OLDER FEMALE CONSUMERS' CLOTHING QUALITY PERCEPTION: EXPECTATIONS AND PERFORMANCE

Minnet du Preez*, Heleen Dreyer, Eloïse Botha, Nadia van der Colff,
Danielle C Coelho & Marelize Pretorius

ABSTRACT

The population of older consumers is growing significantly worldwide as well as in South Africa. Although they have been labelled as vulnerable consumers with less financial freedom, due to their rapid growth in numbers, they have become an important, often overlooked market segment with the likelihood of increasingly more buying power. Changes that occur with ageing lead to changes in the needs of older female consumers as well as possible changes in their evaluation of clothing quality. However, clothing manufacturers do not necessarily take these changed needs into account, which may lead to consumer dissatisfaction with what is available. Applying the expectancy disconfirmation paradigm, this study explores older women's expectations and perceptions of clothing quality, and the attributes that they considered when rating performance. A self-administered, structured questionnaire was used to collect data from a sample comprised 202 South African female consumers over 60 years old who took part in events hosted by the Service Centre for the Aged in the Tlokwe municipal area. A gap analysis indicated significant differences between the consumers' expectations of clothing attributes and performance. They were not satisfied with current clothing quality (negative disconfirmation), especially in terms of the attributes of price, correct sizing, and fabric, which attracted the lowest performance ratings. The study results indicate that, in terms of the expectancy disconfirmation paradigm, dissatisfaction with the quality of clothing among the older female consumers reveals a clear need for improvement. This growing market segment seeks clothing that better accommodates the changed body features and preferences that come with age.

— *Dr M du Preez**
Consumer Sciences
African Unit for Transdisciplinary Health Research

North-West University
Potchefstroom Campus
Private Bag X6001
Potchefstroom
2520
South Africa
Tel: +27 (0)18 299 2479
Email: minnet.dupreez@nwu.ac.za
*Corresponding author

— *Me H Dreyer*
Consumer Sciences
African Unit for Transdisciplinary Health Research
North-West University
Potchefstroom Campus
Private Bag X6001
Potchefstroom
2520
South Africa
Tel: +27 (0)18 299 2471
Email: heleen.dreyer@nwu.ac.za

— *Me E Botha*
Consumer Sciences
African Unit for Transdisciplinary Health Research
North-West University
Potchefstroom Campus
Private Bag X6001
Potchefstroom
2520
South Africa
Tel: +27 (0)18 299 4422
Email: eloise.botha@nwu.ac.za

— *Me N van der Colff*
Institute for Wine Biotechnology
Stellenbosch University
Private Bag X1
Matieland (Stellenbosch)
7602
South Africa
Tel: +27 (0)21 808 3770
Email: nvdc@sun.ac.za

— *Me DC Coelho*
Consumer Sciences

African Unit for Transdisciplinary Health Research
North-West University
Potchefstroom Campus
Private Bag X6001
Potchefstroom
2520
South Africa
Tel: +27 (0)18 299 2470
Fax: +27 (0)18 299 2470
Email: daniellecoelho@yahoo.com

— *Me M Pretorius*
Statistical Consultation Services
North-West University
Potchefstroom Campus
Private Bag X6001
Potchefstroom
2520
South Africa
Tel: +27 (0)18 299 2652.
Email: Marelize.Pretorius@nwu.ac.za

INTRODUCTION

The growing number of older consumers worldwide since the turn of the century (Tyagi & Goel, 2013; Palamutcu & Goren, 2015) has turned them into a larger proportion of the overall population. Also known as the 'silver' economy, they form an increasingly important segment of the economy as a whole (Nam *et al*., 2007; Cole *et al*., 2008; Giacalonea *et al*., 2016; Seo & Fiore, 2016), but as consumers they seem largely to have been neglected by research and industry (Beneke *et al*., 2011; Hwang, 2016).

The majority of older consumers have been characterised as valuing 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; Seo & Fiore, 2016). In some western countries, this segment represents a relatively wealthier cohort compared to other countries. According to various authors (Goldman *et al*., 2014; Giacalonea *et al*., 2016; Seo & Fiore, 2016), older consumers are the fastest growing demographic worldwide; they have caused food and beverages for this category of the population to be the fastest growing consumer segment worldwide, which indicates their buying power (Giacalonea *et al*., 2016). Their ageing, characterised by physical changes in women's physique over time, for example, make purchases of essential items such as clothing a core issue (Makhanya *et al.,* 2014). In addition, globally and in South Africa, women are regarded as the principal buyers of clothing (De Klerk & Lubbe, 2008; Chea, 2011), which has led to the focus in the present study, on older female consumers.

