as time progresses, which means that older consumers are likely to recall only a small division of stored information during this stage (Hoyer *et al.*, 2013:188). Consumers often do not need to pursue an external information search before purchasing a product as a result of making use of information stored in their memory (Blackwell *et al.*, 2006:110), which can be attributed to their quality perception of the product. There are however, limiting factors associated with internal information search namely: time pressure; distractions; degree of knowledge; and experience (Hoyer *et al.*, 2013:189). This may be as a result of not being able to get to shopping centres frequently as increased age is linked with a decrease in mobility.

When presented with more than one stimulus older adults may find it more difficult to combine the two stimuli into an overall prediction (Cole *et al.*, 2008:358) such as the outcome of a purchasing decision from gathering information from two sources. For example, when an older female consumer receives information regarding a product from a friend or relative and then reads about that product in a leaflet, they may find it difficult to make a purchasing decision prediction regarding that product based on their quality perception. Some older consumers have a more limited time and cognitive resource capacity than younger consumers, which may lead

to an increase in prevention focus (behaviour that avoids losses and aims to complete obligations) (Cole *et al.*, 2008:357), thereby possibly prolonging their decision-making process. Aging not only creates a neural decline (Worthy *et al.*, 2011:1375), but also influences older consumers physically. Older consumers' decreased mobility and independence may be the reason for their decision-making process differing from those of younger consumers (Birtwistle & Tsim, 2005:453). However, some older consumers experience less regret regarding decisions as opposed to younger consumers possibly as a result of prevention focus (Bjälkebring *et al.*, 2013:238) that takes place during the evaluation of alternatives. Regret results from failing to make sufficient efforts in order to obtain the desired results (Kim, 2014:16). When consumers do not have sufficient knowledge regarding the product in order to make an informed decision, an external information search will take place (Blythe, 2008:263).

### **2.3.1.3 External information search**

External information searches can be defined as the gathering of information from external sources, other than memory (Dörnyei, 2012:24) (Figure 2-2). These external sources can be categorized as: media (magazines, television, newspapers, radio, etc.); stores; and other people (friends, store assistants, experts) (Blackwell *et al.*, 2006:113; Hawkins *et al.*, 2010:523). When searching these external sources, consumers acquire information regarding brand name, price, and other attributes (Hoyer *et al.*, 2013:203). The commencement of an external information search can be as a result of insufficient prior knowledge of the product and therefore the consumer needs to acquire more information. The extent of this search will be dependent on a range of factors which are connected with consumer's situations, the availability and the value of the information, the nature of the decision, as well as the character of the consumer (Blythe, 2008:267). Searching for external information on a product could have a bearing on consumers' quality perception as it is seen as a judgment. But this may be as a result of the costs that have a bearing on the information search. The costs involved with external information search are defined as time, effort, inconvenience and money (Hoyer *et al.*, 2013:199). These factors may place a psychological and physical strain on consumers and will be regarded as perceived risk.

### **2.3.2 Perceived risk**

Consumers' actions produce consequences that are unpredictable and form part of the perceived risk of the transaction (Schiffman & Wisenblit, 2015:143). Perceived risk can be defined as the amount of risk that consumers perceive during the decision-making process as a result of uncertainty regarding the product or the potential consequences of the decision (Cant *et al.*, 2009:193). In this study, an example of perceived risk may be purchasing a garment at a very high price with a limited budget. This may cause uncertainty regarding the value of the

clothing item and influence the justifiability of spending a large amount of money on the item. There are different types of perceived risk that are involved with the decision-making process, namely financial, social, physical, time, performance, and psychological risk which will now be discussed.

- **Financial risk** is defined as the degree to which buying, using or divesting of a product has the potential to create a monetary loss (Hoyer *et al.*, 2013:59). The risk increases with the amount of money that is at stake (Blythe, 2008:268). For older female consumers, this risk may have a pertinent influence on their decision-making process, due to possible financial constraints as a result of retirement (Portacolone, 2013:166) or dependence on social grants (Stats SA, 2012:93).
- **Social risk** is the extent to which the perception of the product has the potential to harm consumers' social standing (Hoyer *et al.*, 2013:59). It is characterized by product visibility and wanting to avoid ridicule, which will motivate consumers to complete a more extensive information search to ensure that the negative outcome can be avoided (Blythe, 2008:268). However, some older consumers are more steadfast in their social identities and are therefore less concerned with this type of risk (Simcock *et al.*, 2006:360). This means that social risk may have little bearing on older female consumers' clothing purchase decisions.
- **Physical risk** is attributed to the degree to which buying, using or disposing of a product may be perceived to cause physical harm (Hoyer *et al.*, 2013:59). Although research regarding older consumers' physical risk is limited, the available studies have come to the consensus that safety and security are of utmost importance to these consumers (Simcock *et al.*, 2006:359). Physical risks that shopping may entail for older female consumers might thus be, for example, being robbed while shopping for clothing. There may also be a risk with regard to the clothing itself as certain clothing may potentially scratch older consumers' delicate skin, or have elastic that is too tight which may cut off blood circulation.
- **Time risk** reflects doubts that may arise regarding the length of time consumers must invest in the product when buying, using or disposing it (Schiffman & Wisenblit, 2015:144). This risk is considered high when the product requires a significant amount of time or if it involves a long commitment period (Hoyer *et al.*, 2013:59). Older consumers may find time risk to be a factor when making purchasing decisions as a result of decreased health and mobility (unable to spend large amounts of time walking to various stores).
- **Performance risk** is characterized by uncertainty regarding the expected performance of a product (Hoyer *et al.*, 2013:59). Research showed that some older consumers try to

minimize this risk by being highly receptive to sampling products and receiving quality guarantees when shopping (Simcock *et al.*, 2006:358). This could possibly influence older female consumers' quality perception.

- **Psychological risk** involved during the information search includes frustration, driving, visiting various shops, conversing with shop assistants and putting a lot of thought into the search and can overwhelm consumers (Schiffman & Wisenblit, 2015:144). Age-related declines in the efficiency of cognitive processes predict that all consumers might make poorer quality decisions as they age (Boyle *et al.*, 2012:1) which could increase older consumers' psychological risk. Older consumers may also find it difficult to visit multiple shops due to decreased mobility and may therefore become frustrated when shopping for clothing, especially when evaluation of a number of alternatives is required.

When the information search is completed, the next phase of the decision-making process will commence, which is known as evaluation of alternatives (Figure 2-2). This phase is characterised by consumers comparing the knowledge obtained from the information search (both internal and external) with what they consider most important in terms of product attributes (Hoyer *et al.*, 2013:189) as a result of their quality perception.

### **2.3.3 Evaluation of alternatives**

Consumers examine products in terms of its attributes offered at this pre-purchase evaluation stage, as compared to standards formed by internal and external influences (Cole *et al.*, 2008:360; Schiffman & Wisenblit, 2015:369). This is the act of identifying alternative choices as solutions and assessing the advantages and disadvantages of each alternative (Cant *et al.*, 2009:201). These attributes are evaluated to determine which product will satisfy consumers' needs best (Klaus & Maklan, 2013:227). With regard to older female consumers, this may include comparing two similar clothing items (for example skirts), with each other and taking the clothing attributes they find important into account.

Upon evaluation, consumers make use of an evoked set (Blackwell *et al.*, 2006:82; Solomon, 2013:337), which consists of a small number of brands (between three and seven), which consumers are familiar with and take into consideration when purchasing products (Schiffman & Wisenblit, 2015:370). Impaired recall ability may mean that older adults have a smaller evoked set and that they might have difficulty manipulating and memorizing information, especially new information (Cole *et al.*, 2008:363). This could possibly influence their quality perception and thus their decision-making when purchasing clothing as consumers are faced with more clothing options than ever before (Clarke *et al.*, 2009:718) The alternatives in the evoked set comprise criteria used by consumers to evaluate products based on relative importance (Schiffman &

Wisnblit, 2015:371; Solomon, 2013:338). For each product in the evoked set consumers compare and evaluate the product attributes. However, individual consumers use different criteria when evaluating products as different consumers regard different attributes as important (Cole *et al.*, 2008:360). Therefore, the various clothing attributes will be discussed in detail.

A number of studies focusing on clothing attributes have been completed. The authors of each of these studies, as well as the clothing attributes that were focused on, will be provided in Table 2-1:

**Table 2-1: Clothing attributes included in studies by various authors**

<b>Authors</b>	<b>Attributes included in study</b>
Hugo and Van Aardt (2012)	Fit, colour, fabric and ease of care (grouped together as intrinsic attributes).
MacDonald <i>et al.</i> (2009)	Price and sizing.
Kaplan and Okur (2008)	Clothing comfort - which encompasses a variety of sub-groups, which includes fabric (softness, thickness, weight etc.); and garment (thermal insulation, removing sweat from the body, design, colour, fit).
Swinker and Hines (2006)	Sizing and fabric (intrinsic); brand and price (extrinsic); colour and fit (appearance); and ease of care (functional performance).
Abraham (1992)	Intrinsic attributes including style, fit, design, fibre content, colour, care and appearance, and price (extrinsic attribute).
Tselepis and De Klerk (2004)	Expectations about fit.

Although there have been numerous studies that included certain clothing attributes, there has not been a study that aims to explore older female consumers' quality perception of clothing with regard to these attributes. The most suitable choice for final selection is the product that best meets all the evaluative criteria that consumers have formulated during the search (Cant *et al.*, 2009:202). For older female consumers, this could include certain clothing attributes that they perceive as important, and will therefore purchase a clothing item that has those attributes. The study therefore aims to explore older female consumers' quality perception of certain clothing attributes. After the phase of pre-purchase evaluation of alternatives, consumers will purchase the product and then usage takes place, for example, by wearing the skirt that was purchased.

#### **2.3.4 Purchase and usage**

After the process of pre-purchase evaluation of alternatives, consumers will purchase the product. This is seen as the outcome of evaluation and involves the final mental selection of a product and then paying for it (Blythe, 2008:260; Cant *et al.*, 2009:202). Thereafter the product will be used for its intended purpose of fulfilling a need (Blythe, 2008:260), which in the case of this study would mean wearing the clothing that was purchased. The usage of a product can take place immediately or it can be delayed (Schiffman & Wisenblit, 2015:41). During and after wearing the clothing (usage) consumers will continue to evaluate the product as the consumer decision-making process progresses - this is known as post-consumption evaluation and in turn will have an influence on consumers' quality perception of the product in future.

#### **2.3.5 Post-purchase decision-making**

When using a product, consumers compare the product's performance with their expectations thereof, as part of their post-purchase behaviour (Schiffman & Wisenblit, 2015:374). This includes the product assessment based on attributes that consumers have identified as most important (Cant *et al.*, 2009:202) and has two possible outcomes, as stated before, consumer satisfaction or consumer dissatisfaction (Hawkins *et al.*, 2010:648). Therefore, it can be said that quality perception (which is a judgment), leads to an emotional response of satisfaction or dissatisfaction. This has an effect on the future quality perception of consumers as they will not re-purchase an item that lead to dissatisfaction (Cant *et al.*, 2009:204). After which, the final phase of the decision-making process takes place as they are more likely to repeat purchases after being satisfied by that product at an earlier stage. However, the feeling of satisfaction or dissatisfaction is most likely to occur after the usage of the product or even after the final phase of the consumer decision-making process. The final phase of the process is divestment, which involves disposing of the product by donating it or passing on to someone else, for example, after usage thereof (Blythe, 2008:260).

#### **2.3.6 Divestment**

Divestment is seen as the last phase of the consumer decision-making process and is the process of disposal of the product (or packaging it was contained within) after usage thereof (Blythe, 2008:260.) Divestment forms part of post-purchase evaluation, as seen in Figure 2-2. In terms of older female consumers and the decision-making process with regard to clothing, divestment can be considered to be donating clothing when it is no longer needed, or recycling it. The recycling of clothing can be, for example, using an old shirt as a rag to dust surfaces with. When consumers encounter unfavourable comparisons between the performance of a

purchased product and the performance of the alternative options that weren't purchased, this negative quality perception leads to post-decision regret (Hoyer *et al.*, 2013:268). Post-decision dissatisfaction and regret might also lead to negative word-of-mouth which is unfavourable to retailers/manufacturers.

### **2.3.7 Rational versus emotional decision-making**

Rational decision-making is defined as making a purchasing decision after considering a number of alternatives and exploring as much information regarding the product as possible (Solomon, 2013:329). Rational decision-making includes searching for facts regarding the product (country of origin, fibre content, etc.), as well as benefits of the product (fits perfectly, is made for a certain body type etc.) (Ahuja, 2012:20). Consumers do not always engage in rational search processes where each alternative is identified and considered before a product is purchased (Solomon, 2013:328). Emotional decision-making can be seen as making a purchasing decision based on a feeling or whim, and can be as a result of wanting to purchase a product in order to quickly continue with other responsibilities (Jansson-Boyd, 2010:69). This can often be linked to spontaneous shopping, where the consumer buys a product as a result of being unfamiliar with the store (unplanned buying), or as a result of experiencing a sudden urge that cannot be resisted (impulse buying) (Schiffman & Wisenblit, 2015:375). Emotional decision-making can take place as a result of wanting to try a new product as the consumer craves variety as a form of stimulation (variety seeking) (Solomon, 2013:330). The search for variety tends to take place when consumers are in a good mood, or when they feel bored (Jansson-Boyd, 2010:70). Emotional decision-making can, however, be influenced by marketing as through advertisements created to evoke emotion, as well as celebrity endorsements where they are brand ambassadors, thus ensuring safety and pride, as well as having the product be conveyed as a status symbol (Ahuja, 2012:21). With regard to advertising, marketers either primarily use information-dominant (rational) or image-dominant (emotional) advertisements to appeal to consumers (Mahapatra, 2013:87).

Lower-income consumers engage in a smaller search than more affluent consumers when making a purchase, even though it can be seen as a greater risk (Solomon, 2013:328). This could be as a result of not having the amount of time available that is needed to adequately evaluate alternatives and search for information and will therefore settle for a product that is simply good enough (Solomon, 2013:328). However, Ahuja (2012:20) states that high-priced consumers tend to engage in more rational decision-making as opposed to emotional decisions.

## 2.4 Older female consumer market

During the decision-making process, older female consumers may possibly identify problems regarding clothing attributes. Consumers with higher basic cognitive abilities are able to process information in more complex ways, which could also mean that as consumers age and their cognitive processes decrease, they may find it difficult to process information (Hoyer *et al.*, 2013:62). The attributes that are considered important by older female consumers could have a large impact on their quality perception and satisfaction. Women represent 52% of the SA population and on average they tend to live longer than men (Stats SA, 2012:94) and thus comprise a larger percentage of the older consumer population. This means that women are a significant part of the population and therefore their decision-making is seen as important to investigate. Research suggests that gender has an impact on consumers' shopping behaviour. Female shoppers tend to encompass shopping motives such as uniqueness, assortment seeking, social interaction, and browsing, whereas their male counterparts are motivated by information and convenience (Schiffman & Wisenblit, 2015:336). Not only do women hold these motives, but they also demonstrate higher levels of satisfaction deriving from shopping than men (Herter *et al.*, 2014:780). However, research also suggests that age may also have an impact on consumer behaviour.

Age is seen as one of the most important variables affecting consumer behaviour (Cant *et al.*, 2009:99). Older consumers can be defined by their chronological, biological or psychological age. The chronological age of consumers refers to the length of time that has passed since the individual was born (usually in years), whereas biological age refers to changes in the human functional capacity that takes place over time (Cant *et al.*, 2009:100). The psychological age of consumers pertains to defining consumers by their cognitive state of mind, which can sometimes have consumers feeling much younger than their chronological age, (Birtwistle & Tsim, 2005:458). There are two types of older consumers with regard to psychological ageing namely, new-age elderly and traditional elderly (Table 2-2). The characteristics in terms of: actions; feelings; and thought process of the new-age and traditional elderly differ (Schiffman & Wisenblit, 2015:334) as indicated in Table 2-2. This may mean that segments within the group of older consumers differ with regard to purchasing decisions.

**Table 2-2: Comparison of selected characteristics of the new-age elderly and traditional elderly from Schiffman and Kanuk (2010:415)**

New-age elderly	Traditional elderly
Perception of self is different in outlook from other consumers their age	Perception of self is similar to other consumers their age
Perceive age to be state of mind	Perceive age as a physical state
Perceive themselves to be younger than their chronological age	Perceive themselves close to their chronological age
Feel, think and act younger	Feel, think and act in line with their chronological age
Increased self-confidence with regard to consumer decision-making	Normal range of self-confidence with regard to consumer decision-making
Particularly knowledgeable and alert consumers	Consumer capabilities are low-to-average
Selectively innovative	Are not innovative
Challenge themselves personally and actively seek new experiences	Strive for stability and a secure routine
Feel financially secure	Feel somewhat anxious regarding their financial security

Based on the characteristics depicted in Table 2-2, the new-age elderly may be more concerned with fashion trends with regard to fabric type, fit and colour which might be important during decision-making, whereas for the traditional elderly, price might be the most important attribute. These differences within the older consumer segment could mean that these consumers approach decision-making differently. Additionally, older consumers can be further categorized into groups according to year of birth with each group having different characteristics, which may also have an influence on their decision-making process and quality perception of clothing. The two groups of importance for consumers 60 years and older are the Baby Boomers and the Grey Market which will now be discussed.

### **2.4.1 Baby boomers**

Individuals born between the years of 1946 and 1964 (currently aged 52-70) are referred to as baby boomers (Hoyer *et al.*, 2013:335). With regard to this study, older female consumers form part of the segment of the population known as baby boomers. Baby boomers are characterised as being motivated, consumption-orientated individuals who enjoy purchasing products for themselves, their homes and others (Cant *et al.*, 2009:104). These consumers are also not eager to retire and prefer working (full or part time) beyond the age of 65, which can be attributed to needing financial security, or wanting to stay active (Schiffman & Wisenblit, 2015:331) as well as strongly valuing individualism and the freedom to do as they please (Hoyer *et al.*, 2013:335). These characteristics are evident in the first two classifications presented by Schiffman and Wisenblit (2015:331) with regard to the four possible outlooks older consumers may have on retirement: (1) retirement is an opportunity for a new start; (2) retirement is a continuation of their pre-retirement lifestyle; (3) retirement is an unwelcome, imposed disruption; (4) retirement is a transition into old age.

As with the different outlook regarding retirement, clothing decision-making process and quality perception may also vary. For example, a consumer from group 1 (opportunist) may see trendy colour as important, while a consumer from group 4 (transition into old age) considers ease of care as most important, in light of physical or other limitations associated with old age. This difference in consumer behaviour might also be evident in the next segment that older female consumers are divided into, namely the grey market.

### **2.4.2 Grey market**

The grey market segment consists of consumers born prior to 1946 (currently aged 70). Older consumers have shown a tremendous increase in growth from 2002 to 2012 with the total number of older persons rising to more than four million in 2012 (7,7% of the population) (Stats SA, 2012:94). These consumers possess certain values that are of importance, namely autonomy (wanting to lead active and self-sufficient lives); connectedness (valuing bonds with family and friends); altruism (wanting to help others and give back to the world); and personal growth (interested in trying new experiences and activities, developing their potential and expanding their horizons) (Cant *et al.*, 2009:101). Even though older consumers possess these values, as stated before, as consumers age their information-processing skills decline and they become less likely to search for information and have difficulty making complex decisions (Hoyer *et al.*, 2013:336).