The growth in this age group is also evident in South Africa, where the total number of older persons over the age of 60 years has risen from just over three million in 2002 (Statistics South Africa, 2002) to more than four million (8.1% of the population) in 2015, exceeding 20% growth (Statistics South Africa, 2017). In this country, older people are classified as a vulnerable group owing, possibly, to the fact that they are prone to physical and mental health problems (Yeh & Sing, 2004; Statistics South Africa, 2012). They may also have reduced financial freedom and greater insecurity than previously because of the conditions of their retirement (Portacolone, 2013), which may explain older females' concern with value for money and the influence of price on their decisions to purchase clothing (Rousseau & Venter, 2014). Despite often having a lower income than before, however, many have fewer financial commitments and therefore more money to spend on clothing and food (Beneke *et al*., 2011). Their probable lower income is of less importance since they are growing significantly and therefore worthy of attention (Rousseau & Venter, 2014; Giacalonea *et al*., 2016; Seo & Fiore, 2016). Rousseau and Venter, (2014) support the fact that older consumers in South Africa have growing buying power and is becoming an important segment
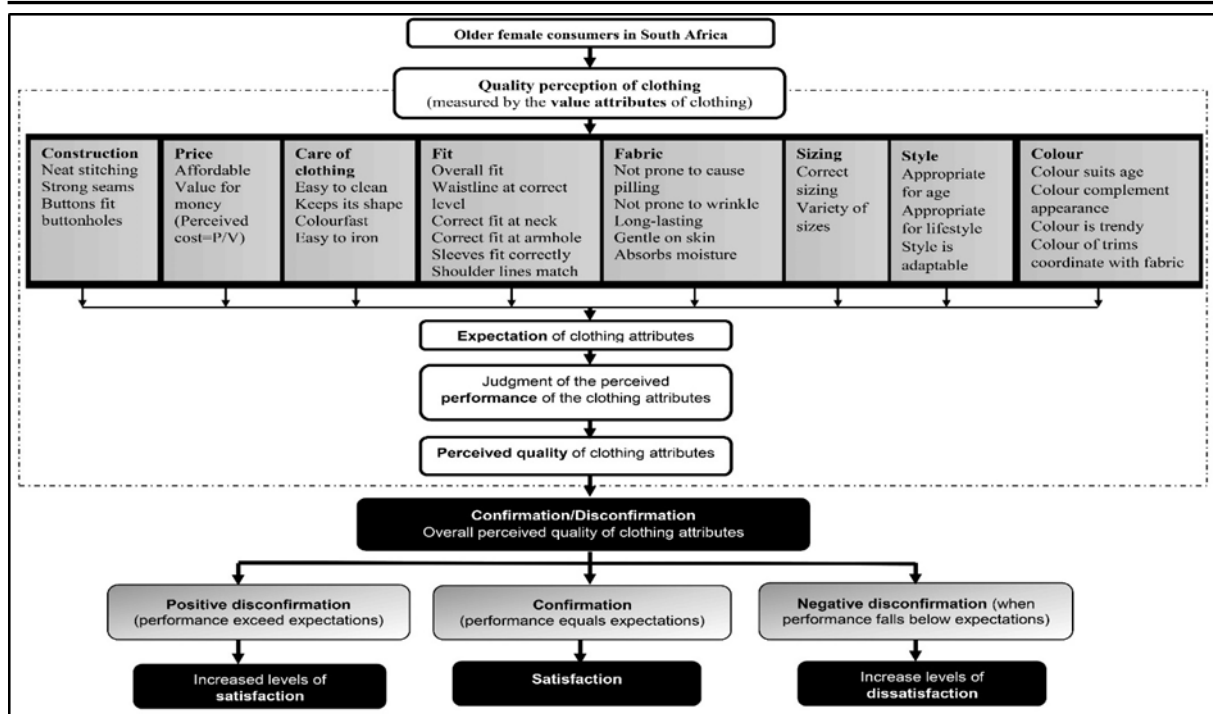
FIGURE 1: AN EXPECTANCY DISCONFIRMATION PARADIGM ADAPTED FROM HOYER *et al.* (2013), OLIVER (1980) AND PRINSLOO (2011)

for retailers. Although research regarding the characteristics of older consumers exists, since they are such a growing market it is important to determine their perceptions of apparel quality as they seek to satisfy their clothing needs in a South African context. The literature was studied to create a conceptual framework (Figure 1) for this study. The aim of the conceptual framework was to indicate the questions which would be answered in this study as well as the empirical measures implemented to answer these questions (De Vos & Strydom, 2011).

The framework (Figure 1) for this study conceptualises older female consumers' quality perception of clothing. This framework is adapted from the expectancy disconfirmation paradigm (Oliver, 1980; Prinsloo, 2011; Hoyer *et al.,* 2013), which represents a cognitive comparison that strives to clarify consumers' post-purchase satisfaction as a function of expectations and perceived performance and to notice whether an expectancy disconfirmation occurs (Oliver, 2014). Confirmation follows when the expected product state and actual product state do not differ, leading to satisfaction or indifference whereas positive or negative disconfirmation occurs when discrepancies between expectations and actual performance of the product arise which lead to satisfaction or dissatisfaction (Hawkins & Mothersbaugh, 2010;

Hoyer *et al*., 2013). To determine older females' perceptions of clothing quality, nine attributes influencing satisfaction of clothing quality was applied in the expectancy disconfirmation paradigm (Visser *et al.,* 1993; Swinker & Hines, 2006; Nam *et al.,* 2007; Prinsloo, 2011; Hugo & Van Aardt, 2012; Van Staden, 2012; Güzel, 2013; Portacolone, 2013; Tyagi & Goel, 2013; Isitalahiri & Siddika, 2014; Kadolph, 2014; Anić & Mihić, 2015; Rath *et al*., 2015; Vianna & Quaresma, 2015).

This paper provides background to the research problem, followed by an overview of the methodology used, a discussion of results, limitations of the study and directions for future research as well as conclusions and recommendations.

BACKGROUND

Clothes for older female consumers

Older consumers' clothing needs are often overlooked because the fashion industry tends to segment female consumers as a homogeneous group – which is not the case (Nam *et al.,* 2007; Tyagi & Goel, 2013). Different age groups have different clothing needs (Palamutcu & Goren, 2015; Giacalonea *et al*., 2016), and older consumers are no exception,

with their changing body features, reduced mobility and (often) limited income. Although some older consumers spend proportionally less of their income on clothing, they tend to buy fewer items but spend more per item, which makes them quality conscious (AT Kearny, 2013).

Female consumers have much in common: for example, they are characterised as more fashion conscious than men (Anić & Mihić, 2015) and therefore shop more often for clothing (Chea, 2011). When women grow older, they experience body changes such as weight gain, a larger abdomen, thinner legs, loss of firmness (especially arms and breasts), height loss, changing body proportions, and thinner and more sensitive skin (Tyagi & Goel, 2013; Vianna & Quaresma, 2015; Giacalonea et al., 2016). Women prefer styles that accommodate their bodily changes (Vianna & Quaresma, 2015) as these help them to accept and embrace their older age, which in turn leads to satisfying higher order needs such as social needs (social acceptance, belonging) (Slepian et al., 2015), status and self-esteem (ego need), and self-fulfilment (self-actualisation need) (Kasambala, 2014). Since research on older female consumers is sparse (Hwang, 2016) and the industry tends to not segment them as a separate age group with their own specific and different requirements, the fashion industry in general does not necessarily focus on fulfilling their needs (Visser et al., 1993; Vianna & Quaresma, 2015). As a result, they have become a neglected consumer segment (Nam et al., 2007), often dissatisfied with the clothing available to them (Güzel, 2013; Vianna & Quaresma, 2015). Nevertheless, this group is rapidly growing, with notable spending power (Beneke et al., 2011; Giacalonea et al., 2016). To understand and provide for this segment's clothing needs, it is necessary to know and understand what attributes they value when buying apparel and what they perceive as a quality product (Hines & Swinker, 2001; Swinker & Hines, 2006).

Perceived quality of clothing

Clothing quality, as well as consumers' perceptions of quality, differ in many ways (Hines & Swinker, 2001; Swinker & Hines, 2006). Consumers' perceptions of quality depend on various clothing attributes that include construction, materials used, product design, and price (Kadolph, 2014). However, evaluation according to these attributes does not happen at once. When consumers consider purchasing a garment, they initially assess price, colour and style. Then, after wearing a garment, they assess durability, comfort and care (Rosenau & Wilson, 2006).

Since older women might have different needs from younger women, different clothing attributes influence their purchasing behaviour (Visser et al., 1993; Vianna & Quaresma, 2015). The literature indicates that, broadly speaking, older consumers value comfort and fit, as well as style (Nam et al., 2007; Tyagi & Goel, 2013; Isitalahiri & Siddika, 2014; Starkey & Parsons, 2016). To achieve these, clothing needs to be made of soft fabric (Nam et al., 2007; Tyagi & Goel, 2013) to lessen the burden on thinning fragile skin (Güzel, 2013; Vianna & Quaresma, 2015). Owing to their changing body dimensions they also prefer loose-fitting styles (Nam et al., 2007), especially around the neck, abdomen and hips (Visser et al., 1993; Güzel, 2013). Furthermore, older female consumers often complain that garments are too long, which can be explained by their smaller frame as a result of ageing (Nam et al., 2007; Güzel, 2013; Tyagi & Goel, 2013). They also prefer sleeves that hide sagging skin (Visser et al., 1993; Vianna & Quaresma, 2015). Decreased mobility requires clothing that is easy to put on and take off (leading, for example, to a preference for cardigans over pullovers) (Visser et al., 1993; Vianna & Quaresma, 2015; Starkey & Parsons, 2016), and easy-to-handle fasteners (with zips or buttons on the front of garments rather than at the back, where they are harder to reach) (Tyagi & Goel, 2013; Vianna & Quaresma, 2015; Starkey & Parsons, 2016). Soft colours tend to complement their skin-and-hair tone and bright colours are reported to lift their spirits (Tyagi & Goel, 2013).

Durability and price have been reported as further considerations for older females' clothing. It should be easy to wash and care for, since older consumers, who care for their own clothes might tire more easily, or who suffer from disabilities may be less able than previously to look after their wardrobes, which in turn adversely affects the durability of their garments (Tyagi & Goel, 2013; Vianna & Quaresma, 2015). Good construction (for example, well-constructed neat stitching and seams) and specific fabric characteristics (for

example, not prone to pilling or wrinkling) contribute to durability. Some older consumers experience a lack of financial security (Portacolone, 2013; Anić & Mihić, 2015), probably because they no longer have a salary, therefore price is important when purchasing clothing (Visser *et al.,* 1993; Tyagi & Goel, 2013).

Since price is important for older female consumers, they initially acknowledge it as a perceived cost, where P (price)/V (value-added attributes such as fabric, fibre and style) equals perceived cost (Rath *et al*., 2015). This equation illustrates that, as the value portion increases (V), the overall perceived cost – the balance between the benefits received and the actual price paid – decreases. When important benefits such as comfort, fit, and style outweigh the price, consumers are more satisfied and feel that they have received good value for money (Rath *et al.,* 2015), which is important for value-driven consumer groups (Levy, 1999).

According to Sweeney and Soutar (2001), product value is categorised as a multidimensional construct in which emotional and rational factors influence purchase choice. Thus, consumers evaluate products, and attributes that make up the quality perception of the product, in functional terms (for example, expected performance and value for money) as well as emotional terms (for example, pleasure derived from the product). Therefore it can be expected that perceptions of clothing quality can be based on the perceived value attributes of the item; it can also be expected that better product value translates into better perceived quality derived from the discrepancy between expected and actual performance of clothing attributes.

Clothing attributes have been divided into four main categories: intrinsic, extrinsic, appearance, and performance. Intrinsic attributes include physical features of a product that cannot be changed without modifying the manufactured product (for example, sizing or fabric) (Brown & Rice, 2001), whereas extrinsic attributes refer to features that can be changed without modifying the product (for example, brand and price) (Brown & Rice, 2001; Swinker & Hines, 2006). Appearance attributes are features affecting the look of the product (for example, colour and fit), and performance attributes affect the way the product functions (for example, ease of care)

(Swinker & Hines, 2006). However, variations of these categories have been used. In the study by Hugo and Van Aardt (2012), for instance, fit, colour, fabric and ease of care were grouped together as intrinsic attributes. Such groupings do not take price or sizing into account, both of which are regarded as important in a study by MacDonald *et al.* (2009). The present study focused on attributes (see Figure 1) that include construction, price, care of clothing, fit, fabric, sizing, style and colour, all of which were identified in previous studies as attributes in terms of which clothing design for older female consumers has fallen short (Hugo & Van Aardt 2012; Tyagi & Goel, 2013; Vianna & Quaresma, 2015). These attributes are clearly important and might therefore influence how older female consumers perceive the quality of clothing.