## **2.5 Clothing attributes**

Clothing attributes are defined as criteria that have an influence on consumers' evaluation and quality perception of clothing, which includes care requirements and product composition (Hugo & Van Aardt, 2012:9) as well as physical, and performance features (Brown & Rice, 2001:418). This study classifies attributes according to the classification by Swinker and Hines (2006) namely: intrinsic; extrinsic; appearance; and performance attributes.

### **2.5.1 Intrinsic attributes**

Intrinsic attributes are defined as inherent product characteristics (e.g. style, sizing) (Schiffman & Wisenblit, 2015:138). For purposes of this study, the intrinsic attributes to be explored are sizing and fabric comfort, to be discussed in detail.

#### **2.5.1.1 Sizing (size labelling)**

Key body dimensions are intended to assist consumers when selecting the correct garment size (Kasambala, 2013:6). However, the average female consumer has little knowledge regarding their own key body dimensions such as hip, bust and waist measurements that are occasionally listed on garment size labels (Howarton & Lee, 2010:221). Furthermore, in SA most garment size labels do not contain these basic body dimensions, which are intended to assist consumers when choosing the correct garment size (Kasambala, 2013:5). Therefore it can be understood why consumers find it difficult to make decisions based merely on the garment size label without trying on the garment first (Park *et al.*, 2009:373).

In addition to key body dimensions, standards for labels differ; the fit varies between each manufacturer and sometimes within the same manufacturer (Kinley, 2010:401). As a result of not needing to adhere to sizing guidelines, clothing manufacturers can allow vanity sizing (altering measurement specifications enabling consumers to fit into smaller sizes), which leads to significant sizing variations between retailers (Kinley, 2003:21). More often than not, consumers have to try on several sizes of the same garment style before finding the one that fits satisfactorily (Kasambala, 2013:6). This could be problematic for older consumers who may become tired quickly as a result of a decline in their body functions (Moschis *et al.*, 2011:469) and thus may not have the strength to continually try on different garments. Hence a standardized labelling system may be of great assistance in easily locating proper-sized garments which will improve consumer satisfaction (Kasambala, 2013:6). The current study investigates the problems older female consumers experience regarding the sizing of apparel with regard to their body shape and sizing. The researcher anticipates results that differ from the

study conducted by Kasambala (2013) as the focus was not on older female consumers, but rather a broader consumer population's experiences of body shape and sizing.

### **2.5.1.2 Fabric comfort**

Clothing comfort became one of the fundamental needs for consumers, thus consumers demanded higher comfort performance in recent years (Kaplan & Okur, 2008:689). Clothing comfort refers to the way fabrics affect heat, air and moisture transfer and the manner in which the body interacts with the fabric (Kadolph, 2010:20). This means that comfort and type of fabric may be interdependent. The fit of a garment also influences the comfort thereof, but will be discussed as an appearance attribute elsewhere. Comfort is mainly a matter of personal preference and perception of comfort under different conditions of physical activity (Frings, 2008:74; Kadolph, 2010:45). Consumers may assess the comfort of apparel by considering whether it will be comfortable in terms of temperature regulation, absorbency and tactile sensations (Frings, 2008:74; Kadolph, 2010:45) which are influenced by the type of fabric used. As consumers age there is a decrease in physical health (Stats SA, 2012:94; United Nations, 2013:47) which could possibly lead to an increase in immobility and skin sensitivity, stressing the importance of comfortable clothing. The researcher could, however, not locate literature regarding clothing comfort concentrating on older consumers and the importance thereof during their decision-making. Therefore, this study explores older female consumers' quality perception of clothing comfort as a clothing attribute.

### **2.5.1.3 Construction**

Should a clothing item be constructed poorly, that item would be less durable (Laitala *et al.*, 2015:103) and therefore be of poor quality, thus it is important to explore this clothing attribute. The items pertaining to construction as an attribute are: neat stitching; strong seams; and buttons fitting buttonholes. Strong seams are defined as being durable and able to withstand tugs and pulls (Fatima & Paul, 2015:80). Many older consumers struggle with everyday activities that have become increasingly difficult such as opening jars (Schiffman & Wisenblit, 2015:334), which can possibly be attributed to a decline in motor control. This decline in motor control may lead to functional requirements for clothing (Fatima & Paul, 2015:81) as it might cause older consumers to have trouble fastening buttons on clothing or pulling up zippers.

## **2.5.2 Extrinsic attributes**

Extrinsic cues are attributes that do not form part of the physical product (Schiffman & Wisenblit, 2015:138). Although price, brand and country of origin are seen as extrinsic attributes (and are

therefore discussed within the literature review), for the purpose of this study only price is explored as an extrinsic attribute.

### **2.5.2.1 Price**

Price is certainly one of the most important practical concerns of the average consumer, as they must compare the total perceived worth of a style with the retail price and their own budgets (Frings, 2008:74). When consumers encounter significantly different prices from what had been expected, they seek additional information to justify the high price (Schiffman & Wisenblit, 2015:136). Due to older consumers often experiencing a lack of financial stability (Portacolone, 2013:167), their perceived financial risk when purchasing clothing may be higher. As a result, price as an apparel product attribute may have an influence on older female consumers' purchasing decisions.

### **2.5.2.2 Brand**

Brand can be defined as a combination of tangible and intangible characteristics that encompass an identifiable name, mark or symbol (Webb, 2010:82). Brand loyalty is described as the repeat purchasing behaviour of an individual that reflects a conscious decision to continuously purchase the same brand (Solomon, 2013:350). As adults age, some may encounter having difficulty manipulating and memorizing information (Cole *et al.*, 2008:363). These consumers may also experience changes in emotion regulation that increase with aging and that may influence these consumers' brand attachment (Jahn *et al.*, 2012:445), which could suggest they remain more brand loyal. This is supported by a habit mechanism suggesting that habits become stronger with age, which is why older consumers may be more likely to prefer long-established options (Lambert-Pandraud & Laurent, 2010:104).

### **2.5.2.3 Country of origin**

Country of origin is often a determining factor in the decision-making process with consumers strongly associating certain products with specific countries (Solomon, 2013:347). Highly ethnocentric consumers (consumers who have a high affiliation to buying products made in their country) feel it is wrong to purchase foreign-made goods, whereas non-ethnocentric consumers tend to evaluate foreign-made goods based on their extrinsic characteristics (Schiffman & Wisenblit, 2015:106). Traditional elderly may feel a strong sense of pride relating to purchasing SA manufactured clothing, while the new-age elderly may be more liberal purchasing imported clothing (Sharma *et al.*, 1995:29).

### **2.5.3 Appearance attributes**

Appearance attributes can be defined as features that affect the look of the product, for example colour, fit and how the fabric feels (Swinker & Hines, 2006:219). Although Swinker and Hines (2006) listed how the fabric feels as an appearance attribute, for the purposes of this study it is categorized under intrinsic attributes (fabric comfort).

#### **2.5.3.1 Colour**

Colour is a characteristic that not only specifies an attribute but also often causes deep aesthetic and emotional effects, influenced by connotations and preferences (Schiffman & Wisenblit, 2015:107). In everyday situations, such as choosing a product or buying a piece of clothing, colour is one of the elements influencing consumer choices significantly (Pina *et al.*, 2012:19). Clothing manufacturing and supply changed over time and has been outsourced to other countries which caused a shift in the type of clothing made available to consumers, focusing on fashionable clothing and colours which relates more to younger consumers (Twigg & Majima, 2014:31). This study explores whether older female consumers' expectations as well as perceived performance regarding colour (as an apparel product attribute) is being met. This may determine whether the colour of a garment has an influence on the decision-making process of older female consumers. If colour is found to be of high importance but older female consumers' needs are not fulfilled in terms thereof, it would be important to make recommendations to improve this attribute.

#### **2.5.3.2 Style**

Fashion usually implies fast change and popular clothing styles (Fischer, 2015:46). The new-age older consumers have become more involved in fashion (Guiot, 2001:1066) and therefore might require stylish clothing. If the available clothing does not meet older female consumer needs, with regard to these specific items within style, it would be important to make recommendations on the improvement thereof.

#### **2.5.3.3 Fit**

When it comes to garment purchases, women especially find it difficult to find garments that fit well (Makhanya *et al.*, 2014:183), which makes them the most discontented consumers (Howarton & Lee, 2010:222). Consumers have personal preferences and perceptions about how they think garments should fit and whether they are comfortable in the garment (Pisut & Connell, 2007:368). When consumers age, their body shapes change (Makhanya *et al.*, 2014:183). The majority of female consumers who do not have the body shape congruent with

the standardised ready-to-wear sizing system, may have problems with garment fit (Park *et al.*, 2009:374) such as: posture changes (shoulders begin to round); changes in position of fat, sagging arms, buttocks flatten; and body contour becomes more angular (Clarke *et al.*, 2009:717). This means that a fit that would have been perfect a few years ago, does not seem acceptable now (Pisut & Connell, 2007:369). Understanding the factors that contribute to the garment fit problem currently being faced by female consumers is an essential step in creating awareness of how this problem affects female consumers' purchasing decisions (Kasambala, 2013:iii). The problems identified with fit could potentially contribute to the improvement of sizing (size labelling), which is interdependent. It is empirically possible to explore how the fit of clothing may influence older female consumers' decision-making, as well as the effect performance attributes may have.

#### **2.5.4 Performance attributes**

Performance attributes are defined as features that affect how the product functions and includes ease of care and fabric characteristics (durability, pilling, wrinkling tendency) (Swinker & Hines, 2006:219). For the purposes of this study, the aspects regarding fabric are included under fabric comfort (intrinsic attribute).

##### **2.5.4.1 Ease of care**

Care of textile products entails the treatment needed to maintain the original appearance and cleanliness of a clothing item during and after use (Kadolph, 2010:20). It involves factors such as time, energy and cost of caring for the item, weighed against the performance of the item (MacDonald *et al.*, 2009:258). Reading and understanding care labels can lead to a prolonged lifespan of apparel (Van der Merwe *et al.*, 2014:23). Inadequate care could result in a clothing item losing durability, becoming uncomfortable or unusable (Kadolph, 2010:50). There is a lack of literature regarding older consumers' use of care instructions provided on clothing items when making a purchasing decision, not only in SA, but also globally. This lack of literature makes it important to explore older female consumers' expectations with regard to ease of care, as well as the perceived performance of this attribute, in order to determine whether their needs are being met. If this attribute is found to be important but older female consumers' are not satisfied with it, there would be a need to make recommendations in order to improve ease of care. This may possibly ensure that older female consumers are able to care for clothing more effortlessly, which may improve consumer well-being.

## 2.6 Conclusion

Clothing decision-making is a process that every consumer undertakes whenever a clothing purchase needs to be made. The process involves a number of phases, namely problem recognition, information search, evaluation of alternatives, purchase, consumption, post-purchase evaluation and finally divestment. Consumers' quality perception affects their decision-making when purchasing clothing. This quality perception comes about as a result of consumers' expectations versus the actual performance of the product. When the consumers' expectations are met or exceeded it leads to positive disconfirmation and satisfaction. However, when the consumers' expectations and subsequently their needs are not met, it leads to negative disconfirmation and dissatisfaction. If consumers' needs are not met and they are dissatisfied, they are unlikely to purchase the product again. The level of involvement and extent of each of the phases will differ between consumers. This could be as a result of gender, age or other factors. With regard to gender, female consumers are seen as the principal buyers within the household and generally tend to gain more satisfaction as a result of shopping. Age can play a major role in the decision-making process. Older consumers' cognitive abilities may decline as their age increases and it is said that some may make poorer decisions as they age. Not only does age have an influence on their cognition, but also on their physical capabilities and bodies. As consumers age, their body shapes change, which means that their clothing may need to change accordingly. These changes in body shape can be characteristics such as an arch of the spine (possibly as a result of osteoporosis) or a diminished posture. This could make it more difficult for older female consumers to find clothing that will satisfy their needs with regard to certain clothing attributes. If it is found that older female consumers experience problems with regard to these clothing attributes, then the clothing industry has the potential to meet their needs more effectively. This could mean an increase in sales and therefore more financial support for the economy, but more importantly it could mean that these consumers could have clothing that is aligned with their needs and thus can help improve their well-being.

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## **CHAPTER 3: METHODOLOGY**

### **3.1 Introduction**

This chapter was included in addition to the methodology in chapter 4 (article) to ensure that the reader has a clear understanding regarding the methodology and reasoning behind the research design and approach.

### **3.2 Research design**

Since very little research regarding older female consumers' quality perception was available, the study followed an exploratory design. Exploratory design is used to obtain new insights into a phenomenon (Maree & Pietersen, 2007:172). The use of surveys are appropriate when conducting non-experimental research (Christensen *et al.*, 2011:330). The design was furthermore cross-sectional as data was collected only once by means of a quantitative survey using self-administered questionnaires (Maree & Pietersen, 2007:152). Quantitative data is objective and provides the researcher with numerical data (Maree & Pietersen, 2007:145), which is necessary to explore and describe older female consumers' quality perception of clothing. Survey data is known for having a descriptive nature since it can explain certain phenomena and is used to draw comparisons between relevant aspects (Creswell, 2014:165). Therefore survey data allowed the researcher to explore and describe older female consumers' quality perception of clothing attributes by comparing their expectations with the perceived performance of specific clothing attributes.

### **3.3 Sampling**

#### **3.3.1 Population and study location**

The sample population included female consumers aged 60 years and older, who had purchased clothing for themselves within the past year. This was necessary as older female consumers needed to think of that purchase and then evaluate the clothing item accordingly. Females were chosen because they are mainly responsible for clothing purchases (Chea, 2011:4) and they view clothing as more than just a basic necessity that conceals and affords warmth to the body (Kasambala, 2013:1). Older consumers are the focus of the study because of the changes in body shapes as they age and their subsequent changing clothing needs (Makhanya *et al.*, 2014:183). The clothing industry mainly focuses on the younger consumer groups (Twigg & Majima, 2014:31) and therefore this research highlights the importance of investigating clothing attributes for older female consumers. The researcher collaborated with the Service Centre for the Aged for the data-collection procedure. The Service Centre for the

Aged is a non-profit organization that provides services to retired individuals in order to enable them to function independently in the community located in the Tlokwe Municipality region (Anon, 2003). The inclusion and exclusion criteria were:

#### Inclusion criteria

- Consumers 60 years and older
- Females
- Consumers who had purchased clothing for themselves in the past year
- Must reside permanently in the Tlokwe Municipality region
- Participating in activities of the Service Centre for the Aged

#### Exclusion criteria

- Consumers younger than 60
- Males
- Consumers who had not purchased clothing for themselves in the past year
- Consumers who do not reside in the Tlokwe Municipality region on a permanent basis
- Do not participate in activities of the Service Centre for the Aged

Potchefstroom, as well as the other old age facilities affiliated with the Service Centre for the Aged within the Tlokwe Municipality region, were chosen based on two factors. Firstly, Potchefstroom was chosen as the Service Centre for the Aged in Potchefstroom informed the researcher that there are currently 10 000 elderly persons living in the city, which includes 1500 active members of the centre. This means that there are a large number of elderly people living in a concentrated area which would lead to a larger sample size. Secondly, the events hosted by the Service Centre for the Aged were selected in order to make it less strenuous for the respondents, as recruitment of the potential respondents was done at these events. By making use of these events, more respondents were reached and may have ensured greater participation of older consumers. These consumers had not been involved in multiple previous research studies to the extent that the study posed an additional burden to them.

### **3.3.2 Sampling technique and sample size**

A non-probability purposive sampling method was recommended as specific inclusion and exclusion criteria for the sample selection is applicable, as well as the study being exploratory and subject to limited resources (Maree & Pietersen, 2007:176-178). A similar technique was

used in a study regarding the fashion-conscious behaviour of mature female consumers and proven to be successful (Nam *et al.*, 2006:103).

A mediator (from the Service Centre for the Aged) was appointed to assist in the distribution and collection of the informed consent forms and completed questionnaires. As data was collected using a self-administered questionnaire, a large sample was needed to provide meaningful statistical results (Fouché & Delpont, 2011:64). However, in the study conducted by Nam *et al.* (2006), a total of 60 respondents were used, from three independent living facilities. On the other hand this may have been too small a number of respondents because the population was relatively small and then the sample should consist of a reasonably large percentage of it (Strydom, 2011:224). The accuracy of estimating characteristics of a certain population when utilizing only the data from the sample improves with larger samples (Maree & Pietersen, 2007:179). The Statistical Consultation Services of the North-West University, Potchefstroom Campus recommended a sample size of 200-300, which is more respondents than the study completed by Hugo and Van Aardt (N=105) (2012). Approximately 500 information leaflets and consent forms (Annexure A) were distributed. The total number of completed questionnaires was 205, however, three of the questionnaires did not meet the inclusion criteria and were therefore removed from the study. Thereby, a total of 202 questionnaires were used to provide the data for this study. Although a great amount of effort was used to ensure a larger number of completed questionnaires, it was not possible.

### **3.4 Data collection**

#### **3.4.1 Measuring instrument**

A large number of respondents' opinions, beliefs and behaviour about a phenomenon, like older female consumers' quality perception of clothing with regard to clothing attributes, can be explored through a questionnaire (Delpont & Roestenburg, 2011:186) and therefore questionnaires were used for data collection. This allowed many variables to be measured and is thus suitable for exploratory research (Neuman, 2011:242).

The questionnaire (Annexure B) was developed using a combination of closed-ended questions (Neuman, 2011:323) adapted from similar studies (Hugo & Van Aardt, 2012; Prinsloo, 2011; Van Staden, 2012) as well as questions formulated after a thorough literature review. The questionnaire consisted of three sections (A, B and C), with section A being used to determine whether respondents met the inclusion criteria. The inclusion criteria were compiled by making use of existing literature that was studied. Section B explored older female consumers' quality perception of clothing with regard to certain attributes using Likert-scales through adapted

previous studies' questionnaires from Hugo and Van Aardt (2012) and Van Staden (2012). Section C determined demographic characteristics by means of closed ended questions and made use of other studies (Prinsloo, 2011; Van Staden 2012) to determine relevant demographic questions. Demographic information was included in the questionnaire as age and gender were specific inclusion criteria for the study. Other demographic information such as marital status, and the amount of money spent on clothing per year, may also have provided insight into certain trends and choices among the respondents and was therefore included in the questionnaire. Furthermore, the researcher would also like to publish the findings of the study in an academic journal, which underlines the need for the demographic information.

The questionnaire was available in English, Afrikaans and Setswana as these are the languages most generally spoken in the area. The questionnaire was translated from English into Afrikaans and Setswana by experts, after which it was translated back into English by a Setswana and an Afrikaans-speaking individual, in order to ensure the translation was valid. The mediator had a translator present when distributing the information leaflets and consent forms, in the case that some of the potential respondents had questions in a different language such as Setswana.

Finally, the questionnaire was pre-tested for errors or unclear questions and was then improved before being used for data collection (Delpont & Roestenburg, 2011:195). The pre-test was done by choosing five respondents that fitted the inclusion criteria, but who did not take part in activities or events hosted by the Service Centre for the Aged, as the researcher did not want to decrease the size of the sample pool. These respondents then had the opportunity to fill out the questionnaire. The researcher took note of the time that each respondent required to complete it. After completion, the researcher asked the respondents of the pre-test whether they had understood each question, whether any words in the questionnaire were troublesome and whether the length of the questionnaire was appropriate. The researcher then took all the new information into account before finalising the questionnaire.