Perceived expectations and performance of clothing

Perception is aligned with an individual's frame of reference (Blythe, 2008; Cant *et al.,* 2009) and is subjective in that it is based on a person's own experiences and expectations (that is, pre-consumption beliefs) of a product (Hoyer *et al*., 2013; Schiffman & Wisenblit, 2015). After a purchase, in this case a clothing product, consumers evaluate the product (performance), then store the information in their long-term memory, which prepares them with an improved knowledge base for their next purchasing decision (Cant *et al.,* 2009). This newly acquired learned information on how the product performed is objective since it is now based on the actual performance (Hoyer *et al*., 2013) of the purchase.

During pre- and post-purchase evaluations, certain product attributes are fundamental in the perceived performance of a product, and the relative importance of attributes differs among consumers (Hoyer *et al*., 2013; Schiffman & Wisenblit, 2015). Consumers often use what is called the lexicographic decision rule when evaluating product attributes, which entails ordering the attributes based on their importance, starting with the most important attribute and then comparing the different options available, one at a time (Hoyer *et al*., 2013). For example, if comfort is the most important attribute for older consumers, they will first look for comfort and then assess other attributes such as fit, style and price.

Perceived quality is defined as the judgement of a product based on a variety of product attributes as listed above (Schiffman & Wisenblit, 2015) by combining sensory inputs (Blythe, 2008). The judgement of perceived quality is based on the degree of discrepancy between consumers' expectations and the actual performance of the attributes they used to assess the quality of the product (Hoyer *et al.*, 2013), in this case a clothing product. During the post-purchase evaluation stage, consumers judge a product's performance according to their expectations, which lead them to judge it as generally satisfactory, neutral, or unsatisfactory. This judgement is known as the expectancy disconfirmation paradigm (Hoyer *et al.,* 2013). When expectations exceed performance, negative disconfirmation occurs, which leads to negative quality perception or dissatisfaction, whereas when performance exceeds expectations, positive disconfirmation occurs that leads to positive quality perception or satisfaction (Hawkins & Mothersbaugh, 2010). Consumer expectations are formed on the basis of past experiences and recommendations from others (Solomon, 2013), which means that attributes evaluated after purchasing clothing (during use), can already have influenced perceptions of quality by a consumer during pre-purchase decision-making.

Attributes that a consumer considers important when evaluating products during the decision-making process can change with age (Cole *et al.*, 2008). Therefore, it is useful to investigate older consumers' expectations (in terms of attribute importance), perceived performance, and clothing attributes associated with perceptions of quality. Although research on the influence of evaluative clothing criteria on South African consumers' decision-making processes has been conducted by Hugo and Van Aardt (2012), no published studies could be found that specifically focus on the attributes that older South African female consumers connect with clothing quality. The aim of the present study, therefore, was to explore, through the lens of the expectancy disconfirmation paradigm, older female consumers' perception of clothing quality by determining, first, their expectations and, second, the subsequent performance of the clothing purchased.

METHOD

Research design

The gap in previous research of older South African consumers' clothing needs motivated the present exploration of older female consumers' perceptions of clothing quality. A set of a-priori objectives (to determine older female consumers' expectations regarding clothing attributes; and perceived performance of these attributes), according to the bi-dimensional constructs of the expectancy disconfirmation paradigm (Oliver, 1980), was established. To describe accurately the older female consumers' perceptions of quality, numerical data were collected by means of a non-experimental, cross-sectional survey (Babbie & Mouton, 2010) and subjected to gap analysis, including significant differences ($p \leq 0.05$; $d \geq 0.5$) between consumers' expectations and perceived performance of clothing attributes.

Data collection

Participants

Non-probability purposive sampling was used to distribute 450 questionnaires at events hosted by the Service Centre for the Aged in the Tlokwe municipal area. A similar technique was successfully used in a study by Nam *et al.* (2007) of fashion-conscious behaviour of older female consumers. To make it convenient and less strenuous for respondents (who may be vulnerable), we targeted a Service Centre with a membership of 1 500 active members who were likely to fit the inclusion criteria. Purposive sampling is appropriate when a population with pre-selected characteristics is sought (Maree & Pietersen, 2016), as in this study. The following inclusion criteria were set: consumers had to be female, aged 60 years and older, permanent residents in Tlokwe, who had purchased clothing for themselves in the previous 12 months. A total of 202 questionnaires were completed, representing a response rate of 45%.

Recruitment for potential respondents occurred through a trained mediator at events hosted by the Service Centre for the Aged. At the time of data collection, the mediator was an employee of the Centre and familiar to the potential respondents.

Instrument

The questionnaire was developed using closed-ended questions (Neuman, 2011) only, adapted from similar studies with acceptable Cronbach alpha coefficients (Prinsloo, 2011; Hugo & Van Aardt, 2012; Van Staden, 2012), and questions formulated after a thorough literature review. The questionnaire consisted of three sections.

Section A comprised screening questions following the inclusion criteria, which were compiled from material in the existing literature. Section B explored older female consumers' quality perception of clothing with regard to certain clothing attributes (construction, price, care of clothing, fit, fabric, sizing, style and colour), adapted from questionnaires used in previous studies by Prinsloo (2011), Hugo and Van Aardt (2012) and Van Staden (2012). Five-point Likert scales were employed to assess expectations (1-not important; 5-very important) and perceived performance (1-unacceptable; 5-excellent) according to each clothing attribute. Section C determined demographic characteristics by means of closed-ended questions used in earlier similar studies (Van Staden, 2012; Prinsloo, 2011). The questionnaire was made available to respondents in English, Afrikaans and Setswana as these were the languages generally spoken in the area.

Procedure

Willing respondents gave written consent, after which self-administered, pencil-and-paper questionnaires were distributed and retrieved after two weeks. Questionnaires were completed in the comfort of the respondents' homes. This data collection method was judged to be appropriate in terms of convenience, especially for respondents who may be suffering from age-related frailties. The study was approved by the Health Research Ethics Committee (HREC) of the North-West University (NWU-00026-15-S1).

Analysis

Data were analysed using IBM® SPSS® Version 21. Descriptive statistics were employed, including frequencies and means. All the attributes were measured on two separate five-point Likert-type scales – one for *expectations* and the other for *performance*.

Exploratory factor analysis was used to test 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 Normalisation as rotation method (Field, 2013). All Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) values for the factor analysis were higher than the suggested minimum of KMO≥0.5, therefore construct validity was present. Dependent T-Tests were used for a gap analysis using the conformation disconfirmation paradigm. Quality perception was determined by comparing expectations and perceived performance of clothing attributes. P-values ($p \leq 0.05$) indicated statistical significance, but, because of the non-representative sample, Cohen's *d*-values were used to indicate practical significance with effect sizes $d \geq 0.8$=large and $d \geq 0.5$=medium (Steyn, 2000).

Exploratory factor analysis

Items related to respondents' quality perception, with regard to each of the clothing attributes, resulted in the extraction of 15 factors including *performance* of sizing, and *expectations* and *performance* of construction, price, care, fit, fabric, style and colour (Table 1). The attribute *expectation* of sizing was not reliable. Because communality was too low, the two items within *expectation* of sizing (correct sizing and variety of sizes) were included and discussed as individual items, on the grounds that they were considered important by respondents. The same items for *performance* (correct sizing and variety of sizes) were also discussed separately to maintain consistency (Table 1).

Cronbach's alpha reliability test is used to describe the internal reliability and consistency of multi-item scales' data (Shen *et al*., 2012). In the present study, inter-item correlation values (Pietersen & Maree, 2016) were used to describe the internal reliability and consistency of the data. Cronbach's alpha values that are closer to one indicate high levels of internal consistency for constructs with a suggested cut-off value of α=0.50 (Field, 2013). However, Pietersen and Maree (2016) indicate guidelines in which it is acceptable for α=0.90 to signify high reliability, α=0.80 moderate reliability, and α=0.70 low reliability. Values for the mean inter-item correlations of each factor are suggested to be between 0.15 and 0.55 (Field, 2013). For all

extracted factors, Cronbach's alpha measurements were above the recommended value of α=0.50 except the data relating to sizing *expectations* (correct sizing and variety of sizes), which were α=0.098. Thus, this factor had to be interpreted with caution and was subsequently analysed separately and discussed by way of individual items.

Validity and reliability

Face and content validity were assured by using a panel of experts in the field of Consumer Sciences, as well as the Statistical Consultation Services of the North-West University, to inspect the questionnaire items (Delport & Roestenburg, 2011). Validity was addressed by pre-testing the questionnaire, to ensure that respondents interpreted the questions correctly. Factor analysis was used to ensure construct validity as previously explained. Questionnaire reliability was investigated by calculating Cronbach's alpha coefficients which confirmed internal consistency.

RESULTS AND DISCUSSION

Demographic characteristics

All respondents (N=202) were female and above the age of 60 years, as stipulated by the inclusion criteria. Respondents' ages ranged from 62 to 85 years and their average age was 72 years. The large majority (88.7%) spent less than R3 000 on clothing per year and the rest (11.3%) less than R5 000. This result confirms earlier research showing that some older consumers do not have much financial freedom because of conditions associated with retirement (Portacolone, 2013) and therefore want to save their money. However, 57.4% of participants were property owners, 17.3% lived in a retirement home, 17.3% lived with family or friends and a minority (7.9%) rented an apartment or house. Also, 72.8% of respondents shopped for clothes once to four times per year and 23.3% five to eight times a year; only 3.9% of the respondents purchased clothing more than nine times per year (of these, 86.6% went shopping alone).

Expectations of clothing

Respondents were asked to rate their expectations in terms of the attributes of a clothing item they had purchased within the past year, based on a 5-point Likert-type scale (Table 1). The indicators of importance were interpreted as means (averages), where 5 indicated "very important" and 1 indicated "unimportant". The results clearly showed that respondents had high expectations in terms of all the attributes. Construction, price, and care of clothing yielded mean values of $M \geq 4.5$, indicating "very important" ratings. Poor construction of a clothing item makes it less durable (Laitala *et al.*, 2015) and therefore of poorer quality, which could explain respondents' high expectations of construction. The importance of price may relate to financial constraints among some older consumers (Portacolone, 2013), which is consistent with the importance given to being able to care properly for clothing in order to ensure durability (care of clothing attribute). The other attributes – fit, style, fabric, sizing (correct sizing and variety of sizes) and colour – yielded values of $M \geq 4$, indicating that respondents rated these attributes as important. Because of changes of body shape among older female consumers, their clothing also needs to change (Palamutcu & Goren, 2015). For example, they may want to hide body changes (Vianna & Quaresma, 2015) through correct fit, style, fabric, sizing and colour, as supported by the results of the current study. Furthermore, ill-fitting garments may be uncomfortable to wear, which may influence the comfort of clothing, thus confirming the importance of fabric, style and fit. Respondents' rating of fabric as being very important, in conjunction with their high rating for comfort, may also be due to consumers assessing the comfort by considering temperature regulation, absorbency and tactile sensations (Kadolph, 2014), all of which are influenced by the type of fabric used. With regard to expectations of style, the reason for the high mean value allocated to this attribute could be that older consumers have become more aware of fashion (Guiot, 2001) and therefore wish to have stylish clothing.