**Table 3-1: Changes made to questionnaire after pilot study**

Original question:	Changed to:
Small table with choices regarding age groups	Date of birth
Have you purchased clothing for yourself within the past year?	Have you gone to a store and purchased clothing for yourself within the past year?

No question present regarding residency.	Are you a permanent resident of the Tlokwe municipal area?
Style lines of design flattering for figure (fit).	Question removed.
Garment was machine washable.	Question removed.
Colour compliments personal features.	Colour complements appearance.
Question asking to indicate race.	Questions asking to indicate race removed.
Marital status.	Current marital status.

In the study conducted by Nam *et al.* (2006), problems with their self-administered approach were reported and they consequently recommended that future research on older consumers be done using one-on-one interviews. However, the problems reported were only evident from the second part of their sampling, where female consumers above the age of 90 became frustrated with the questions requiring different ranking scales for different questions. To prevent the same problems as seen in the study by Nam *et al.* (2006), in this study the researcher made use of a simple scale which continued through the questionnaire and did not vary between questions. It was assumed that this consistency would have made it easier for older consumers to understand and complete the questionnaire. Due to the time constraint faced by the researcher, the study did not make use of one-on-one interviews, but rather provided the questionnaires to the mediator at the Service Centre for the Aged, who distributed it to potential respondents. Thus no fieldworkers were required for this study. This was beneficial for the study as having a number of fieldworkers collecting data can influence the reliability of the study. Different people may approach the data-collection procedure differently and therefore influence the data collection. Having only one person (mediator) collecting the data ensured consistency and therefore increased the reliability of the study.

### **3.4.2 Recruitment of respondents and data-collection procedure**

Written permission was obtained from the administrative principle and the social worker (mediator) of the Service Centre for the Aged in Potchefstroom (Annexure C). The researcher did not need to obtain permission from the Department of Social Services as the Deputy Director of the centre had the sole authority to provide consent. The researcher advertised the study by means of posters that stated the purpose of the study, as well as the time and dates of data collection. The posters were designed using a large font and graphics so that the potential

older respondents could easily read and comprehend it (Annexure D). Advertisements in the form of flyers were also placed at locations such as the foyer inside the Service Centre for the Aged and looked exactly like the posters (Annexure D), but on a smaller scale (A5). The advertising of the study was done 2-3 weeks prior to data collection.

The researcher provided the mediator with the questionnaires, as well as the information leaflets and consent forms. Thereafter, about 450 information leaflets and consent forms were distributed by the mediator. These forms and questionnaires were explained to older female attendees who may have met the inclusion criteria at functions that are held weekly by the Service Centre for the Aged in Potchefstroom. The mediator was not directly involved with the potential respondents on a daily basis and is an employee of the Service Centre for the Aged, therefore the respondents did not have a dependent relationship with the mediator. In the cases where the potential respondent was illiterate and would like to participate, the social worker employed by the Service Centre for the Aged in Potchefstroom was entrusted to co-sign and help the potential respondent with the necessary forms and questionnaire. The information leaflet contained all the necessary information needed for potential respondents to make an informed decision regarding participation in the study. Information on the leaflet was explained and potential respondents then had the opportunity to ask questions to the mediator or to contact the researcher. The mediator then obtained written consent and only the respondents who provided written consent took part in the study.

Respondents completed the questionnaire at home, but could contact the researcher (whose contact number appeared on the questionnaire) if they had any questions. This method may also have led to the respondents feeling more willing to participate as they could complete the questionnaire during a time that was most suitable for them. The respondents were asked to return the completed questionnaires within two weeks of receiving them. The mediator took care to keep the informed consent forms and the completed questionnaires separate. This is necessary to ensure the anonymity of the respondents. If the informed consent forms and completed questionnaires are not separated the researcher can identify questionnaires by the name given on the accompanying consent form. These documents were also kept safe until the researcher returned after the designated time to collect the documents. This is important as the information provided in both the documents should be acknowledged as confidential and should therefore be kept safe.

When the respondents returned the questionnaires to the mediator, they were given a small token of appreciation, in the form of a small chocolate. They had no prior knowledge regarding this token of appreciation. The researcher returned two weeks later to collect the completed questionnaires from the mediator. A token of appreciation was given to the mediator. This token

of appreciation was in the form of a box of chocolates. The mediator had not been notified about this token of appreciation prior to completion of the data-collection procedure.

Feedback regarding the study was given at the end of 2015, in a communal hall. These feedback sessions were done by the researcher by means of oral information sessions, which were also advertised prior to the events. The respondents who were present at the feedback sessions (after completion of the study) also received a token of appreciation in the form of tea and cake at the events. The respondents had no prior knowledge of this token of appreciation.

### **3.4.3 Mediator and mediator training**

Prior to data collection the researcher consulted with the mediator and ensured that this individual fully understood the procedure to be followed. During the session, the researcher discussed the study, questionnaire and possible scenarios that may have arisen during data collection. After these sessions, the mediator was permitted to distribute the consent forms and questionnaires to potential respondents.

## **3.5 Data analysis**

Quantitative data analysis involves the transfiguration of captured data to numerical forms in order to be analysed statistically (Babbie, 2013:438). This data was obtained by means of a questionnaire. The researcher firstly scrutinized the questionnaire in order to ensure that the questionnaires were complete with all relevant information. The aim was to use the findings from the sample data to draw conclusions regarding the older female sample, which required statistical inference (Pietersen & Maree, 2007a:198). This allowed the researcher to obtain information with regard to older female consumers' quality perception of clothing. Data analysis was performed using the Statistical Package for Social Science (SPSS version 22: 2015) in consultation with the Statistical Services of the North-West University at the Potchefstroom Campus. Exploratory factor analysis was done to facilitate validity in terms of external and construct validity (Field, 2013). The Principal Axis Factoring (PAF) method was used for extraction of factors, after which items were designated into different factors using the Direct Oblimin with Kaiser Normalisation as rotation method (Field, 2013:674). All Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) values for the factor analysis done in this study were higher than the suggested minimum of  $KMO \geq 0.5$ . Therefore, construct validity with regard to the questionnaire was present.

Descriptive statistics such as frequencies and means were used. The means ranged from high values for the expectations (3.35 - 4.75), indicating respondents were not sure with regard to certain attributes, but regarded most other attributes as important to very important. Whereas

the performance of attributes had lower means ranging from 2.45 to 3.82, indicating respondents rated most attributes as poor or neutral, with the exception of others being good. Statistically significant differences ( $p \leq 0.05$ ) in means between variables were tested using one-way analysis (ANOVA), as well as Tukey's tests (Field, 2013:66). Inferential statistics such as correlations were also used. It was evident that there was a significant correlation between the respondents' general rating of clothing quality and all the performance attributes. Items related to respondents' quality perception, with regard to each of the clothing attributes resulted in sixteen extracted factors, after which one was removed and re-analysed as two factors, due to communality being too low. Therefore, respondents' expectations with regard to the sizing of clothing resulted in two factors. The extracted factors were expectations and performance of: fit, style, care, sizing, colour, price, and construction. The attribute of sizing expectation (respondents' expectations with regard to the sizing of clothing) resulted in two factors namely, 'correct sizing' and 'variety of sizes'. All the attributes were measured on two separate five-point Likert-type scales – one for expectations and the other for perceived performance. These questions resulted in answers in the form of percentages for each item relating to each attribute (factor).

Cronbach's alpha reliability test was used in order to describe the internal reliability and consistency of multi-item scales data (Shen *et al.*, 2012:240). The internal reliability and consistency of the data were described by making use of inter-item correlation values (Pietersen & Maree, 2007b:216). Cronbach's alpha values that are closer to one indicate high levels of internal consistency for constructs with a suggested cut-off value of  $\alpha=0.5$  (Field, 2013:709). However, Pietersen and Maree (2007b:215) indicate guidelines with  $\alpha=0.90$  signifying high reliability,  $\alpha=0.80$  moderate reliability, and  $\alpha=0.70$  low reliability, as being acceptable. Values for the mean inter-item correlations of each factor are suggested to be between 0.15 and 0.55 (Field, 2013:709). For all extracted factors, Cronbach's alpha measurements were above the recommended value of  $\alpha=0.5$  except for the data relating to sizing expectations being  $\alpha=0.098$ . Thus, this factor had to be interpreted with caution and was subsequently analysed separately in order to produce two separate factors.

Gap analysis was furthermore performed to correctly identify the clothing attributes that should be improved based on a comparison of means (by looking at the 'gap' present between consumers' expectations versus the perceived performance of clothing attributes). It was evident that the respondents' expectations were marginally higher than the perceived performance of the clothing attributes. Thus, it would be necessary to improve each of these attributes and/or the characteristics within each of the attributes.

### **3.6 Ethical considerations**

Permission was obtained from the Health Research Ethics Committee (HREC) of the North-West University (NWU-00026-15-S1) prior to any research being conducted, or data collected from respondents (Creswell, 2014:95). After permission had been obtained and respondents had been identified by the researcher (according to the inclusion criteria), each respondent needed to provide written informed consent in order to participate in the study.

#### **3.6.1 The information leaflet and written informed consent form**

Respondents were asked to sign a written informed consent form before they could participate in the study as an agreement that the necessary information and risks had been explained to them (Creswell, 2014:97; Neuman, 2011:149). The information leaflet also stated any possible risks that the study may have posed (Christensen *et al.*, 2011:106) and contained the contact information of the researcher; and the Health Research Ethics Committee, Faculty of Health Sciences, NWU. Participation in the study was anonymous and completely voluntary. However, respondents provided their contact details (which did not appear on the questionnaire), as well as their date of birth in order to be able to identify and remove questionnaires if a participant wished to withdraw later. Respondents were free to withdraw from the study at any given time or stage (Creswell, 2014:97; Neuman, 2011:149). This was also explained to each of the respondents before they received the questionnaire and also appeared on the written informed consent form, along with the time required to complete the questionnaire. The number of respondents who would take part in the study; the inclusion and exclusion criteria and the ethics approval were also visible on the information leaflet.

#### **3.6.2 Risk-benefit analysis**

An investigation regarding the possible risks involved with participating in the study is presented in the table below. The risks and precautionary measures set in place for protection of the respondents are discussed (Table 3-1). It can be seen that there are only a few minor risks and there were precautionary measures set in place to minimize the risks even further.

**Table 3-2: Possible risks pertaining to the respondents**

<b>Respondents</b>	
<b>Risks</b>	<b>Precautionary measure</b>
<b>Physical:</b> Respondents might have experienced some boredom and fatigue during the data collection.	Data collection involved self-administered questionnaires. This means that respondents received the questionnaire and completed it at a convenient time and place, as apposed to completeing it during a time consuming group session. This limited the physical risks to respondents. The questionnaire took 15-20 minutes to complete, which may have prevented respondents from becoming fatigued.
<b>Psychological:</b> There were limited psychological risks anticipated; however, respondents might have felt embarrassed while participating in the study, if they perhaps thought there were any sensitive questions going to be asked e.g. how much income they receive.	There were no threatning or sensitive questions in the questionnaire. The respondents were in a familiar environment, which possibly made them feel more comfortable about participating. Moreover, respondents could withdraw at any stage and were not forced to answer any of the questions. These precuatory measures minimised the risks.
<b>Social:</b> There was no social harm to respondents that could be anticipated	Participation in the study was done anonymously and voluntarily.
<b>Legal:</b> There was no legal harm to respondents that could be anticipated	
<b>Economic:</b> There was no economic harm to respondents that could be anticipated.	The respondents were not asked to contribute financially and did not suffer any loss of income as data was collected at venues that the respondents frequently visited during events that they participated in.
<b>Dignitary:</b> There was no dignitary harm to respondents that could be anticipated	Participation in the study was done voluntarily and the respondents provided written informed consent prior to their participation.

<p><b>Community:</b> There was no community harm to respondents that could be anticipated.</p>	<p>Respondents' participation was voluntary and anonymous and the data collected kept confidential (Babbie, 2014:68, Christensen <i>et al.</i>, 2011:124; Creswell, 2014:99). When published in an academic journal, all personal information will be kept anonymous and will only be accessible to researchers when granted permission from the NWU.</p> <p>Data storage: All the raw data (hard copies) was archived and will be stored in locked cabinets for five years at the NWU, Potchefstroom campus (building F15). All electronic data was also encrypted and will be kept by the chief researcher. The data will be destroyed according to the regulations of the NWU after the completed storage period of five years. During the time of storage, only the principal researchers of this study will have access to the data.</p>
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There are a number of benefits identified regarding older female consumers and the NWU, as stated below.

**Benefits to the older female consumer:**

- This research provided older female consumers of Potchefstroom with a voice in terms of their needs regarding clothing (direct benefit).
- If the clothing industry implements the recommendations made and improves clothing for older female consumers, not only in Potchefstroom, but in SA too, it may provide these consumers with clothing according to their needs and expectations (indirect benefit).
- This might ultimately reflect in the success of the industry (more of the older female consumers purchasing clothing) (indirect benefit).

**Benefits to the NWU:**

- The results obtained from the study may contribute to new knowledge and may provide other students with insights leading to future research and/or programmes.
- The findings of the study might also be published in an academic journal, which advances the research mission of the NWU.

These benefits outweigh the risks and underline the importance of this study.

### 3.7 Reliability and validity

Validity is defined as the extent to which a measuring instrument, like a questionnaire, measures the concept in question, as well as how accurately it is measured (Babbie, 2013:191; Delport & Roestenburg, 2011:173). Face validity, content validity, construct validity and criterion validity should be considered, as evaluating validity is not considered to be a direct process (Bernard, 2013:48). Face validity and content validity are usually established before data collection and will ensure that each question can be linked to an objective; and criteria and construct validity thereafter (Delport & Roestenburg, 2011:173). In this study, both face and content forms of validity were guaranteed by a panel of experts in the field of Consumer Sciences, as well as the Statistical Consultation Services of the North-West University, since they inspected the questionnaire and analysed the contribution of each construct in the questionnaire (Delport & Roestenburg, 2011:173).

Construct validity ensures that the measuring instrument is standardised and requires the use of factor analysis (Delport & Roestenburg, 2011:174; Pietersen & Maree, 2007b:217). A thorough literature review was conducted and the questionnaire included adapted questions from previous studies' questionnaires that studied similar phenomena which increased the content and construct validity of the questionnaire, as the questionnaire endeavoured to measure all aspects of the construct (Neuman, 2011:212). Furthermore, validity was improved by pre-testing the questionnaire with five respondents living in Potchefstroom who fitted the inclusion criteria in order to ensure that respondents interpreted the questions correctly (criterion validity) and eliminated any uncertainties that may have arisen.

Reliability refers to a measuring instruments consistency in yielding reliable numerical results (Delport & Roestenburg, 2011:173). A measuring instrument such as the questionnaire used in this study would therefore be reliable if it can be performed repeatedly to measure the same problem in different situations and still provide similar results (Bernard, 2013:219). However, perfect reliability is rare but the study aimed to make the research results reliable by having certain measures in place (Babbie, 2013:191). There are different types of reliability, namely test-retest, equivalent form, split-half and internal reliability. For the purposes of this study internal reliability was tested through Cronbach's alpha coefficient as the researcher aimed to find correlations within the data groups regarding the clothing attributes in order to draw conclusions (Delport & Roestenburg, 2011:177; Pietersen & Maree, 2007b:217). For all extracted factors, Cronbach alpha measurements were above 0.5 except for the data relating to sizing expectations with concerned  $\alpha=0.098$ . Thus, this factor has to be interpreted with caution. When items are formulated to measure certain constructs, there needs to be a high degree of

similarity between them and the degree thereof indicates the internal reliability of the instrument (Pietersen & Maree, 2007b:216).

### **3.7.1 Fieldworker reliability**

The researcher made use of only one mediator, which ensured consistency with regard to the data-collection procedure. The mediator was also trained by the researcher during sessions prior to data collection, ensuring that the procedure was understood. These factors increased the reliability of the study (Delpont & Roestenburg, 2011:173).

### **3.8 Conclusion**

After reviewing this chapter, a clear understanding of the research methods and statistical analysis should be evident, in conjunction with the research article provided in chapter 5.

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## **CHAPTER 4: RESULTS AND DISCUSSION**

### **4.1 Introduction**

This chapter contains the complete results obtained from the statistical analysis performed for the study. The results are discussed in-depth as per the study objectives.

### **4.2 Results and discussion**

#### **4.2.1 Demographics**

Of the 205 respondents, three did not meet the inclusion criteria (having purchased a clothing item within the past year) and were therefore excluded. The remaining 202(n) respondents were all female, above the age of 60 and permanent residents of the Tlokwe municipal region. The average age of respondents was 72 years (minimum 62 and maximum 85 years of age). In the study, there were more respondents indicating their home language as Afrikaans (88.6%) than English (10.9%), while only a small percentage (0.5%) indicated their home language as being Sepedi. This does not reflect the home language statistics of the Tlokwe municipal region as the largest percentage of people in the region speak Setswana (40.0%), with Afrikaans being the second largest (27.1%), and English being fifth (4.8%) after Sesotho and IsiXhosa (Stats SA, 2011). As this research does not consist of a random sample and is only inclusive of a certain number of older female consumers within the Tlokwe municipal region, the results cannot be generalized.

Regarding marital status, the sample comprised 57.4% of respondents being widowed, 34.7% married, 6.4% divorced/separated, and 1.0% never having been married. This could be as a result of women living, on average, longer than men and thus making up a larger percentage of the population (Stats SA, 2012:71). With regard to type of housing, most participants indicated owning their own house/apartment (57.4%), while others indicated living in a retirement home (17.3%), sharing a yard or house with family/friends (17.3%) and renting a house/apartment (7.9%). With the largest percentage of the study population owning a house or apartment, the reason could be that as most respondents are widowed (57.4%) and perhaps their spouse left them the house/apartment after their passing. While the other respondents might prefer sharing a yard or apartment with family/friends as the elderly run the risk of feeling lonely and neglected due to a possible lack of social support (Stats SA, 2012:94; Yeh & Sing, 2004:129), or may have moved to a retirement home out of necessity because as people age their mobility decreases and they may need the extra assistance.

With regard to the approximate amount of money respondents spent on clothing per year, most respondents indicated spending less than R1000 (39.6%), with the second highest percentage being attributed to spending R1000 - R2000 (26.7%). The interval of R2001 – R3000 obtained 22.3%, with R3001 – R4000 only having 5.9% and R4001 – R5000 having 5.4%. It is clear in these results that as the intervals with regard to money spent on clothing increase, the percentage of respondents decrease. The majority of respondents (72.8%) also indicated purchasing clothing 1 – 4 times per year, with the percentage of respondents decreasing as the intervals increase. This reflects research stating that some older consumers do not have as much financial freedom due to retirement (Portacolone, 2013:166). It could also be a result of receiving the social grant of approximately R1500 per month from the government (SASSA, 2016), which is a small amount of money. Lastly, with regard to demographic information, respondents were asked how they purchased their own clothing (Table 4-1), with most of respondents (86.6%) indicating that they purchased clothing by themselves, while the rest of the respondents (13.4%) purchased clothing with the help of family/friends.

**Table 4-1: Demographic profile of study population (n=202)**

Variables	Total group frequency	Percentage (%)
Language		
Afrikaans	179	88.6
English	22	10.9
Sepedi	1	0.5
Marital status		
Widowed	116	57.4
Married	70	34.7
Divorced / separated	13	6.4
Never married	2	1.0
Living together	1	0.5
Type of housing		
Own house / apartment	116	57.4
Retirement home	35	17.3
Sharing yard or house with family/friends	35	17.3
Rented house / apartment	16	7.9
Approximate spending on clothing per year		
Less than R1000	80	39.6
R1000 – R2000	54	26.7
R2001 – R3000	45	22.3
R3001 – R4000	12	5.9
R4001 – R5000	11	5.4
Amount of clothing purchases per year		

1 – 4 times	147	72.8
5 – 8 times	47	23.3
More than 12 times	5	2.5
9 – 12 times	3	1.5
Method of shopping for clothing		
Alone	175	86.6
With the help of family/friends	27	13.4

#### 4.2.2 Older female consumers' expectations concerning clothing attributes during pre- and post-purchase decision-making

Respondents were asked to rate their expectations concerning the clothing attributes of a clothing item they had purchased within the past year, based on a 5-point Likert-type scale. The indicators of importance were interpreted as means:  $\geq 4.5$  being very important; means:  $\geq 3.5 < 4.5$  important; means:  $\geq 2.5 < 3.5$  signifying neutral ratings; means:  $\geq 1.5 < 2.5$  being less important and means:  $< 1.5$  indicating the attribute is unimportant.

**Table 4-2: Respondents' expectations regarding individual items pertaining to clothing attributes, in terms of importance (n=202)**

<i>Expectation attributes</i>	Mean	SD	1	2	3	4	5
			Percentage of respondents				
<b>Construction</b>	<b>4.70</b>	<b>0.584</b>					
Neat stitching	4.75	0.547	0.0	1.0	2.5	17.3	79.2
Strong seams	4.69	0.717	0.0	5.0	0.0	16.3	78.7
Buttons fit buttonholes	4.66	0.730	1.0	2.5	2.0	18.3	76.2
<b>Price</b>	<b>4.64</b>	<b>0.921</b>					
Affordable	4.67	0.539	0.0	0.5	2.0	27.2	70.3
Value for money	4.62	0.570	0.0	0.0	4.5	28.7	66.8
<b>Care of clothing</b>	<b>4.61</b>	<b>0.623</b>					
Easy to clean	4.75	0.670	1.5	0.5	2.5	12.9	82.7
Keeps its shape	4.70	0.624	1.0	0.0	3.0	19.8	76.2
Colourfast (keeps its colour)	4.68	0.725	1.5	0.5	5.0	14.4	78.7
Easy to iron	4.32	1.180	5.0	9.4	0.5	18.8	66.3
<b>Fit</b>	<b>4.49</b>	<b>0.632</b>					
Overall fit	4.68	0.661	1.0	1.0	2.0	20.8	75.2
Waistline at the correct level	4.60	0.656	1.0	0.0	3.5	29.2	66.3
Correct fit at the neck	4.46	0.888	2.0	3.9	3.4	27.8	62.9
Correct fit at the armhole	4.45	0.930	2.0	4.0	6.9	21.8	65.3
Sleeves fit correctly	4.39	0.772	1.0	1.5	7.4	38.1	52.0
Shoulder lines match shoulders	4.38	0.966	2.0	6.4	3.5	28.2	59.9
<b>Fabric</b>	<b>4.38</b>	<b>0.630</b>					
Not prone to cause fuzz balls (pilling)	4.58	0.709	0.0	3.0	4.0	24.8	68.3
Not prone to wrinkle	4.46	0.898	0.0	7.9	4.0	22.8	65.3
Long-lasting	4.42	0.796	1.0	2.0	7.4	33.2	56.4
Gentle on skin	4.37	0.922	0.0	7.4	8.4	24.3	59.9
Absorbs moisture	4.06	1.093	0.0	15.8	8.9	28.2	47.0
<b>Sizing</b>	**	**					

Correct sizing	4.49	0.741	0.0	2.0	8.9	27.2	61.9
Variety of sizes	4.22	0.975	3.0	2.5	13.4	31.7	49.5
<b>Style</b>	<b>4.36</b>	<b>0.630</b>					
Appropriate for age	4.55	0.646	0.0	1.0	5.4	31.2	62.4
Appropriate for lifestyle	4.37	0.928	1.5	5.4	5.9	28.7	58.4
Style is adaptable	4.16	0.889	0.5	6.4	10.4	42.2	40.6
<b>Colour</b>	<b>4.14</b>	<b>0.677</b>					
Colour suits age	4.46	0.993	4.0	4.0	1.0	24.	66.3
Colour compliments appearance	4.44	0.851	0.5	5.0	5.9	27.7	60.9
Colour is trendy	3.35	1.371	11.4	21.8	13.9	26.7	26.2
Colour of trims coordinate with fabric	4.32	0.842	0.0	5.0	9.5	34.5	51.0

SD = Standard deviation

1=Unimportant 2=Slightly important 3=Neutral 4=Important 5=Very important

\*\* Not applicable as these result were not reliable

From the results obtained it is clear that respondents' expectations were high with regard to all the attributes. Construction, price, and care of clothing yielded mean values of  $M \geq 4.5$  indicating that respondents rated these attributes as very important. Should a clothing item be constructed poorly, that item would be less durable (Laitala *et al.*, 2015:103) and therefore be of poor quality, thus construction expectation is of high importance to these respondents. Whereas price being of high importance may be as a result of some of certain older consumers often experiencing a lack of financial stability (Portacolone, 2013:167) reiterating the importance of being able to properly care for clothing in order to ensure it lasting longer (care of clothing attribute).

Fit, fabric, and colour yielded values  $M = \geq 3.5 < 4.5$  (Table 4-2). Therefore, these attributes were rated as being important. The reason for fit being of importance to older female consumers may be because women find it difficult to find garments that fit well (Makhanya *et al.*, 2014:183). Ill-fitting garments may also be uncomfortable to wear, which may have an influence on the comfort of clothing, thus confirming the importance of fabric. Respondents rating of fabric as being very important may also be as a result of consumers assessing the fabric by considering temperature regulation, absorbency and tactile sensations (Kadolph, 2010:45) that are influenced by the type of fabric used. With regard to style expectations, the reason for the high mean value could be that new-age older consumers have become more involved in fashion (Guiot, 2001:1066) and therefore would like to have stylish clothing. Although the attribute of colour expectation yielded a high value, the item pertaining to the question of "colour is trendy", yielded a mean value of  $M = 3.35$  indicating that respondents are unsure. This could suggest that as a result of their age, older female consumers' expectations are indifferent with regard to colour trends.

As sizing yielded a KMO value of 0.500 and  $\alpha=0.098$  for reliability, it could not yield a distinct and reliable factor (Field, 2013:709). Instead, each item within sizing was analysed as a separate factor. With regard to “correct sizing” the results yielded a mean value of  $M=4.49$  and  $M=4.22$  for “variety of sizes” (Table 4-2). The reason for older female consumers possibly feeling stronger about correct sizing expectations could be as a result of fit and sizing problems in SA (Kinley, 2010:401).

#### 4.2.3 Older female consumers’ perceived performance of clothing attributes during pre- and post-purchase decision-making

Respondents were asked to rate their perceived performance of clothing attributes of a clothing item they had purchased within the past year, based on a 5-point Likert-type scale. Indicators of performance were interpreted as means:  $\geq 4.5$  being excellent; means:  $\geq 3.5 < 4.5$  good; means:  $\geq 2.5 < 3.5$  signifying neutral ratings; means:  $\geq 1.5 < 2.5$  being poor and means:  $< 1.5$  indicating the attribute is unacceptable.

**Table 4-3: Respondents' performance rating of individual items pertaining to clothing attributes (n=202)**

<i>Performance attributes</i>	Mean	SD	1 %	2 %	3 %	4 %	5 %
<b>Care of clothing</b>	<b>3.58</b>	<b>0.883</b>					
Easy to clean	3.82	0.870	0.0	6.4	29.2	40.6	23.8
Easy to iron	3.52	1.094	2.5	19.3	22.3	35.6	20.3
Colourfast (keeps its colour)	3.50	1.143	0.0	25.2	26.2	21.3	27.2
Keeps its shape	3.49	1.107	4.0	17.3	24.3	35.1	19.3
<b>Colour</b>	<b>3.39</b>	<b>0.456</b>					
Colour complements appearance	3.52	0.768	0.0	8.4	39.6	43.6	8.4
Colour is trendy	3.39	1.074	4.5	15.3	34.2	29.2	16.8
Colour suits age	3.36	1.008	4.0	12.9	41.1	27.7	14.4
Colour of trims coordinates with fabric	3.31	1.049	2.0	23.8	30.2	29.7	14.4
<b>Style</b>	<b>3.13</b>	<b>0.883</b>					
Style is adaptable	3.39	1.075	3.0	20.3	27.7	32.7	16.3
Appropriate for lifestyle	3.04	1.043	5.9	25.2	36.1	23.8	8.9
Appropriate for age	2.95	1.105	6.9	32.2	30.2	20.3	10.4
<b>Fabric</b>	<b>3.06</b>	<b>0.742</b>					
Gentle on skin	3.33	0.979	3.5	17.	29.2	41.1	8.4
Absorbs moisture	3.15	0.887	6.9	10.9	43.1	38.1	1.0
Long-lasting	2.99	0.992	6.9	23.3	39.1	25.2	5.4
Not prone to wrinkle	2.95	0.926	1.5	33.7	41.1	16.3	7.4
Not prone to cause fuzz balls (pilling)	2.85	1.056	8.8	30.7	33.7	20.0	6.8
<b>Construction</b>	<b>3.04</b>	<b>1.014</b>					
Buttons fit buttonholes	3.16	1.174	10.9	16.3	31.7	28.2	12.9
Neat stitching	3.03	1.009	8.4	18.3	40.1	27.7	5.4
Strong seams	2.91	1.177	15.3	18.3	35.6	21.3	9.4
<b>Sizing</b>	<b>2.71</b>	<b>0.956</b>					

Variety of sizes	2.96	1.251	15.8	21.3	25.7	25.7	11.4
Correct sizing	2.45	0.982	15.8	41.6	26.7	13.9	2.0
<b>Price</b>	<b>2.34</b>	<b>0.733</b>					
Affordable	2.34	1.040	23.8	36.1	23.3	15.8	1.0
Value for money	2.31	1.105	25.2	39.1	18.8	12.9	4.0
<b>Fit</b>	<b>2.23</b>	<b>0.791</b>					
Sleeves fit correctly	3.31	1.054	4.5	20.8	24.3	40.1	10.4
Correct fit at the neck	3.29	0.903	2.5	16.8	35.6	39.1	5.9
Overall fit	3.28	0.911	3.0	14.4	42.1	32.7	7.9
Shoulder lines match shoulders	3.28	0.969	4.5	16.3	32.7	39.6	6.9
Correct fit at the armhole	3.26	1.066	8.4	12.9	32.2	37.6	8.9
Waistline at the correct level	2.96	0.997	3.5	34.2	32.2	23.3	6.9

SD = Standard deviation

1=Unacceptable 2=Poor 3=Neutral 4=Good 5=Excellent

Care of clothing was the only attribute to yield a higher mean value of  $M=3.58$  indicating that respondents rated the performance of this attribute as good. The reason for this could be that older female consumers have the experience required to properly care for clothing items, which is necessary as reading and understanding care labels can lead to a prolonged lifespan of apparel (Van der Merwe *et al.*, 2014:23). The clothing may possibly be easy to care for and the manufacturers might also successfully communicate care instructions on clothing labels.

Colour, style, fabric, construction and sizing all yielded mean values of  $M \geq 2.5 < 3.5$  (Table 4-3) indicating that respondents rated the performance of these attributes as neutral, or neither good nor poor. Although it seems as though respondents might have been indecisive about the performance of the abovementioned attributes, there are opportunities for improvement of clothing attributes. This is evident when considering results obtained for each item within these neutral attributes, as the lowest mean value was attributed to the item of "correct sizing" ( $M=2.45$ ). This could be as a result of SA retailers not having a standardized sizing system including key body dimensions to help consumers find the correct size (Kasambala, 2013:5; Kinley, 2010:401). It can also be attributed to the fact that large amounts of clothing imports from China are taking place (Ronan, 2015:1). This clothing is based on Asian key body dimensions, with body shapes of the SA (Caucasian, African and Indian) population differing vastly (Yates *et al.*, 2004:301). This might cause consumers to fit clothes in every store in order ensure the correct sizing. For older female consumers this may be a problem as they may become tired quickly as a result of a decline in their health and/or mobility (Moschis *et al.*, 2011:469).

Fit and price yielded the lowest mean values of  $M \geq 1.5 < 2.5$  indicating a poor rating for these attributes. A reason for the poor rating of fit could possibly be as a result of the older female consumers' bodies changing as they age (Makhanya *et al.*, 2014:183) and there not being any

clothing lines specifically made for these ageing consumers. This indicates that the clothing no longer fits these older female consumers as well as they might desire. However, the lowest mean value overall was for price performance (M=2.34), which confirms that price is the biggest problem for respondents. As stated before, this could possibly be as a result of these consumers not having the financial freedom and stability (Portacolone, 2013:167) that they once did. It could, however, also be as a result of the performance of clothing as a whole (with most of the factors scoring a mean value of close to 3 – neutral). This means that these respondents are not completely pleased with the performance of the items and that the price respondents pay for clothing is not reflected in the value they receive (Schiffman & Wisenblit, 2015:177). However, it is important to note that prices have increased with regard to the importing of textiles as SA is ranked as an upper middle income country, aiming to transform into an upper income country (Moss Group, 2014:3). This could possibly lead to the necessity of having to increase prices for clothing in order to make a profit.

#### **4.2.3.1 Associations between demographic characteristics and attribute variables (expectations and perceived performance)**

*An independent-samples t-test was conducted to compare respondents' home language, current marital status, and manner in which shopping occurred with their expectations and the perceived performance of clothing attributes. The categories/intervals that were present in the questionnaire were not all analysed, as there were not enough respondents indicating the other intervals that would have resulted in being able to perform statistically meaningful analyses.*

- Manner in which respondents went shopping

Effect sizes of  $d \leq 0.2$  indicated a small effect for all the attributes. Therefore, it can be concluded that the manner in which respondents went shopping did not have an impact on their quality perception with regard to the clothing attributes.

*A one-way between subjects ANOVA was conducted to compare respondents' expectations and the perceived performance of clothing attributes with purchasing intervals, type of housing and the amount of money spent on clothing annually, respectively. The categories/intervals that were present in the questionnaire were not all analysed, as there were not enough respondents indicating the other intervals that would have resulted in being able to perform statistically meaningful analyses.*

- Purchasing intervals

Statistical as well as practically significant differences in values were obtained for a number of attributes. Construction expectation ( $p=0.001$ ;  $d=1.34$ ), when comparing the second purchasing

interval (5-8 times per year) with the fourth purchasing interval (more than twelve times per year) indicated a large effect size. The large effect size was also present regarding care performance ( $p=0.000$ ;  $d=1.18$ ), construction performance ( $p=0.000$ ;  $d=1.17$ ) and fabric expectation ( $p=0.001$ ;  $d=1.08$ ) when comparing the first purchasing interval (1-4 times per year) with the fourth purchasing interval. Whereas the other large effect size for fabric expectation ( $p=0.001$ ;  $d=1.07$ ) was obtained when comparing the second purchasing interval with the fourth.

Medium effect size values were obtained with regard to multiple attributes. Construction performance yielded a medium effect size ( $p=0.000$ ;  $d=0.68$ ) when comparing the second purchasing interval with the fourth. Colour performance ( $p=0.002$ ;  $d=0.62$ ) yielded the effect size when comparing the first purchasing interval with the fourth. However, the other medium effect size values were obtained when comparing the first purchasing interval with the second purchasing interval for construction performance ( $p=0.000$ ;  $d=0.57$ ), care performance ( $p=0.000$ ;  $d=0.51$ ), colour performance ( $p=0.002$ ;  $d=0.51$ ), and fabric performance ( $p=0.005$ ;  $d=0.50$ ).

These results, as well as the mean values obtained (Table 4-4), suggest that respondents who purchased clothing more often (purchasing intervals 2 and 4), had a tendency to indicate that these attributes performed more positively as opposed to respondents who purchased clothing less often (1-4 times per year). This could be as a result of purchasing clothing at more frequent intervals, leading to newer clothing replacing the old. The storage of clothing, how often it is laundered, and how much it is used, affects its life-time (Laitala *et al.*, 2015:104). This might lead consumers who frequently purchase clothing, to perceiving the performance of clothing as being better than those who have to use their clothing for longer periods of time.

With regard to fabric expectations, the respondents who purchased clothing less often (intervals 1 and 2) had rated their expectations more highly than those who purchased clothing more often (interval 4). This may also be as a result of the consumers who purchase clothing more often replacing their clothing frequently and therefore being less likely to expect that it should last longer.

**Table 4-4: One-way ANOVA analysis: Mean differences in respondents' expectations and perceived performance judgement of clothing attributes based on their purchasing intervals per annum (n=202)**

Attribute	Interval 1 (1-4 times)		Interval 2 (5-8 times)		Interval 4 (>12 times)		MSE	p-value ANOVA
	Mean	SD	Mean	SD	Mean	SD		
Colour performance	3.29 <sup>a</sup>	0.751	3.67 <sup>b</sup>	0.621	3.75 <sup>c</sup>	0.482	3.16	0.002
Construction expectation	4.68 <sup>ab</sup>	0.630	4.87 <sup>a</sup>	0.284	4.08 <sup>b</sup>	0.584	2.19	0.001
Fabric expectation	4.42 <sup>a</sup>	0.630	4.41 <sup>ab</sup>	0.500	3.55 <sup>c</sup>	0.805	2.89	0.001
Care performance	3.42 <sup>a</sup>	0.804	3.93 <sup>bc</sup>	0.994	4.38 <sup>c</sup>	0.612	7.26	0.000
Construction performance	2.86 <sup>a</sup>	1.009	3.43 <sup>b</sup>	0.895	4.04 <sup>c</sup>	0.452	10.01	0.000

SD = Standard deviation

MSE= Mean square error of ANOVA

Statistical significant difference:  $p \leq 0.05$

a,b,c Means with different superscripts differed statistically significantly with medium and large effect size only

- Amount of money spent on clothing per year

The amount of money spent annually on clothing, was compared to respondents' expectations, by focusing on spending interval 1 (less than R1000), 2 (R1000-R2000), 3 (R2001-R3000), and 5 (R4001-R5000). There were statistically and practically significant differences in the values obtained for the following attributes: care performance ( $p=0.018$ ;  $d=0.61$ ) and fabric performance ( $p=0.035$ ;  $d=0.55$ ), which indicates a medium effect size. However, although statistically significant differences were indicated with regard to the following: care expectation ( $p=0.023$ ;  $d=0.48$ ), construction expectation ( $p=0.023$ ;  $d=0.46$ ), and care expectation ( $p=0.023$ ;  $d=0.40$ ), no practical significant results were obtained.