Performance of clothing

Respondents were asked to rate the perceived performance of the attributes of a clothing item they had purchased within the past year, using a 5-point Likert-type scale (Table 1). The indicators of performance were interpreted as means (averages) where 5 indicated "excellent" and 1 indicated "unacceptable". Care of clothing was the only attribute which performance the

TABLE 1: MEAN DIFFERENCES IN RESPONDENTS' EXPECTATIONS AND PERFORMANCE JUDGEMENT OF CLOTHING ATTRIBUTES, AS WELL AS THE ITEMS PERTAINING TO EACH ATTRIBUTE (N=202)

Attribute	Expectation		Performance	
	Mean	**SD**	**Mean**	**SD**
Construction	**4.70**	**0.584**	**3.04**	**1.014**
Neat stitching	4.75	0.547	3.03	1.009
Strong seams	4.69	0.717	2.91	1.177
Buttons fit buttonholes	4.66	0.730	3.16	1.174
Price	**4.64**	**0.921**	**2.34**	**0.733**
Affordable	4.67	0.539	2.34	1.040
Value for money	4.62	0.570	2.31	1.105
Care of clothing	**4.61**	**0.623**	**3.58**	**0.883**
Easy to clean	4.75	0.670	3.82	.870
Keeps its shape	4.70	0.624	3.49	1.107
Colourfast (keeps its colour)	4.68	0.725	3.50	1.143
Easy to iron	4.32	1.180	3.52	1.094
Fit	**4.49**	**0.632**	**3.23**	**0.791**
Overall fit	4.68	0.661	3.28	0.911
Waistline at the correct level	4.60	0.656	2.96	0.997
Correct fit at the neck	4.46	0.888	3.29	0.903
Correct fit at the armhole	4.45	0.930	3.26	1.066
Sleeves fit correctly	4.39	0.772	3.31	1.054
Shoulder lines match shoulders	4.38	0.966	3.28	0.969
Fabric	**4.38**	**0.630**	**3.06**	**0.742**
Not prone to cause fuzz balls (pilling)	4.58	0.709	2.85	1.056
Not prone to wrinkle	4.46	0.898	2.95	0.926
Long-lasting	4.42	0.796	2.99	0.992
Gentle on skin	4.37	0.922	3.33	0.979
Absorbs moisture	4.06	1.093	3.15	0.887
Sizing	**	**	**2.71**	**0.956**
Correct sizing	4.49	0.741	2.45	0.982
Variety of sizes	4.22	0.975	2.96	1.251
Style	**4.36**	**0.630**	**3.13**	**0.883**
Appropriate for age	4.55	0.646	2.95	1.105
Appropriate for lifestyle	4.37	0.928	3.04	1.043
Style is adaptable	4.16	0.889	3.39	1.075
Colour	**4.14**	**0.677**	**3.39**	**0.456**
Colour suits age	4.46	0.993	3.36	1.008
Colour complements appearance	4.44	0.851	3.52	0.768
Colour is trendy	3.35	1.371	3.39	1.074
Colour of trims coordinate with fabric	4.32	0.842	3.31	1.049

SD = Standard deviation
Expectation: 1=Unimportant 2=Slightly important 3=Neutral 4=Important 5=Very important
Performance: 1=Unacceptable 2=Poor 3=Neutral 4=Good 5=Excellent
** Not applicable as these result were not reliable

respondents rated as good (M=3.58). The reason could be that older female consumers have the experience required to care properly for clothing (Van der Merwe *et al.*, 2014) or the advancement of easy care finishing on fabrics (Kadolph, 2014). The attributes of fit, colour, style, fabric, construction and variety of sizes all yielded mean values of $M \geq 2.5 < 3.5$, indicating

neutral responses. 'Correct sizing' received a poor rating (M=2.45), indicating that respondents were not satisfied with clothing sizing, which reflects other research on the topic (MacDonald *et al.*, 2009; Hugo & Van Aardt, 2012). Although older consumers' bodies change over time, Vianna and Quaresma (2015) report that manufacturers do not consider these

changes when designing clothes for these consumers, which could contribute to the incorrect sizing with which respondents were dissatisfied. This point was reinforced in respondents' perceived low performance of waistline fit (*M*=2.96), further highlighting the need for clothing manufacturers to attend to body changes in the elderly. Price (*M*=2.34) also received a poor rating, matching the two lowest mean scores for *performance* values, namely affordability (*M*=2.34) and value for money (*M*=2.31). These results confirm that the benefits inherent in the clothes neither met nor exceeded the price that consumers paid, giving rise to their feelings that the value proposition was inadequate, and their dissatisfaction with the available clothing. Clearly there was a discrepancy between the respondents' expectations and the actual performance of the clothing, which is addressed in the gap analysis section that follows.

A gap analysis of expectations versus performance of clothing attributes through the lens of the expectancy disconfirmation paradigm

A gap analysis was performed to determine the consumers' perceptions of clothing quality, based on a comparison of *expectations* and *performance* according to different clothing attributes within the expectancy confirmation paradigm. A statistically significant difference was 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), colour (p=0.000; *d*=1.02) and sizing (correct sizing, p=0.000; d=2.06 and variety of sizes, p=0.000; *d*=1.01) were significantly higher than their perceived performance.

When expectations exceed performance, the negative disconfirmation that occurs leads to negative quality perception or dissatisfaction (Oliver, 1980; Hawkins & Mothersbaugh, 2010; Hoyer *et al*., 2013). Figure 2 shows the gaps (negative disconfirmation) per attribute, between the clothing expectations of older females and the actual performance that manufacturers would need to fill in order to attract and satisfy such consumers.

The attribute indicating statistical significance with the largest effect size was price, showing that price was the biggest concern for the older female consumers in this study. Manufacturers need, therefore, to pay attention to construction and care of clothing so as to improve their durability and quality which could increase the value for money. Different items in the *factor* fabric (not prone to cause pilling; not prone to wrinkle; long-lasting) hinges on durability contributing to the quality of clothing. 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, style and fit. Respondents' needs were not met thus, they experienced negative quality perception with regards to the clothing attributes and/or dissatisfaction occurred. It is necessary
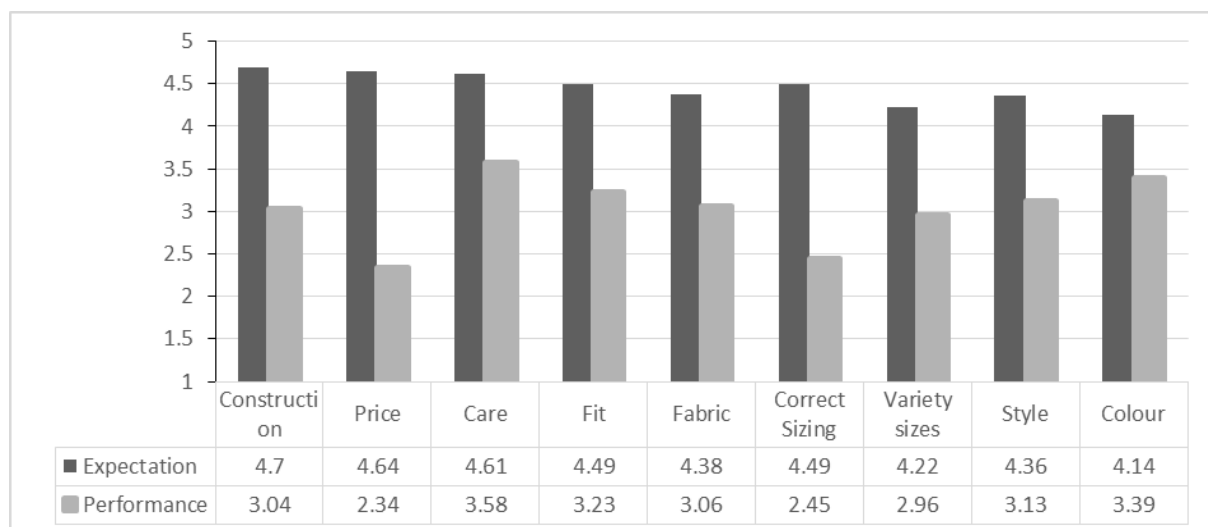

	Constructi on	Price	Care	Fit	Fabric	Correct Sizing	Variety sizes	Style	Colour
■ Expectation	4.7	4.64	4.61	4.49	4.38	4.49	4.22	4.36	4.14
■ Performance	3.04	2.34	3.58	3.23	3.06	2.45	2.96	3.13	3.39

FIGURE 2: GAP ANALYSIS OF RESPONDENTS' EXPECTATIONS AND THE PERCEIVED PER-FORMANCE OF CLOTHING FOR EACH ATTRIBUTE

for the clothing industry to improve these clothing attributes according to the needs of older female consumers, with the aim of improving their quality perception of clothing. Although older female consumers might spent less money on clothing they do represent a substantial proportion of the economically active consumer segment in South Africa and still growing rapidly. Consequently their satisfaction with clothing quality can only advance apparel manufacturers in the long term and might lead to more frequent apparel purchases.

Perceived quality of clothing

Respondents were asked to indicate their opinion of clothing quality in general. The results were as follows: 45% of respondents indicated that they felt neutral, while 38.6% rated clothing quality as good, 5% as excellent, and only 9.9% as poor and 1.5% as unacceptable. However the mean for general clothing quality yielded a value of M=3.36, indicating that the respondents overall felt neutral about it. Consumers buy less when satisfaction is low; and feeling "neutral" isn't going to make them take special or additional interest in actively seeking clothing purchases. Although respondents expectations exceeded performance which led to negative quality perception or dissatisfaction, their negative disconfirmation demonstrates that respondents perceived the quality of clothing inadequate. This corresponds with most of the average values obtained for the performance of the individual attributes (M=2.50-3.50), with price performance (including the items: affordable and value for money) and correct sizing (M<2.50) rated as poor (Table 1). Thus, the older female consumers' general opinion of clothing quality supports earlier findings relating to these attributes, further emphasising the fact that there is room for improvement, as shown in the consistently significant differences between respondents' expectations and their perception of performance of the clothing they had bought. Respondents' value consciousness combined with their dissatisfaction with clothing quality highlights the importance for clothing manufacturers to close the gap between expectations and performance when designing and creating garments for older female consumers. They need to be aware that lowering the price does not necessarily translate into perceptions of better value, however, as when the clothes match consumers' expectations, their perception of the value they

receive outweighs the price paid (Rath *et al.*, 2015).

Adjustments to raise quality for this market segment could result not only in satisfied consumers but also in higher demand and higher sales for retailers. The availability of more attractive clothes (i.e. fulfilling their needs) could help to redirect what disposable income they have from other things to the purchase of more clothing for themselves.

LIMITATIONS OF THE STUDY AND FUTURE RESEARCH

This study only involved participants from Tlokwe, who were not representative of the larger South African population, so results obtained could not be generalised. Future research can therefore use larger samples of the populations in various parts of the country, and employ random sampling for a more comprehensive distribution of respondents, to enable generalisation of the study to older South African female consumers. This study could not classify respondents according to the LSM (Living Standards Measure) segmentations, however it is recommended for future studies to map social economic status with clothing needs of older female consumers. Future research could also include older male consumers, and involve qualitative and quantitative studies, following the call, by Moschis *et al.* (2011) in particular, for further work on the entire older consumer segment. Although the results presented here, in relation to this sample, are not widely generalizable, they do provide insights that could be of value to retail and manufacturing industries in South Africa and elsewhere.

CONCLUSION AND RECOMMENDATIONS

Our study is the first that provides information about the perceptions of clothing quality held by older female consumers in South Africa. This study concluded that although these consumers' judgement of clothing quality was mainly neutral, the expectancy disconfirmation paradigm indicated a profound gap between the actually performance of clothing and respondents expectations thereof indicating a negative quality perception. Price, correct clothing sizing, and fabric in particular were the three attributes in which they felt that clothing quality fell short.