As indicated in Table 4-5, a statistical significance was indicated regarding fabric performance when comparing mean values from interval 1 ( $M=3.12$ ;  $d=0.61$ ), as well as interval 2 ( $M=3.03$ ;  $d=0.61$ ) with interval 5 ( $M=2.67$ ) ( $p=0.035$ ;  $d=0.61$ ). In addition, a practical significance was also found when comparing interval 3 ( $M=3.12$ ;  $d=0.55$ ) with interval 5 ( $M=2.67$ ;  $p=0.035$ ) in this regard. Therefore, respondents who spent larger amounts of money on clothing per year had a tendency to rate fabric performance lower than those who spent less money. This can also be observed through the values yielded for care of clothing performance. Practically significant

differences were indicated at interval 1 ( $M=3.72$ ;  $d=0.61$ ) and interval 2 ( $M=3.72$ ;  $d=0.61$ ) when compared to interval 5 ( $M=3.11$ ;  $p=0.018$ ). The reason for these similar results could be that respondents who spent less on clothing were perhaps more inclined to take better care of the clothing (according to the label) as they may not be able to afford damaging the clothing. Furthermore, there were no statistically significant differences ( $p \geq 0.05$ ) between group means as determined by one-way ANOVA with regard to the other clothing attributes and amount of money spent.

**Table 4-5: One-way ANOVA analysis: Mean differences in respondents' expectations and perceived performance judgement of clothing attributes based on amount of money spent on clothing per year (n=202)**

Attribute	Interval 1		Interval 2		Interval 3		Interval 5		MSE	P-value ANOVA
	Mean	SD	Mean	SD	Mean	SD	Mean	SD		
Fabric performance	3.14 <sup>a</sup>	0.798	3.03 <sup>a</sup>	0.604	3.12 <sup>a</sup>	0.834	2.67 <sup>b</sup>	0.513	0.46	0.035
Construction expectation	4.55	0.699	4.75	0.434	4.81	0.588	4.88	0.257	0.50	0.023
Care expectation	4.52	0.606	4.71	0.336	4.48	0.924	4.81	0.315	1.63	0.023
Care performance	3.72 <sup>a</sup>	0.999	3.65 <sup>a</sup>	0.816	3.47 <sup>a</sup>	0.781	3.11 <sup>b</sup>	0.599	1.38	0.018

SD = Standard deviation

MSE= Mean square error of ANOVA

Statistical significant difference:  $p \leq 0.05$

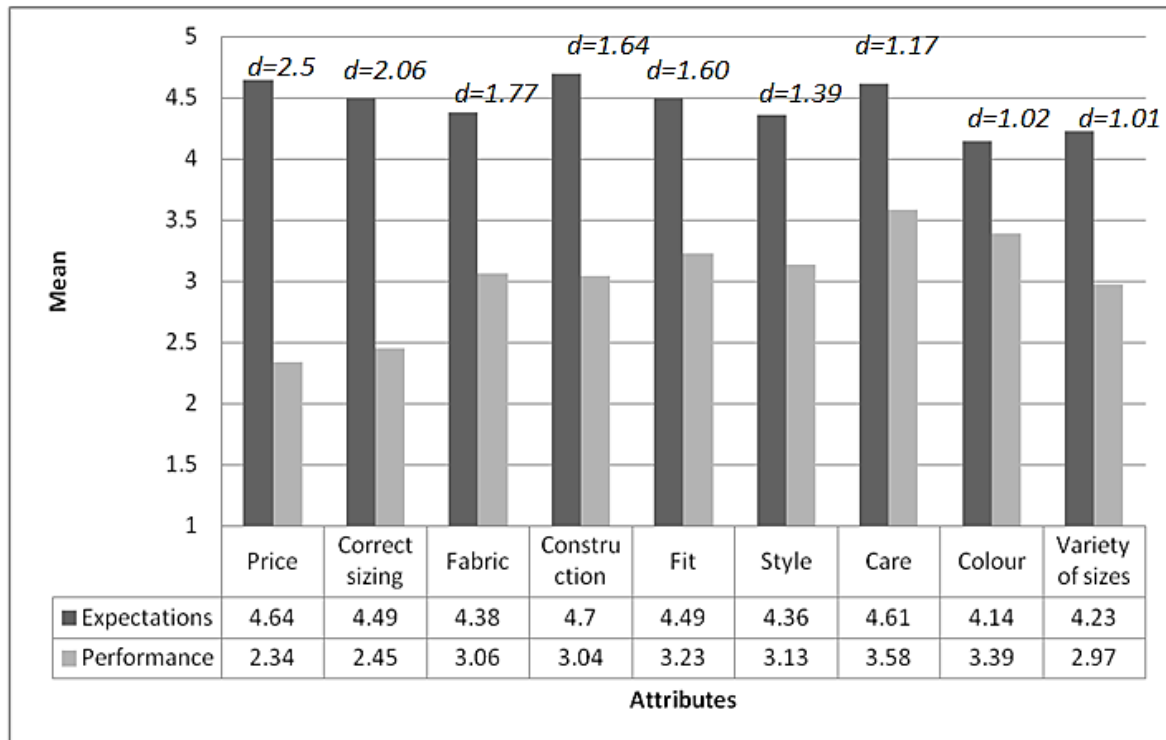
a,b Means with different superscripts differed statistically significantly with medium effect size only

**4.2.4 Older female consumers' quality perception of clothing attributes based on a gap analysis of expectations versus their perceived performance**

A gap analysis was performed (Figure 4-6) to determine consumers' quality perception based on a comparison of expectations versus performance within the expectancy confirmation paradigm. With regard to the gap analysis it was evident that the respondents' expectations were higher than the perceived performance regarding all the clothing attributes, indicating a negative quality perception in general. Table 4-7 presents the findings of the gap analysis in detail by providing the values of each attribute (expectations versus performance). There was a statistical significant difference obtained for each of the attributes ( $p=0.000$ ). The effect size of every attribute comparison was  $d > 0.8$  which means that the effect size was large and therefore of practical significance.

Expectations of price ( $p=0.000$ ;  $d=2.50$ ), fabric ( $p=0.000$ ;  $d=1.77$ ), construction ( $p=0.000$ ;  $d=1.64$ ), fit ( $p=0.000$ ;  $d=1.60$ ), style ( $p=0.000$ ;  $d=1.39$ ), care ( $p=0.000$ ;  $d=1.17$ ), and colour ( $p=0.000$ ;  $d=1.02$ ) were significantly higher than the perceived performance thereof. Therefore, it can be deduced that the respondents had a negative quality perception with regard to these clothing attributes. As these respondents were all older, it can be assumed that a process of learning had taken place over long periods of time. Expectations change over time as a result of numerous factors (such as age) (Solomon, 2013) and consequently consumer needs and expectations change accordingly. For example, as older female consumers age, changes in body shape may take place (Makhanya *et al.*, 2014) such as: posture changes (shoulders begin to round); changes in position of fat, sagging arms, buttocks flatten; and body contour becomes more angular (Clarke *et al.*, 2009:717). These changes in perception and needs can also be as a result of large amounts of clothing imports from China taking place (Ronan, 2015:1), with clothing based on Asian key body dimensions, the body shapes of the SA (Caucasian, African and Indian) population differs vastly (Yates *et al.*, 2004:301). Thus, the perception of certain clothing attributes may have been good initially, but now the clothing might not meet these expectations anymore, causing consumer displeasure. The respondents indicated that the performance of most of the attributes was below expectations (by taking the gap analysis into account) and therefore it was necessary for the clothing industry to improve these attributes for older female consumers.

Consumers are also motivated to choose certain products as a result of reasoning that the product will fulfil their needs (Jansson-Boyd, 2010:122). Larger assortments can increase choice deferral and switching. In terms of the expectancy-disconfirmation paradigm, as assortments increase, so do consumers' expectations thereof (Diehl & Poynor, 2010:312). Therefore, the respondents may have experienced increased expectations as a result of a large assortment of clothing from which to make choices. When expectations exceed performance, negative disconfirmation occurs which leads to negative quality perception or dissatisfaction (Hawkins *et al.*, 2010:648; Hoyer & MacInnis, 2007:199; Oliver, 1980:460). Thus, the respondents experienced negative quality perception with regard to the clothing attributes and/or dissatisfaction. Therefore, it is necessary for the clothing industry to improve these attributes for older female consumers. Although price was identified as the largest practically significant attribute, it will be beneficial for older female consumers, as well as the retail and manufacturing industry, to improve all the clothing attributes listed.



**Figure 4-1:** Gap analysis depicting respondents' quality perception with regard to clothing attributes

**Table 4-6:** Gap analysis of respondents' expectations versus the perceived performance of clothing attributes (n=202)

Attribute	Mean	SD	p-value	Effect size ( <i>d</i> )
Price expectation	4.64 <sup>a</sup>	0.456	0.000	2.50
Price performance	2.34 <sup>b</sup>	0.921		
Correct sizing expectation	4.49 <sup>a</sup>	.738	0.000	2.06
Correct sizing performance	2.45 <sup>b</sup>	.992		
Fabric expectation	4.38 <sup>a</sup>	0.630	0.000	1.77
Fabric performance	3.06 <sup>b</sup>	0.746		
Construction expectation	4.70 <sup>a</sup>	0.584	0.000	1.64
Construction performance	3.04 <sup>b</sup>	1.014		
Fit expectation	4.49 <sup>a</sup>	0.633	0.000	1.60
Fit performance	3.23 <sup>b</sup>	0.791		

Style expectation	4.36 <sup>a</sup>	0.630	0.000	1.39
Style performance	3.13 <sup>b</sup>	0.883		
Care expectation	4.61 <sup>a</sup>	0.623	0.000	1.17
Care performance	3.58 <sup>b</sup>	0.882		
Colour expectation	4.14 <sup>a</sup>	0.677	0.000	1.02
Colour performance	3.39 <sup>b</sup>	0.733		
Variety of sizes expectation	4.23 <sup>a</sup>	.971	0.000	1.01
Variety of sizes performance	2.97 <sup>b</sup>	1.254		

SD = Standard deviation

Statistical significant difference:  $p \leq 0.05$

a,b Means with different superscripts differed statistically significantly with a large effect size

Effect size (Cohen's *d*): 0.2=small; 0.5=medium; 0.8=large

#### 4.2.5 Clothing quality in general

Respondents were also asked to indicate their opinion regarding clothing quality in general. The following was found: 45% of respondents indicating neutral, 38.6% good, and 9.9% poor. The lower scoring opinions were excellent (5%) and unacceptable (1.5%). The mean for general clothing quality yielded a value of  $M=3.36$  indicating that the respondents had a neutral opinion. This corresponds with the average values obtained for each attribute, except with regard to care performance ( $M=2.50-3.50$ ). Thus, the general opinion regarding clothing quality supports earlier findings with regard to these attributes, which emphasizes that there is room for improving clothing attributes.

A Spearman's rank-order correlation analysis (Table 4-7) was run to determine the relationship between respondents' general quality perception of clothing and each clothing attribute. It is evident that there is a statistically significant and positive correlations between the respondents' general rating of clothing quality and all the performance attributes namely: fit ( $r_s=0.405$ ;  $p=0.000$ ), style ( $r_s=0.361$ ;  $p=0.000$ ), fabric ( $r_s=0.474$ ;  $p=0.000$ ), care ( $r_s=0.418$ ;  $p=0.000$ ), sizing ( $r_s=0.458$ ;  $p=0.000$ ), colour ( $r_s =0.529$ ;  $p=0.000$ ), price ( $r_s =0.367$ ;  $p=0.000$ ), and construction performance ( $r_s=0.557$ ;  $p=0.000$ ). In addition, construction expectation also yielded a statistically significant value ( $p=0.006$ ). Therefore, as the rating for respondents' general perception of clothing increased, their rating with regard to performance attributes also increased. However, there was an expectation attribute that yielded a statistically significant value, namely construction expectation ( $r_s=-0.190$ ;  $p=0.006$ ), indicating a negative correlation. The Spearman's coefficient for this attribute indicates that as the value for clothing quality increased, the value

for construction expectation decreased. This may be ascribed to respondents possibly not perceiving construction to indicate clothing quality and may refer more to other attributes when considering quality of clothing. Although there were other expectation attributes that yielded negative Spearman's coefficient values, namely correct sizing expectation ( $r_s=-0.021$ ;  $p=0.760$ ), colour ( $r_s=-0.009$ ;  $p=0.898$ ), price ( $r_s=-0.049$ ;  $p=0.482$ ), they were of no statistical significance.

**Table 4-7: Spearman's rank-order correlation analysis of respondents' quality perception**

Attribute	$r_s$	p-value
Clothing quality perception in general	1.000	
Fit expectation	.019	.785
Fit performance	.405**	.000
Style expectation	.061	.381
Style performance	.361**	.000
Fabric expectation	.015	.836
Fabric performance	.474**	.000
Care expectation	.029	.675
Care performance	.418**	.000
Correct sizing expectation	-.021	.760
Variety of sizes expectation	.104	.138
Sizing performance	.458**	.000
Colour expectation	-.009	.898
Colour performance	.529**	.000
Price expectation	-.049	.482
Price performance	.367**	.000
Construction expectation	-.190**	.006
Construction performance	.557**	.000

$r_s$ = Correlation coefficient

\*\* Correlation is significant at the 0.01 level (2-tailed)

\* Correlation is significant at the 0.05 level (2-tailed)

#### 4.2.6 Proposed recommendations to the clothing industry to improve clothing attributes for older female consumers

As mentioned above (Table 4-7), the attribute indicating statistical significance with the largest effect size is the attribute of price ( $p=0.000$ ;  $d=2.50$ ). In addition, the attribute of price yielded

the two lowest scoring mean values pertaining to performance for the entire study, namely affordability (M=2.34) and value for money (M=2.31), and has therefore been rated as poor. This means that the greatest concern with regard to clothing attributes for older female consumers have involved price. If the retail industry could develop a clothing line specifically with value for money in mind, it may better satisfy consumer needs.

The second highest value pertaining to statistical, as well as practical significance was with regard to correct sizing ( $p=0.000$ ;  $d=2.06$ ), whereas fabric ( $p=0.000$ ;  $d=1.77$ ) was the third largest effect size. With regard to correct sizing (M=2.45), improvements can be made by developing a standardized labelling system. This will result in all retail stores following the same labelling system, thus minimizing the need for older female consumers to try on various sizes to ensure a correct garment fit. Regarding fabric, improvements can be made by developing clothing products that are not prone to cause surface fuzz (M=2.85), as this was the lowest scoring item.

Regarding fabric, although recommendations have been made in order to improve the three attributes listed as having the greatest practical significance, it is important to note that the other attributes could also be improved. The lowest scoring means for each of the other attributes are as follows: construction - strong seams (M=2.91); fit – the waistline (M=2.96); style – appropriate for age (M=2.96); care of clothing – holds shape (M=3.49); colour - trims coordinating with fabric (M=3.31); and variety of sizes (M=2.97). However, it is important to note that the items listed as having the lowest scoring means for each of these attributes have been rated as being neutral. Therefore, should the retail industry aim to improve clothing attributes that have been rated as poor, it would be imperative to focus on the three attributes that had the highest practical significance (price, correct sizing and fabric). By improving the lowest scoring items within each attribute the clothing quality perception that older female consumers have may possibly improve. If a clothing product line is designed specifically with regard to improvements to the identified problems, the clothing industry could possibly create a whole new market for clothing stores. This new product line would be focussed on older female consumers' needs with regard to the most important, as well as poorly rated clothing attributes. With regard to improving sizing, manufacturers should base their patterns on body proportions of older female body shapes and make adaptations to patterns to accommodate posture changes (shoulders rounding); sagging arms; flattened buttocks; and more angular body contours (Clarke *et al.*, 2009:717). By ensuring the designing of patterns and manufacturing of clothing that has for example, the waistline at the correct level; and provides extra give at the shoulders for changes in posture, the clothing industry will meet the needs of older female

consumers more effectively. This may increase revenue and sales, while benefiting the older female consumers, as their needs will be fulfilled.

#### **4.3 Limitations and recommendations for future research**

Limitations of this study include the focus being on the Tlokwe municipal region, resulting in a smaller sample size, which was not representative of the larger SA population. Therefore, the results obtained could not be generalised. The questionnaire being a self-administered questionnaire may have also resulted in fewer respondents taking part (205 instead of the proposed 300), as the legibility of the questionnaire might have been problematic, resulting in a lower than expected response rate and sample size. The legibility may have been problematic as many of the older participants could read the questionnaire, but might have preferred an even larger font, although this was not an issue during the pre-test. Future research can make use of a larger population in various regions and make use of random sampling to ensure a more comprehensive distribution of respondents to ultimately enable generalisation to all older female SA consumers. As the study focused on female consumers, future research could focus on older male consumers and possibly compare the results with the current study, or choose to include both male and female consumers across the country in order to generalize the findings. In particular Moschis *et al.* (2011) calls for additional research with regard to the segment of older consumers. Although the results cannot be generalized, it did provide valuable recommendations that may be of importance to the retail and manufacturing industry in SA and possibly other developing countries, which may deserve future investigation.

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## CHAPTER 5: RESEARCH ARTICLE

**Title:** Older female consumers' quality perception of clothing during pre- and post-purchase decision-making

**Short title:** Older female consumers' quality perception of clothing

(Article to be submitted to *The International Journal of Consumer Studies*)

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## **Abstract**

This study investigated the quality perception of older female consumers during the pre- and post-purchase phases of decision-making within the disconfirmation paradigm. Evaluative criteria are used by consumers when making clothing purchasing decisions and include intrinsic, extrinsic, performance and physical features. During evaluations of clothing products, certain attributes might be essential in the perceived performance of a product. However, different consumer groups such as the elderly may evaluate these attributes differently as a result of changes relating to their physical well-being and socio-economic circumstances. Older consumers are defined as being vulnerable and female consumers are the principal buyers, and it is therefore important to investigate their clothing needs regarding certain clothing attributes. The aim of this study was to explore and describe the quality perception of older female consumers' during pre- and post-purchase decision-making. A self-administered, structured questionnaire using two Likert-scales was used to collect the data. The final sample of respondents consisted of 202 female consumers over the age of 60, who took part in events hosted by the Service Centre for the Aged in the Tlokwe municipal region. While the expectations of all clothing attributes were rated as being important or very important, the performance of these attributes was rated as being poor or neutral. This indicates a need for improving the quality of clothing for older female consumers.

**Keywords:** Older consumer, quality perception, disconfirmation theory, clothing attributes, decision-making.

## **5.1 Introduction**

Perception is the process of exchanging sensory input and becoming aware of the environment in order to understand it, as well as be congruent with an individuals' frame of reference (Blythe, 2008; Cant *et al.*, 2009). Perception is subjective as it is based on each individual's own experiences (Schiffman & Wisenblit, 2015). Perception is also influenced by post-buying learning. After buying a product, consumers will evaluate the product, thus discovering something about it and then storing this new information in their long-term memory, which prepares them for the next decision-making process with an improved knowledge base (Cant *et al.*, 2009). Perceived quality is defined as the judgment of the product based on a variety of product attributes (Schiffman & Wisenblit, 2015) by combining sensory inputs such as touching (Blythe, 2008).

During pre- and post-purchase evaluations, certain product attributes might be fundamental in the perceived performance of a product and the relative importance of attributes might even

differ amongst consumers (Hoyer & MacInnis, 2007). During the post-purchase evaluation stage, consumers judge a product's performance according to their expectations. According to the disconfirmation paradigm, when expectations exceed performance, negative disconfirmation occurs which leads to negative quality perception or dissatisfaction whereas in the case performance exceeds expectations, positive disconfirmation occurs which lead to positive quality perception or satisfaction (Hawkins *et al.*, 2010; Hoyer & MacInnis, 2007). Consumer expectations are formed due to past experience and/or recommendations from others (Solomon, 2013), which means that attributes evaluated after purchasing clothing (during use), can have an influence on consumers' quality perception during pre-purchase decision-making. Each consumer identifies product attributes that are important when evaluating products during the decision-making process, which may become increasingly difficult with age (Cole *et al.*, 2008), therefore it is essential to investigate older consumers' expectations (in terms of attribute importance), perceived performance and consequent quality perception of clothing attributes. Although research regarding the influence of clothing evaluative criteria on SA consumers' decision making process has been done by Hugo and Van Aardt (2012); research into older SA female consumers' quality perception of clothing attributes is lacking.

Attributes of clothing are criteria that have an influence on consumers' evaluation of clothing, and include care requirements and product composition (Hugo & Van Aardt, 2012) as well as physical and performance features (Brown & Rice, 2001). A study conducted by Swinker and Hines (2006) found that consumers use informational cues (referred to as attributes by Bennur & Jin, 2013) when considering a clothing purchase during the decision-making process. These clothing attributes were divided into four main categories, namely Intrinsic, extrinsic, appearance and performance attributes. Intrinsic attributes include physical features of a product that cannot be changed without modifying the manufactured product, (e.g. sizing or fabric) (Brown & Rice, 2001), whereas extrinsic attributes have features that can be changed without modifying the product (brand and price) (Brown & Rice, 2001; Swinker & Hines, 2006). Appearance attributes are features that affect how the product looks (e.g. colour, fit) and performance attributes affect how the product functions (e.g. ease of care) (Swinker & Hines, 2006). However, in the study conducted by Hugo and Van Aardt (2012) fit, colour, fabric and ease of care were grouped together under intrinsic attributes. Moreover, these studies do not take price or sizing into account, which has been listed as important in a study conducted by MacDonald *et al.* (2009) and therefore this study focused on attributes within the four categories as outlined by Swinker and Hines (2006), which encompasses a variety of attributes, namely sizing and fabric (intrinsic); brand and price (extrinsic); colour and fit (appearance); and ease of care (functional performance).

The population of older consumers in SA has grown considerably during the past ten years (Stats SA, 2012a) and has been classified as an important part of the economy (Chaston, 2011; Cole *et al.*, 2008). Even though other studies defined age by a cognitive state of mind (Birtwistle & Tsim, 2005; Nam *et al.*, 2006) older persons in SA are defined chronologically through the Social Assistance Amendment Act, No. 6 of 2008 (revised again in 2010), stating that all persons over the age of 60 are defined as older persons (Stats SA, 2012a). Thus for the purposes of this study, older consumers are defined by their age and are considered to be consumers who are 60 years and older. Older SA consumers, along with children, youth and women have been classified as vulnerable groups (Stats SA, 2012a). This classification is possibly due to a lack of social support in the elderly community, which leads to isolation. This group is also more prone to experience physical and mental health problems (Stats SA, 2012a; Yeh & Sing, 2004), as studies indicate that the elderly show an incapacity to independently manage chronic diseases or make appropriate health decisions (Levy & Royne, 2009). In addition, older consumers do not have the same amount of financial freedom due to retirement and often experience insecurities (Portacolone, 2013). It is therefore of great importance for older consumers to receive the most value for their money when buying essential items such as clothing. Changes in the body shapes of female consumers that take place over time (Makhanya *et al.*, 2014), as well as female consumers being the principal buyers (De Klerk & Lubbe, 2008) have led to the choice of focusing on female consumers. Recommendations from this study might lead to improved clothing in congruence with the expectations of older female consumers, which in turn might increase their consumer well-being.

## **5.2 Research methodology**

### **5.2.1 Sample**

Non-probability purposive sampling was used to distribute approximately 450 questionnaires through a mediator at the Service Centre for the Aged in the Tlokwe municipal region. A similar technique was used in a study by Nam *et al.* (2006) regarding the fashion-conscious behaviour of mature female consumers and had proved to be successful. Older female consumers were chosen for two main reasons. Firstly, as female consumers age, changes in body shapes occur (Makhanya *et al.*, 2014:183) which may lead to their needs and decision-making varying regarding clothing and important attributes. Secondly, female consumers are seen as principal buyers (De Klerk & Lubbe, 2008:48), meaning that they are primarily responsible for shopping. This is still the case despite emancipation and equal rights of the current environment (Degen, 2010:14).

The Service Centre for the Aged in the Tlokwe municipal region was chosen as the site for respondent selection as recruitment at events hosted by the centre made it convenient and less strenuous for the respondents and the possibility of reaching more respondents who fitted the inclusion criteria was increased. Two hundred and five respondents successfully completed and returned questionnaires (response rate of 45%) while only three questionnaires were unusable and removed, making the total sample size 202 respondents.

### **5.2.2 Measures**

The scales used in the present study were adopted from established measures. The questionnaire was developed using a combination of closed-ended questions adapted from similar studies (Hugo & Van Aardt, 2012; Prinsloo, 2011; Van Staden, 2012) as well as questions formulated after a thorough literature review. The questionnaire consisted of three sections namely, Section A (inclusion criteria), Section B (questions regarding quality perception of clothing attributes), and Section C (demographic information). The inclusion criteria determined that respondents had to be female, 60 years or older, have purchased clothing for themselves in the past year, had to be permanent residents of the Tlokwe municipal region, and participated in activities hosted by the Service Centre for the Aged. The clothing attributes included in the questionnaire were as follows: fit, style, fabric, care of clothing, sizing, colour, price, and construction. The section asked questions regarding the characteristics under each of the attributes, in terms of the respondents' quality perception (of both their expectations and the performance of the clothing item). Demographic information, namely home language, current marital status, approximate amount of money spent per year on clothing, how often clothing is purchased, and method of purchasing clothing (alone or with friends/family) was requested in Section C. The questionnaire was available in English, Afrikaans and Setswana as these are the languages most generally spoken in the area. The original questionnaire was translated into Setswana and back-translated to ensure consistency. Expectations and perceived performance were rated on a five-point Likert-type scale, with importance and performance of each attribute rated separately. During a pre-test of the research instruments, it was found that although most respondents understood the questionnaire it was too long and needed to be made shorter.

The validity of the questionnaire was investigated by making use of construct, face and content validity methods. Reliability was investigated by calculating Cronbach's alpha coefficients. Exploratory factor analysis was done to facilitate validity in terms of external and construct validity (Field, 2013). The Principal Component Analysis (PCA) Factoring method was used for extraction of factors, after which items were designated into different factors using the Direct

Oblimin with Kaiser Normalization as rotation method (Field, 2013:674). All Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) values for the factor analysis done in this study were higher than the suggested minimum of  $KMO \geq 0.5$ . Therefore, construct validity was present. Face and content validity were guaranteed by a panel of experts in the field of Consumer Sciences, as well as the Statistical Consultation Services of the North-West University, since they inspected the questionnaire and analysed the contribution of each construct in the questionnaire (Delpont & Roestenburg, 2011). Furthermore, validity was improved by pre-testing the questionnaire with five respondents who fitted the inclusion criteria, in order to ensure that respondents interpreted the questions correctly and eliminated any uncertainties that might have arisen.

### 5.3 Results and discussion

#### 5.3.1 Demographic characteristics of the sample

The demographic profiles of the respondents are summarized in Table 5-1. As the inclusion criteria stipulated a certain age (above 60) and gender (female), all the respondents conformed to those criteria. The average age of respondents was calculated to be 72 years of age. Annual spending on clothing (the majority indicating spending less than R1000) and frequency of shopping (the majority indicating 1-4 times per year) could be as a result of their being on pension or receiving social grants. This reflects research stating that some older consumers do not have much financial freedom due to retirement (Portacolone, 2013) and therefore will want to save their money. It could also be as a result of increased difficulty concerning mobility, making it difficult to visit shops. However, when they do visit shops, the majority of respondents indicated that they purchased clothing by themselves (86.6%) perhaps as a result of the elderly receiving a lack of social support from family or friends (Stats SA, 2012a; Yeh & Sing, 2004) and therefore might feel that they have no choice but to go shopping alone.

**Table 5-1: Respondents' expectations, as well as performance ratings regarding clothing attributes (n=202).**

Variables	Total group frequency	Percentage (%)
Language		
Afrikaans	179	88.6
English	22	10.9
Sepedi	1	0.5
Marital status		
Widowed	116	57.4
Married	70	34.7
Divorced / separated	13	6.4

Never married	2	1.0
Living together	1	0.5
Type of housing		
Own house / apartment	116	57.4
Retirement home	35	17.3
Sharing yard or house with family/friends	35	17.3
Rented house / apartment	16	7.9
Approximate spending on clothing per year		
Less than R1000	80	39.6
R1000 – R2000	54	26.7
R2001 – R3000	45	22.3
R3001 – R4000	12	5.9
R4001 – R5000	11	5.4
Number of clothing purchases per year		
1 – 4 times	147	72.8
5 – 8 times	47	23.3
More than 12 times	5	2.5
9 – 12 times	3	1.5
Method of shopping for clothing		
Alone	175	86.6
With the help of family/friends	27	13.4

### 5.3.2 Expectations regarding clothing attributes

The respondents were asked to rate their expectations concerning the clothing attributes of a clothing item they had purchased within the past year, based on a 5-point Likert-type scale (Table 5-2). The indicators of importance were interpreted as means (averages) with five being very important and one, unimportant. The results of attribute expectations are also listed in Table 5-2. From the results obtained it is clear that respondents' expectations were high regarding all the attributes. Construction, price, and care of clothing yielded mean values of  $M \geq 4.5$  indicating that respondents rated these attributes as being very important. Should a clothing item be constructed poorly, that item would be less durable (Laitala *et al.*, 2015) and therefore be of poor quality, thus construction expectation is of high importance. Whereas price being very important may be as a result of some older consumers often experiencing a lack of financial stability (Portacolone, 2013) reiterating the importance of being able to properly care for clothing in order to ensure it lasting longer (care of clothing attribute). The other attributes, namely fit, style, fabric, sizing and colour, yielded values of  $M \geq 4$  indicating that respondents rated the attributes as being important. However, as a result of sizing yielding a KMO value of  $KMO=0.500$  and  $\alpha=0.098$  for reliability, it could not yield a distinct and reliable factor (Field, 2013). Therefore, each item within sizing was analysed as a separate factor with correct sizing ( $M=4.49$ ), and variety of sizes ( $M=4.22$ ) producing individual mean values. However, the

individual mean values produced concerning sizing still indicate respondents rated these items as important.

### **5.3.3 Performance of clothing attributes**

The respondents were asked to rate the perceived performance of the clothing attributes of a clothing item they had purchased within the past year, based on a 5-point Likert-type scale (Table 5-2). The indicators of performance were interpreted as means where five was excellent and one was unacceptable. The performance of care of clothing was the only attribute that respondents rated as good ( $M=3.58$ ). The reason for this could be that older female consumers have the experience required to properly care for clothing items, which is necessary as reading and understanding care labels can lead to a prolonged lifespan of apparel (Van der Merwe *et al.*, 2014). The clothing may possibly be easy to care for and the manufacturers might also successfully communicate care instructions on clothing labels. The attributes of colour, style, fabric, construction and sizing all yielded mean values of  $M \geq 2.5 < 3.5$  indicating respondents rated the performance of these attributes as neutral. Although sizing received a neutral rating, it is important to note that the lowest scoring performance mean was found within this attribute. The item of 'correct sizing' received a poor rating ( $M=2.45$ ), indicating that although respondents might have been indecisive about the performance of the abovementioned attributes, there are opportunities for improving clothing attributes.

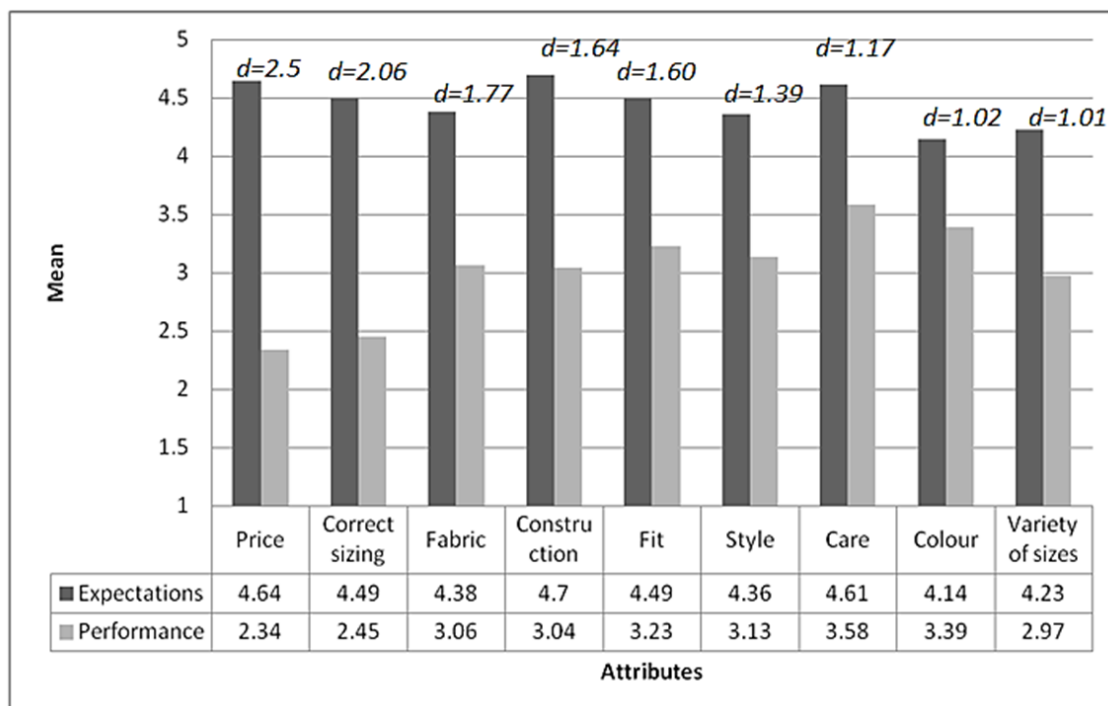
**Table 5-2: Mean differences in respondents' expectations and performance judgement of clothing attributes, as well as the items pertaining to each attribute (n=202).**

<i>Attribute</i>	<i>Expectation</i>		<i>Performance</i>	
	<b>Mean</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>
<b>Construction</b>	<b>4.70</b>	<b>0.584</b>	<b>3.04</b>	<b>1.014</b>
Neat stitching	4.75	.547	3.03	1.009
Strong seams	4.69	.717	2.91	1.177
Buttons fit buttonholes	4.66	.730	3.16	1.174
<b>Price</b>	<b>4.64</b>	<b>0.921</b>	<b>2.34</b>	<b>0.733</b>
Affordable	4.67	.539	2.34	1.040
Value for money	4.62	.570	2.31	1.105
<b>Care of clothing</b>	<b>4.61</b>	<b>0.623</b>	<b>3.58</b>	<b>0.883</b>
Easy to clean	4.75	.670	3.82	.870
Keeps its shape	4.70	.624	3.49	1.107
Colourfast (keeps its colour)	4.68	.725	3.50	1.143
Easy to iron	4.32	1.180	3.52	1.094
<b>Fit</b>	<b>4.49</b>	<b>0.632</b>	<b>2.23</b>	<b>0.791</b>
Overall fit	4.68	.661	3.28	0.911
Waistline at the correct level	4.60	.656	2.96	.997
Correct fit at the neck	4.46	.888	3.29	.903
Correct fit at the armhole	4.45	.930	3.26	1.066
Sleeves fit correctly	4.39	.772	3.31	1.054
Shoulder lines match shoulders	4.38	.966	3.28	.969
<b>Fabric</b>	<b>4.38</b>	<b>0.630</b>	<b>3.06</b>	<b>0.742</b>
Not prone to cause fuzz balls (pilling)	4.58	.709	2.85	1.056
Not prone to wrinkle	4.46	.898	2.95	.926
Long-lasting	4.42	.796	2.99	.992
Gentle on skin	4.37	.922	3.33	.979
Absorbs moisture	4.06	1.093	3.15	.887
<b>Sizing</b>	<b>**</b>	<b>**</b>	<b>2.71</b>	<b>0.956</b>
Correct sizing	4.49	.741	2.45	.982
Variety of sizes	4.22	.975	2.96	1.251
<b>Style</b>	<b>4.36</b>	<b>0.630</b>	<b>3.13</b>	<b>0.883</b>
Appropriate for age	4.55	.646	2.95	1.105
Appropriate for lifestyle	4.37	.928	3.04	1.043
Style is adaptable	4.16	.889	3.39	1.075
<b>Colour</b>	<b>4.14</b>	<b>0.677</b>	<b>3.39</b>	<b>0.456</b>
Colour suits age	4.46	.993	3.36	1.008
Colour complements appearance	4.44	.851	3.52	.768
Colour is trendy	3.35	1.371	3.39	1.074
Colour of trims coordinate with fabric	4.32	.842	3.31	1.049

#### **5.3.4 Older female consumers' quality perception of clothing attributes**

A gap analysis was performed to determine consumers' quality perception based on a comparison of expectations versus performance within the expectancy confirmation paradigm (Figure 5-1). There was a statistically significant difference obtained for each of the attributes

( $p=0.000$ ). The effect size of every attribute comparison was large ( $d>0.8$ ) and therefore of practical significance. Expectations of price ( $p=0.000$ ;  $d=2.50$ ), fabric ( $p=0.000$ ;  $d=1.77$ ), construction ( $p=0.000$ ;  $d=1.64$ ), fit ( $p=0.000$ ;  $d=1.60$ ), style ( $p=0.000$ ;  $d=1.39$ ), care ( $p=0.000$ ;  $d=1.17$ ), and colour ( $p=0.000$ ;  $d=1.02$ ) were significantly higher than the perceived performance thereof. Therefore, it can be deduced that the respondents had a negative quality perception concerning these clothing attributes. As these respondents were all older, a process of learning had taken place over long periods of time. Expectations change over time as a result of numerous factors, such as age (Solomon, 2013). For example, as older female consumers age, changes in body shape may take place (Makhanya *et al.*, 2014) such as: posture changes (shoulders begin to round); changes in position of fat, sagging arms, buttocks flatten; and body contour becomes more angular (Clarke *et al.*, 2009:717). These changes in perception and needs can also be as a result of large amounts of clothing imports from China taking place (Ronan, 2015:1), with clothing based on Asian key body dimensions, with body shapes of the SA (Caucasian, African and Indian) population differing vastly (Yates *et al.*, 2004:301). Thus, the perception of certain clothing attributes may have been good initially, but now the clothing might not meet these expectations anymore, causing consumer displeasure. The respondents indicated that the performance of most of the attributes was below expectations (by taking the gap analysis into account) and therefore it is necessary for the clothing industry to improve these attributes for older female consumers.



**Figure 5-1:** Gap analysis of respondents' expectations and the perceived performance of clothing attributes

### 5.3.5 Associations between demographic characteristics and attribute variables (expectations and perceived performance)

An independent-samples t-test was conducted to compare respondents' home language, current marital status, and manner in which shopping occurred with their expectations and the perceived performance of clothing attributes. No statistical as well as practically significant differences in mean values were found regarding any of these attributes. Therefore, these aspects do not have an influence on older female consumers' quality perception regarding certain clothing attributes.

A one-way between subjects ANOVA was conducted to compare respondents' expectations and the perceived performance of clothing attributes with purchasing intervals, type of housing and the amount of money spent on clothing annually, respectively. Statistically and practically significant differences in values were obtained for a number of attributes regarding the ANOVA analysis for purchasing intervals. Large as well as medium effect sizes were obtained for multiple attributes when comparing purchasing intervals one, two, and four with the attributes. Through these results (Table 5-3) it can be suggested that respondents who purchased clothing more often (purchasing intervals 2 and 4), had a tendency to indicate that these attributes performed more positively as opposed to respondents who purchased clothing less often (1-4 times per year). This could be as a result of purchasing clothing at more frequent intervals, leading to newer clothing replacing the old as the storage of clothing, how often they are laundered, and how much they are used, affects their life-time (Laitala *et al.*, 2015). This might lead to consumers perceiving the performance of clothing as being better than those who have to use their clothing for longer periods of time.

**Table 5-3: One-way ANOVA analysis: Mean differences in respondents' expectations and performance judgement of clothing attributes based on their purchasing intervals per annum (n=202).**

Attribute	Interval 1 (1-4 times)		Interval 2 (5-8 times)		Interval 4 (>12 times)		MSE	p-value ANOVA
	Mean	SD	Mean	SD	Mean	SD		
Colour performance	3.29 <sup>a</sup>	0.751	3.67 <sup>b</sup>	0.621	3.75 <sup>c</sup>	0.482	3.16	0.002
Construction expectation	4.68 <sup>ab</sup>	0.630	4.87 <sup>a</sup>	0.284	4.08 <sup>b</sup>	0.584	2.19	0.001
Fabric expectation	4.42 <sup>a</sup>	0.630	4.41 <sup>ab</sup>	0.500	3.55 <sup>c</sup>	0.805	2.89	0.001
Care performance	3.42 <sup>a</sup>	0.804	3.93 <sup>bc</sup>	0.994	4.38 <sup>c</sup>	0.612	7.26	0.000
Construction performance	2.86 <sup>a</sup>	1.009	3.43 <sup>b</sup>	0.895	4.04 <sup>c</sup>	0.452	10.01	0.000

SD = Standard deviation

MSE= Mean square error of ANOVA

Statistically significant difference:  $p \leq 0.05$

a,b,c Means with different superscripts differed statistically significantly with medium and large effect size only

The amount of money spent annually on clothing was compared to respondents' expectations, by focusing on spending interval 1 (less than R1000), 2 (R1000-R2000), 3 (R2001-R3000), and 5 (R4001-R5000). The statistically and practically significant difference in the values obtained for the attributes can be seen in Table 5-4. Thus, it can be concluded that respondents who spent larger amounts of money on clothing per year had a tendency to rate fabric as well as care of clothing performance lower than those who spent less money. The reason for these results could be that respondents who spent less on clothing were perhaps more inclined to take better care of the clothing (according to the label) as they may not be able to afford damaging the clothing.

**Table 5-4: One-way ANOVA analysis: Mean differences in respondents' expectations and performance judgement of clothing attributes based on amount of money spent on clothing per year (n=202).**

Attribute	Interval 1		Interval 2		Interval 3		Interval 5		MSE	P-value ANOVA
	Mean	SD	Mean	SD	Mean	SD	Mean	SD		
Fabric performance	3.14 <sup>a</sup>	0.798	3.03 <sup>a</sup>	0.604	3.12 <sup>a</sup>	0.834	2.67 <sup>b</sup>	0.513	0.46	0.035
Construction expectation	4.55	0.699	4.75	0.434	4.81	0.588	4.88	0.257	0.50	0.023
Care expectation	4.52	0.606	4.71	0.336	4.48	0.924	4.81	0.315	1.63	0.023
Care performance	3.72 <sup>a</sup>	0.999	3.65 <sup>a</sup>	0.816	3.47 <sup>a</sup>	0.781	3.11 <sup>b</sup>	0.599	1.38	0.018

SD = Standard deviation

MSE= Mean square error of ANOVA

Statistical significant difference:  $p \leq 0.05$

a,b Means with different superscripts differed statistically significantly with medium effect size only

### 5.3.6 Clothing quality in general

Respondents were also asked to indicate their opinion regarding clothing quality in general. The following was found: 45% of respondents indicated neutral, 38.6% good, and 9.9% poor, while only 5% and unacceptable (1.5%). The mean for general clothing quality yielded a value of

$M=3.36$  indicating that the respondents had a neutral opinion. This corresponds with the average values obtained for the performance of the individual attributes ( $M=2.50-3.50$ ), except for care performance. Thus, the general opinion regarding clothing quality supports earlier findings of these attributes, and this emphasizes the fact that there is room for improving clothing attributes.

#### **5.4 Recommendations to the SA clothing industry**

The attribute indicating statistical significance with the largest effect size is the attribute of price ( $p=0.000$ ;  $d=2.50$ ). In addition, the attribute of price yielded the two lowest scoring mean performance values, namely affordability ( $M=2.34$ ) and value for money ( $M=2.31$ ), and have therefore been rated as poor. It is therefore evident that price is the biggest concern to older female consumers. If the retail industry could develop a clothing line specifically with value for money in mind, it may better satisfy consumer needs. This can be done by using more durable fabrics when manufacturing clothing. Durable fabrics will last longer thereby increasing the value of the clothing item.

Following price, sizing and fabric were also rated as problematic. Regarding correct sizing ( $M=2.45$ ), improvements can be made by developing a standardized labelling system. This will result in all retail stores in SA following the same labelling system, thus minimizing the need for older female consumers to try on various sizes to ensure a correct fit. As a result of not needing to adhere to sizing guidelines, clothing manufacturers have allowed for vanity sizing to take place (altering measurement specifications enabling consumers to fit into smaller sizes), which leads to significant sizing variations between retailers (Kinley, 2003:21). A standardised labelling system may prevent vanity sizing from taking place. Regarding fabric, improvements can be made by developing clothing products that are not prone to cause surface fuzz ( $M=2.85$ ), as this was the lowest scoring item.

Although recommendations have been made in order to improve the three attributes listed as having the greatest practical significance, it is important to note that the other attributes could also be improved. The lowest scoring means for each of the other attributes are as follows: construction - strong seams ( $M=2.91$ ); fit – the waistline ( $M=2.96$ ); style – appropriate for age ( $M=2.96$ ); care of clothing – holds shape ( $M=3.49$ ); colour - trims coordinating with fabric ( $M=3.31$ ); and variety of sizes ( $M=2.97$ ). These individual items may possibly be easy to improve, such as: incorporating stronger seams during clothing construction; designing bottom garments with higher waistlines; ensuring that the style is suitable for older consumers; making use of fabric that is able to hold its shape; that trims (such as buttons or zippers) coordinate with

the fabric; and that a variety of sizes are available. However, the items listed as having the lowest scoring means for each of the other attributes have been rated as being neutral. Therefore, should the retail industry aim to improve clothing attributes that have been rated as poor, it would be imperative to focus on the three attributes that had the highest practical significance (price, fabric and sizing). By improving the lowest scoring items within each attribute the clothing quality perception that older female consumers have may possibly improve. If a new clothing product line is designed specifically with regard to improvements to the identified problems, the clothing industry could possibly create a whole new market for clothing stores. This new product line would be focussed on older female consumers' needs with regard to the most important, as well as poorly rated clothing attributes. With regard to improving sizing, manufacturers should base their patterns on body proportions of older female body shapes and make adaptations to patterns to accommodate posture changes (shoulders rounding); sagging arms; flattened buttocks; and more angular body contours (Clarke *et al.*, 2009:717). By ensuring the designing of patterns and manufacturing of clothing that has for example, the waistline at the correct level; and provides extra give at the shoulders for changes in posture, the clothing industry will meet the needs of older female consumers more effectively. This may increase revenue and sales, while benefiting the older female consumers, as their needs will be fulfilled.

## **5.5 Conclusion**

The expectations regarding clothing attributes were high for all the attributes and their individual items in contrast to the performance rating of each. Therefore it can be concluded that the respondents were dissatisfied with the quality of their clothing. When expectations are not met, consumers' needs are often not satisfied, which impacts negatively on their consumer well-being. Thus, the retail and clothing manufacturing industry could identify the gap in the market to develop and improve clothing specifically for older female consumers. The improvement of the individual items of the attributes, more specifically the lowest scoring performance items (price, correct sizing and fabric), could satisfy the needs of these consumers. Satisfying the needs of these consumers could lead to the improvement of their well-being and possibly create a new stream of income to the clothing industry, as consumers who are satisfied will re-purchase.

Limitations of this study included the focus being on the Tlokwe municipal region, resulting in a smaller sample size, which was not representative of the larger SA population. Therefore, the results obtained could not be generalised. The legibility may have been problematic as many of the older participants could read the questionnaire, but might have preferred an even larger

font, although this was not an issue during the pre-test. The questionnaire being a self-administered questionnaire may have also resulted in fewer respondents taking part (response rate of 45%), as the legibility of the questionnaire might have been problematic, resulting in a lower than expected response rate and sample size. Future research can therefore make use of a larger population in various regions of SA and make use of random sampling to ensure a more comprehensive distribution of respondents in order to generalize the study to all older female consumers. As the study focused on female consumers, future research could focus on older male consumers and possibly compare the results with the current study, or choose to include both male and female consumers across the country in order to generalize the findings. In particular Moschis *et al.* (2011) calls for additional research concerning the entire segment of older consumers. Although the results could not be generalized, it did provide valuable recommendations that may be of value to the retail and manufacturing industries in SA and possibly other developing countries, which may deserve future investigation.

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## **CHAPTER 6: CONCLUDING CHAPTER**

### **6.1 Introduction**

This chapter serves as a conclusion for the complete research project. The implications of the research regarding older female consumers and the clothing industry are also discussed. Certain limitations regarding the methods follow and finally, recommendations for future research are made.

### **6.2 Conclusion**

During the decision-making process consumers identify a need, and progress through multiple stages to fulfil it. Prior to and during these stages, consumers build expectations regarding the product they intend to purchase. These expectations can be influenced by multiple factors, such as demographic characteristics and previous experience and changes over time. Older female consumers' needs are therefore different to other consumers' needs in terms of clothing attributes such as fit (waistline at the correct level), style (appropriate for age), colour (trims need to coordinate with fabric) etc. After purchase and usage of the product, consumers are able to evaluate the products' performance in order to determine whether their needs have been completely satisfied, which in turn will influence future expectations. The current study aimed to explore and describe older female consumers' expectations, as well as the perceived performance of certain clothing attributes related to clothing quality perception.

During pre- and post-purchase decision-making, the results indicated that respondents rated all the clothing attributes (construction, price, care of clothing, fit, fabric, sizing, style and colour) as being important or very important. The attributes yielding the highest values (indicating that they are the most important to older female consumers) were: construction, price and care of clothing. However, all the attributes being of importance to the respondents solidified the need to also explore the perceived performance thereof.

In order to determine the perceived performance of clothing attributes (objective 2), respondents rated the performance of the clothing attributes on a 5-point Likert-type scale. Findings indicated that respondents regarded the attributes as poor or neutral, with the exception of care of clothing (good). Although sizing received a neutral rating, the lowest scoring performance value was obtained within this attribute (correct sizing). Therefore, it can be concluded that although the respondents' expectations were high, the performance of the attributes was unsatisfactory and negative disconfirmation occurred.

The final objective was addressed by a comparison of means in order for a gap-analysis (expectations versus performance) to be completed. The gap-analysis findings were used to provide the clothing industry with recommendations to improve clothing attributes for older female consumers. Results from the gap analysis revealed that respondents' expectations were higher than the perceived performance of attributes, indicating a negative quality perception in general. Although respondents rated the perceived performance of the attributes as poor or neutral, individual items within each attribute indicated aspects that are the most necessary to improve. In conclusion, the study provided insights into older female consumers' quality perception of clothing, and identified attributes that can be improved.

### **6.3 Practical implications of the study**

#### **6.3.1 Implications for older female consumers**

Older female consumers' expectations of clothing attributes, as well as the perceived performance thereof, were determined in order to explore their quality perception regarding certain clothing attributes. Negative quality perception can have a negative impact on consumer satisfaction and well-being. Attributes that were found to be contributing to the negative quality perception of older female consumers within the study could be identified. Three attributes indicating the largest effect sizes and thus the largest areas of concern were price, sizing and fabric. With regard to price, the clothing industry could develop an affordable clothing line specifically for older female consumers, while ensuring that correct sizing is prevalent by developing a standardized labelling system. The lowest scoring mean for fabric was concerning surface fuzz (pilling) and can be addressed by making use of materials that are not prone to cause pilling. Although these three attributes were the most problematic for respondents, it is important to note that improvements to the other attributes (construction, fit, style, care, colour and variety of sizes) can also be beneficial to older female consumers. If improvements to clothing attributes were to be made by the clothing industry, older female consumers' needs could possibly be fulfilled, thus increasing their satisfaction. By increasing consumer satisfaction, consumer well-being can ultimately be improved.

#### **6.3.2 Implications for the clothing industry**

The SA clothing manufacturers could make use of the findings and recommendations provided in order to improve clothing specifically for the older female consumer market which could give them a competitive advantage over imports (that can only offer foreign sizing). In addition to improving these clothing attributes, the SA clothing industry and retailers could design, develop and produce a new clothing line exclusively for older female consumers. The development of

this line could attract older consumers thereby expanding retailers' customer pool, especially considering the increasing life expectancy and subsequently larger group of older consumers in SA.

### **6.3.3 Implications for future research**

Future research projects can be conducted in order to expand the results of the current study where, for example more in-depth and qualitative approaches could be followed to gain a deeper understanding of older female consumers' quality perception of clothing attributes. Future research could also build upon the number of attributes included in the study to include a larger number of clothing attributes such as brand, country of origin and psychological attributes (makes consumer feel: more comfortable, more fashionable, more accepted and more successful) . This will provide a more in-depth perspective into the quality perception of clothing attributes, in order to improve upon them. Because no scientific literature could be located, locally or internationally, pertaining to older female consumers' quality perception of clothing attributes, the results of the current study could be used as a basis for research projects globally.

## **6.4 Limitations and recommendations**

### **6.4.1 Sample**

The sample size of the study consisted of 202 respondents, while the recommended sample size was 300. Despite the high level of effort to obtain more completed questionnaires, it was not possible due to time constraints. The ethics application took approximately 6 months to be approved due to an audit taking place, as well as redesigning of the application process (which was in transition). Also, as a result of non-probability sampling, the results are not representative of the larger population. Future research could make use of random-sampling to obtain a more diverse study sample. While making use of more locations within the Tlokwe municipal region, possibly allowing the results to be generalized within the region. Moreover, respondents were recruited from only one municipal region in SA. It could therefore be recommended that a replication of the study be conducted in the other municipal regions, or even in other provinces in SA providing a representative study population of older consumers within the country. These results can then also be compared in order to produce interesting and relevant results based on geographic comparisons. The current study sample was aimed at older female consumers as they have been classified as vulnerable consumers possibly due to a lack of social support and being more prone to experience physical and mental health problems. Future research could focus on older male consumers in order to determine whether

their quality perception differs from the current study findings. By including male participants, findings may possibly allow for more similarities to be exposed, which can be attributed thus to age and not only gender.

#### **6.4.2 Time limitations**

In addition to the sample size of the research project, time was also a limiting factor that restricted the researcher. As a result of the time limitations, the researcher could not continue for a longer period of time with the data-collection procedure of the study in order to obtain a larger number of completed questionnaires. Furthermore, a larger number of completed questionnaires could be obtained by making use of interviewer-administered questionnaires as legibility of the questionnaires might have been a limiting factor. Therefore, it is recommended that future research should make provision and plan for longer data-collection periods, as well as making use of interviewer-administered questionnaires should the time-frame allow it.

#### **6.4.3 Exploratory nature of current research**

The results obtained cannot be generalized as a result of the exploratory nature of the study, as well as the sampling method (purposive sampling). The results are therefore not applicable to the older female consumer population of the whole of SA. However, the results obtained from the current study may be helpful as a basis for future research regarding older consumers' quality perception of clothing. Future research could follow a qualitative design in order to obtain in-depth findings.

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**ANNEXURE A:  
INFORMATION LEAFLET AND CONSENT FORM**

**HREC Stamp**

## **PARTICIPANT INFORMATION LEAFLET AND CONSENT FORM FOR OLDER FEMALE CONSUMERS PARTICIPATING IN THE STUDY OF QUALITY PERCEPTION REGARDING CLOTHING PROPERTIES.**

**TITLE OF THE RESEARCH PROJECT:** Older female consumers' quality perception of clothing during pre- and post-purchase decision-making.

**REFERENCE NUMBER:** NWU – 00026 – 15 – A1

**PRINCIPAL INVESTIGATOR:** Danielle Carmen Coelho

**ADDRESS:** Hoffman Street, NWU-Potchefstroom Campus, Potchefstroom, 2531.

**CONTACT NUMBER:** 082 839 3410

You are being invited to take part in a research project that forms part of Consumer Sciences, which falls under the Faculty of Health Sciences of the North-West University Potchefstroom. Please read the information given, it explains the details of this project. Please ask the researcher any questions about any part of this project that you do not fully understand. It is very important that you are fully satisfied that you clearly understand what this research is about and how you could be involved. Also, your participation is **entirely up to you** and you are free to decline taking part. If you say no, this will not affect you negatively in any way. You are also free to stop and withdraw from the study at any point, even if you do agree to take part.

This study has been approved by the **Health Research Ethics Committee of the Faculty of Health Sciences of the North-West University (NWU – 00026 – 15 – A1)** and will follow the ethical guidelines and principles of the international Declaration of Helsinki and the ethical guidelines of the National Health Research Ethics Council. It might be necessary for the research ethics committee members or relevant authorities to inspect the research records.

### **What is this research study all about?**

- *This study will be conducted in Potchefstroom, at events hosted by The Service Centre for the Aged and will need you to fill out a questionnaire on your own time and in the comfort of your own home. 300 people will take part in this study.*
- *The researcher would like to obtain information regarding the following from the study:*

To be able to describe what older females' expect regarding clothing properties when buying clothing.

To describe older females' perception of how these clothing properties perform after buying clothing.

To be able to make recommendations to the clothing industry to improve clothing for older female consumers.

### **Why have you been asked to take part?**

- *Because you are a female consumer, above the age of 60, permanently living in Potchefstroom.*
- *You have bought clothing for yourself within the past year.*
- *You cannot take part if: You are a male, are not above the age of 60, do not permanently reside in Potchefstroom, or have not bought clothing for yourself in the past year.*

### **What is expected of you?**

- *To fill out a questionnaire, at a time that best suits you. It will take about 15-20 min to finish, after which you will return the questionnaire to the person who gave it to you.*

### **Will you benefit from taking part?**

- **This research will give older female consumers of Potchefstroom a chance to voice their clothing needs.**
- **The study is done in order to make recommendations to the clothing industry to improve clothing for older female consumers. This will enable the clothing industry to provide clothes that meet your needs.**

### **Are there risks involved in your taking part?**

- **You might experience boredom by completing the questionnaire, but:**
- **the benefits outweigh the risk**

**What will happen if you have some form of discomfort because you took part in the study?**

- *If you have the need to talk to someone after filling out the questionnaire, you can contact the researcher or mediator, who might refer you to someone who is trained to help you.*

**Who will have access to the information?**

- *No personal details will be on the questionnaire and no personal information will be revealed. Reporting of findings will be anonymous. Only the researcher will have access to the information and it will be kept safe and secure by locking hard copies in locked cupboards in the building of Consumer Sciences of the NWU and any electronic data will be password protected. It will be stored for 5 years.*

**Will you be paid to take part in this study and are there any costs involved?**

No, you will not be paid to take part in the study. There are no costs involved for you, if you do take part.

**Is there anything else that you should know or do?**

- You can contact Danielle Coelho at 0828393410 if you have any further queries or encounter any problems.
- You can contact the Health Research Ethics Committee via Mrs Carolien van Zyl at 018 299 2089; carolien.vanzyl@nwu.ac.za if you have any concerns or complaints that have not been covered by the researcher.
- You will receive a copy of this information and consent form for your own records.

**How will you know about the findings?**

- The findings will be shared with you by means of a follow-up session. If you wish to receive feedback you will be asked to give your contact number. After the research is completed the researcher will advertise information feedback sessions by means of posters – it will contain the time, date and venue of the session. If, for any reason, you would need the findings earlier, you are welcome to contact us.

**Declaration by participant**

By signing below, I ..... agree to take part in the study with the title: Older female consumers' quality perception of clothing during pre- and post-purchase decision-making.

I declare that:

- I have read this information and consent form and it is written in a language that I understand.
- I have had a chance to ask questions to the researcher and all my questions have been answered.
- I understand that taking part in this study is up to me and I have not been forced to take part.

- I may choose to leave the study at any time and will not be punished in any way.
- I may be asked to leave the study before it has finished, if the researcher feels it is in my best interests.

Signed at (*place*) ..... on (*date*) ..... 20....

.....  
**Signature of participant**

.....  
**Signature of witness**

**Declaration by person obtaining consent**

I (*name*) ..... declare that:

- I explained the information in this document to .....
- I encouraged him/her to ask questions and took adequate time to answer them.
- I am satisfied that he/she adequately understands all aspects of the research, as discussed above
- I did/did not use an interpreter.

Signed at (*place*) ..... on (*date*) ..... 20....

.....  
**Signature of person obtaining consent**

.....  
**Signature of witness**

**Declaration by researcher**

I (*name*) ..... declare that:

- I explained the information in this document to .....
- I encouraged him/her to ask questions and took adequate time to answer them.
- I am satisfied that he/she adequately understands all aspects of the research, as discussed above
- I did/did not use an interpreter.

Signed at (*place*) ..... on (*date*) ..... 20....

.....  
**Signature of researcher**

.....  
**Signature of witness**

**ANNEXURE B:  
QUESTIONNAIRE**

## **Questionnaire for older female consumers to explore their quality perception of clothing**

### **Instructions:**

- Please read the instructions listed under every section and/or question and complete the questionnaire.
- The questionnaire can be completed in the comfort of your own home.
- Should you have any questions, you can call the researcher (Danielle Coelho) at 082 839 3410, or the project leader (Eloïse Botha) at 018 299 2470.
- Please complete all sections of the questionnaire and return it to the person who gave it to you.

### **Section A**

1. Please mark the applicable box with an X:

<b>Gender</b>	
Female	1
Male	2

2. Date of birth (year/month/day):

	/		/	
--	---	--	---	--

3. Have you gone to a store and purchased clothing for yourself within the past year?

Yes	1
No	2

4. Are you a permanent resident of the Tlokwe municipal area?

Yes	1
No	2

## Section B

Think back to when you bought clothing during the past year. The following questions are about when you shop for, buy, wear or wash clothing. Please rate what you **expected** AND the **actual performance** of the clothing items. Please mark each question in the applicable box with an X according to the scales at the top of the tables. Please ensure that you complete all questions on both sides of the thick black line (this means you will have two X's in one row – one on each side of the thick black line). First ask yourself what you expected from the clothing item and then rate what you experienced in reality.

	Concerning your <u>expectations</u> of clothing in general, how important are the following attributes:					Concerning your general experience with clothing, how would you rate the <u>performance</u> of the following attributes:				
	Not important	Slightly important	Not sure	Important	Very important	Unacceptable	Poor	Neutral	Good	Excellent
<b>A. Fit</b>										
1. Overall fit	1	2	3	4	5	1	2	3	4	5
2. Waistline is at the correct level	1	2	3	4	5	1	2	3	4	5
3. Sleeves fit correctly	1	2	3	4	5	1	2	3	4	5
4. Shoulder lines match shoulders	1	2	3	4	5	1	2	3	4	5
5. Correct fit at the neck	1	2	3	4	5	1	2	3	4	5
6. Correct fit at the armhole	1	2	3	4	5	1	2	3	4	5
<b>B. Style</b>										
7. Style is adaptable	1	2	3	4	5	1	2	3	4	5
8. Appropriate for lifestyle	1	2	3	4	5	1	2	3	4	5
9. Appropriate for age	1	2	3	4	5	1	2	3	4	5

	Concerning your <u>expectations</u> of clothing in general, how important are the following attributes:					Concerning your general experience with clothing, how would you rate the <u>performance</u> of the following attributes:				
	Not important	Slightly important	Not sure	Important	Very important	Unacceptable	Poor	Neutral	Good	Excellent
<b>C. Fabric</b>										
10. Absorbs moisture	1	2	3	4	5	1	2	3	4	5
11. Long-lasting	1	2	3	4	5	1	2	3	4	5
12. Gentle on the skin	1	2	3	4	5	1	2	3	4	5
13. Not prone to wrinkles	1	2	3	4	5	1	2	3	4	5
14. Not prone to cause fuzz balls (pilling)	1	2	3	4	5	1	2	3	4	5
<b>D. Care of clothing (clean, dry, iron)</b>										
15. Easy to clean	1	2	3	4	5	1	2	3	4	5
16. Easy to iron	1	2	3	4	5	1	2	3	4	5
17. Keeps its shape	1	2	3	4	5	1	2	3	4	5
18. Colourfast (keeps its colour)	1	2	3	4	5	1	2	3	4	5
<b>E. Sizing</b>										
19. Correct sizing	1	2	3	4	5	1	2	3	4	5
20. Variety of sizes	1	2	3	4	5	1	2	3	4	5
<b>F. Colour</b>										
21. Colour is trendy	1	2	3	4	5	1	2	3	4	5
22. Colour suits age	1	2	3	4	5	1	2	3	4	5
23. Colour complements appearance	1	2	3	4	5	1	2	3	4	5

	Concerning your <u>expectations</u> of clothing in general, how important are the following attributes:					Concerning your general experience with clothing, how would you rate the <u>performance</u> of the following attributes:				
	Not important	Slightly important	Not sure	Important	Very important	Unacceptable	Poor	Neutral	Good	Excellent
24. Colour of trims (e.g. buttons, zippers) coordinate with fabric	1	2	3	4	5	1	2	3	4	5
<b>G. Price</b>										
25. Affordable	1	2	3	4	5	1	2	3	4	5
26. Value for money	1	2	3	4	5	1	2	3	4	5
<b>H. Construction</b>										
27. Neat stitching	1	2	3	4	5	1	2	3	4	5
28. Strong seams	1	2	3	4	5	1	2	3	4	5
29. Buttons fit buttonholes	1	2	3	4	5	1	2	3	4	5

30. Please give your opinion of the quality of clothing in general (Mark only one of the boxes with an X).

Unacceptable	Poor	Neutral	Good	Excellent
1	2	3	4	5

**Section C**  
**Demographic information**

The following questions are about you, and will only be used for statistics. Please mark the appropriate box with an X.

<b>6.4.4 31. HOME LANGUAGE</b>			
English	1	IsiNdebele	7
Afrikaans	2	Sepedi	8
Setswana	3	Tshivenda	9
Sesotho	4	SiSwati	10
IsiZulu	5	Xitsonga	11
IsiXhosa	6	Other: _____	12
<b>32. CURRENT MARITAL STATUS</b>			
Never married			1
Married			2
Living together			3
Divorced / separated			4
Widow			5
<b>34. TYPE OF HOUSING</b>			
Retirement home			1
Own house / apartment (owner)			2
Rented house / Rented apartment			3
Sharing yard or house with family/friends			4
Other (please specify):			5
<b>35. APPROXIMATELY HOW MUCH DO YOU SPEND ON CLOTHING FOR YOURSELF PER YEAR?</b>			
Less than R1000			1
R1000 – R2000			2

R2001 – R3000	3
R3001 – R4000	4
R4001 – R5000	5
R5001 – R6000	6
More than R6000	7
<b>36. HOW OFTEN DO YOU BUY CLOTHES FOR YOURSELF?</b>	
1 – 4 times per year	1
5 – 8 times per year	2
9 – 12 times per year	3
More than 12 times per year	4
<b>37. I GENERALLY BUY MY OWN CLOTHES:</b>	
By myself	1
With the help of family / friends	2

**ANNEXURE C:**  
**PERMISSION OBTAINED FROM THE SERVICE CENTRE FOR THE**  
**AGED REGARDING THE DATA COLLECTION**



**Sec 8d: Terrain / Facility Manager(s)**

The terrain/facility manager(s) (e.g. the manager or overseer of the offices, school, clinic, centre, laboratory or animal subject centre where the project or research activities will be carried out) completes this section (where applicable)


The Ethics Committee relies completely on you with regard to the suitability and availability of the terrain or facilities to be able to carry out the project.

8.1 Is the terrain / are the facilities available to carry out the project, as described in this application?  
 (Please mark "Yes" or "No" with X in the appropriate box)

<b>Yes</b>	<b>No</b>	<b>Remarks (optional)</b>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	

8.2 Is the terrain / are the facilities suitable for carrying out the project, as described in this application?  
 (Please mark "Yes" or "No" with X in the appropriate box)

<b>Yes</b>	<b>No</b>	<b>Remarks (optional)</b>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	

<b>Name (Title, Full Names &amp; Surname)</b> Type here <i>Dr Sanet Jansen van Rensburg</i>	<b>Qualifications</b> Type here <i>Deputy Director</i>																				
 <b>Signature</b>	<table border="1"> <tr> <td>2</td><td>0</td><td>7</td><td>5</td><td>-</td><td>0</td><td>3</td><td>-</td><td>0</td><td>3</td> </tr> <tr> <td>c</td><td>c</td><td>y</td><td>y</td><td></td><td>m</td><td>m</td><td></td><td>d</td><td>d</td> </tr> </table> <b>Date</b>	2	0	7	5	-	0	3	-	0	3	c	c	y	y		m	m		d	d
2	0	7	5	-	0	3	-	0	3												
c	c	y	y		m	m		d	d												

**NWU Ethics Application**

<b>Project Head</b> (Title, Initials & Surname) Type here	<b>Project Title</b> (see § 3.1) Type here
---	--

**NWU Ethics Number (for office use only)**

N	W	U	-																
Institution			Project Number											Year		Date			

SIWU: S = Submitted, R = Re-Submission, P = Provisional Authorization, A = Authorization



**Faculty of Health Sciences**

**Letter pertaining to permission from the Social Worker**

*I am Danielle Coelho from the North-West University working on my Master's thesis in Consumer Sciences and would like to invite you to give consent, allowing the researcher to conduct research with regards to elderly women associated with the Service Center for the Elderly in Potchefstroom. To follow is information about the study so that you can make an informed decision.*

The aim of this study is to explore the quality perception of older female consumers. The findings of the research will be used to make recommendations to the clothing industry with regards to clothing attributes, with the intention of improving clothing for older female consumers. The researcher also plans to give feedback to all participants of the study once the research is complete. This feedback could potentially improve older female consumers' decision-making when evaluating clothing by using attributes.

Data collection will take place as follows: The researcher will distribute a number of questionnaires to a designated person at the center, which in turn will be distributed to older female consumers at the center. After completion the participants will return the questionnaires to the designated person. After which the researcher will collect them again.

I Sanet Jansen van Rensburg hereby voluntarily consent to the above-mentioned study, in allowing the researcher to conduct the research. I understand my role in the study and agree to it. I am not coerced in any way.

26-03-2015

Date

  
Signature

Potchefstroom-Dienssentrum.

Name of facility

**ANNEXURE D:  
DATA COLLECTION ADVERTISEMENT (POSTERS AND FLYERS)**

# RESEARCH REGARDING OLDER FEMALE CONSUMERS' QUALITY PERCEPTION OF CLOTHING



**DATE: August 2015**

## **PROCEDURE:**

- +300 FEMALES (60 YEARS AND OLDER) LIVING IN THE TLOKWE MUNICIPAL REGION AND TAKING PART IN EVENTS HOSTED BY BEING THE SERVICE CENTER FOR THE AGED WILL BE ASKED TO PARTICIPATE.
- QUESTIONNAIRES WILL BE GIVEN TO YOU AT EVENTS HOSTED BY THE SERVICE CENTRE FOR THE AGED.
- YOU WILL BE ASKED TO FILL OUT THE QUESTIONNAIRE AT A TIME AND PLACE THAT IS MOST CONVENIENT TO YOU AND THEN RETURN IT TO THE PERSON WHO GAVE IT TO YOU AFTER COMPLETING IT.
- THE QUESTIONNAIRE SHOULD TAKE ABOUT 15 MIN TO COMPLETE.
- THIS WILL BE AT NO COST TO YOU AND YOU WILL NOT RECEIVE ANY PAYMENT FOR YOUR COMPLETING IT.
- NO PERSONAL DETAILS WILL BE ASKED.
- ALL ANSWERS WILL BE CONFIDENTIAL AND WILL CONTRIBUTE TO RECOMMENDATIONS THAT CAN BE MADE TO CLOTHING MANUFACTURERS TO IMPROVE CLOTHING FOR YOU.
- FEEDBACK WILL BE PROVIDED TO YOU AT THE END OF 2015, IF YOU SO WISH.
- YOUR PARTICIPATION WILL BE GREATLY APPRECIATED.

**ANNEXURE E:**  
**INTERNATIONAL JOURNAL OF CONSUMER STUDIES GUIDELINES**

## **Author Guidelines**

### **Submission**

Contributions to such a multidisciplinary journal should be written with clarity and precision and any specialized terms should be defined. For more information about the journal's editorial policy and style guidelines please click [here](#) and for the Editor's advice on how to get published please click [here](#).

### **Guidelines for Submission to *International Journal of Consumer Studies***

*International Journal of Consumer Studies* has now adopted ScholarOne Manuscripts, for online manuscript submission and peer review. The new system brings with it a whole host of benefits including:

- Quick and easy submission
- Administration centralised and reduced
- Significant decrease in peer review times

All submissions to the journal must be submitted online at <http://mc.manuscriptcentral.com/ijc>. Full instructions and support are available on the site and a user ID and password can be obtained on the first visit. If you require assistance then click the Get Help Now link which appears at the top right of every ScholarOne Manuscripts page. If you cannot submit online, please contact the Editor Katherine Hughes by telephone (44 (0)29 2088 6569) or by e-mail ([katherine.hughes@btconnect.com](mailto:katherine.hughes@btconnect.com)).

All papers go through a process of double-blind peer review.

Articles will normally not exceed 5,000 words. The Journal also publishes research reviews, policy updates, development and practice articles and abstracts of conference papers. These are reviewed by at least one referee and usually do not exceed 2000 words. All articles should report original research that has not been published or submitted for publication elsewhere, in any form other than a simple abstract of 400 words or less. Papers presented at conferences are accepted provided that they have not been published in full in Conference Proceedings.

Contributions must be submitted as a Word document. The title page should be submitted as a separate document. A single page must give the title and short title (to be printed at the head of alternate pages), authors' names and department(s) in which the work was done. Please highlight the corresponding author, including the name, full postal address and e-mail address. In the main document, the text must be preceded by a short summary of the paper (Abstract). Four to six keywords should be supplied for indexing purposes. The main manuscript should be divided into appropriate sections, e.g. Introduction, Methods, Results, Discussion, Conclusions, Acknowledgements and References.

Please submit electronic **figures**. Authors are encouraged to visit our digital illustration guidelines for further information on preparing high resolution images. A separate sheet should contain all the captions for the figures. In the full-text online edition of the journal, figure legends may be truncated in abbreviated links to the full-screen version. Therefore, the first 100 characters of any legend should inform the reader of key aspects of the figure. Tables should be typed on separate sheets and numbered (with Arabic numbers) in order of appearance. The approximate position of figures and tables should be indicated.

### References in Articles

We recommend the use of a tool such as EndNote or Reference Manager for reference management and formatting.

EndNote reference styles can be searched for here:

<http://www.endnote.com/support/enstyles.asp>

Reference Manager reference styles can be searched for here:

<http://www.refman.com/support/rmstyles.asp>

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Flowers, S. (1996) *Software Failure: Management Failure*, 3rd edn. John Wiley, Chichester, UK.

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**ANNEXURE F:  
LETTER OF CONFIRMATION FROM LANGUAGE EDITOR**

## *Declaration*

*This is to declare that I, Annette L Combrink, accredited language editor and translator of the South African Translators' Institute, have language-edited the dissertation by*

**D.C. COELHO (21697264)**

*with the title*

**Older female consumers' quality perception of clothing during pre- and post-purchase decision-making**



*Prof Annette L Combrink*

*Accredited translator and language editor*

*South African Translators' Institute*

*Membership No. 1000356*

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**ANNEXURE G:  
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2016 ACKNOWLEDGEMENTS I would like to take this opportunity to express my  
sincere appreciation and gratitude to the following people. Their contribution to  
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stages of the study, by retrieving all the study-related files that were lost. To my  
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Dominique, Michael and Paula, for your continuous love and support. And a final  
word of thanks to the rest of my family and friends for great friendship and  
support throughout the duration of the study, your friendship and love kept me  
going. Glória a Deus ! ABSTRACT During the decision-making process consumers  
establish expectations regarding the performance of the product under  
consideration. These expectations are usually connected to certain product  
attributes inherent to the product, which are evaluated during both the pre- and  
post-purchase phases of the process. The clothing industry may mistakenly focus  
on insignificant clothing attributes when aiming to improve clothing quality, or  
may not have sufficient knowledge regarding the most important clothing  
attributes. In addition, no literature could be located which pertains to older  
female consumers' quality perception regarding certain clothing attributes. As  
older female consumers have been defined as a vulnerable consumer group,  
research aiding and contributing to the possible improvement of their well-being  
is essential. If older female consumers' needs are not being fulfilled with regards  
to clothing quality, recommendations can be made to improve these attributes.  
The current study investigated the quality perception of older female consumers  
with regards to certain clothing attributes during both the pre- and  
post-purchase phases of decision-making. The objectives of the study were to  
determine older female consumers' expectations regarding the clothing  
attributes; as well as to determine the perceived performance of these  
attributes; and lastly to make recommendations to the clothing industry to  
improve the relevant attributes based upon the findings regarding their  
expectations and the perceived performance of the attributes. An exploratory  
research approach was followed by means of a quantitative survey in the form of  
a structured questionnaire. The results indicated that the majority of the  
respondents rated clothing attribute expectations as being of high importance.  
However, the performance of the attributes was rated as poor or neutral.