Even though the manufacturing of clothing is an emerging market that is vital for the country's economy, manufacturers seem not to be taking these consumers' needs into account. Despite the existence of clothing lines designed to suit a variety of consumer segments, one that is aimed specifically at the needs of older female consumers seems to be underexploited, which could suggest promising new opportunities for manufacturers and retailers. Key recommendations that would satisfy the requirements of the sample population in the present study are for the development of a clothing line that is more specifically customised for these consumers and their unique needs, especially including changing body shape and fragile skin.

ACKNOWLEDGEMENTS

REFERENCES

Anić. I. & Mihić, M. 2015. Demographic profile and purchasing outcomes of fashion conscious consumers in Croatia. *Ekonomski Pregled,* 66 (2):103-118.

AT Kearney. 2013. *Understanding the needs and consequences of the ageing consumer,* viewed 30 November 2017, from https://www.atkearney.com/documents/10192/682603/Understanding+the+Needs+and+Consequences+of+the+Aging+Consumer.pdf/6c25ffa3-0999-4b5c-8ff1-afdca0744fdc.

Babbie, E. & Mouton, J. 2010. *The Practice of Social Research*. Cape Town: Oxford University Press.

Beneke, J., Frey, N., Chapman, R., Mashaba, N. & Howie, T. 2011. The grey awakening: a South African perspective. *Journal of consumer marketing*, 28(2):114-124.

Blythe, J. 2008. *Consumer behaviour*. London: Thompson Learning.

Brown, P. & Rice, J. 2001. *Ready-to-wear apparel analysis*. 3rd ed. Upper Saddle River: Prentice Hall.

Cant, M., Brink, A. & Brijball, S. 2009. *Consumer behaviour*. Cape Town: Mills Litho.

Chea, P. 2011. *Gender differences in the fashion consumption and store characteristics in Swedish clothing stores*. Swede: University of Boras (Dissertation – MBA).

Cole, C., Laurent, G., Drolet, A., Ebert, J., Gutchess, A., Lambert-Pandraud, R., Mullet, E., Norton, M.I. & Peters, E. 2008. Decision making and brand choice by older consumers. *Marketing letters,* 19:355-365.

De Klerk, H.M. & Lubbe, S. 2008. Female consumers' evaluation of apparel quality: exploring the importance of aesthetics. *Journal of fashion marketing and management,* 22:36-50.

Delport, C.S.L. & Roestenburg, W. 2011. Quantitative data-collection methods: Questionnaires, checklists, structured observation and structured interview schedules. In: *Research at grass roots: For the social sciences and human services professions, 4th ed.* A.S.

De Vos, H. Strydom, C.B. Fouché & C.S.L. Delport *eds*. Pretoria: Van Schaik.

De Vos, A.S. & Strydom, H. 2011. Scientific theory and professional research. . In: *Research at grass roots: For the social sciences and human services professions, 4th ed.* A.S.

De Vos, H. Strydom, C.B. Fouché & C.S.L. Delport *eds*. Pretoria: Van Schaik.

Field, A. 2013. *Discovering statistics using IBM SPSS statistics*. London: Sage.

Giacalonea, D., Wendin, K., Kremer, S., Frøsta, M.B., Bredie, W.L.P., Olsson, V., Otto, M.H, Skjoldborg, S., Lindberg, U. & Risvik, E. 2016. Health and quality of life in an aging population – Food and beyond. *Food and Quality Preference*, 47:166-170.

Goldman, A., McKay, B., Mojet, J. & Kremer, S. 2014. Meeting the food needs of the ageing population – implications for food science and technology. *IUFoST Scientific Information* Bulletin (SIB).

Guiot, D. 2001. Antecedents of subjective age biases among senior women. *Psychology and marketing,* 18(10):1049-1071.

Güzel, S. 2013. Clothes preferences and problems of consumers aged 65 and above. *The Macrotheme Review: A multidisciplinary journal of global macro trends*, 2(5):168-181.

Hawkins, D.I. & Mothersbaugh. 2010. *Consumer behaviour. Building marketing strategy*. 11th ed. Boston: McGraw-Hill/ Irwin.

Hines, J.D. & Swinker, M.E. 2001. Knowledge: a variable in evaluating clothing quality.

International Journal of Consumer Studies, 25 (1): 72-76.

Hoyer, W.D., MacInnis, D.J. & Pieters, R. 2013. *Consumer behaviour.* 6th ed. South-Western: Cengage Learning: OH.

Hugo, S.H. & Van Aardt, A.M. 2012. Evaluative criteria applied by South African female fashion consumers when purchasing casual daywear. *International journal of consumer studies,* 36:460-471.

Hwang, J. 2016. Organic food as self-presentation: The role of psychological motivation in older consumers' purchase intention of organic food. *Journal of Retailing and Consumer Services,* 28:281-287.

Isitalahiri & Siddika, H. 2014. *Apparel Shopping Behavior: A Snapshot*, viewed 20 November 2017 from http://pioneerjournal.in/ conferences/mapping-for-excellence/18th-national-conference/4133-apparel-shopping-behavior-a-snapshot.html.

Kadolph, S.J. 2014. *Textiles.* 11th ed. Harlow: Pearson.

Kasambala, J. 2014. *Retailers, you're selling more to women than clothes,* viewed 5 December 2017 from https://mg.co.za/ article/2014-08-15-retailers-youre-selling-more-to-women-than-clothes.

Kincade, D. H. & Gibson, F.Y. 2010. *Merchandising of fashion products.* Prentice Hall: New Jersey.

Laitala, K., Boks, C. & Klepp, I.G. 2015. Making clothing last: a design approach for reducing the environmental impacts. *International journal of design*, 9(2):93-107.

Levy, M. 1999. Revolutionizing the Retail Pricing Game. *Discount Store News*, 38 (September):15.

MacDonald, N.M., Lazorchak, S.A. & Currie, K.M. 2009. African American women's satisfaction with the design and marketing of ready to wear clothing. *Family and consumer sciences research journal,* 37:253-265.

Makhanya, B.P., De Klerk, H.M., Adamski, K., & Mastamet-Mason, A. 2014. Ethnicity, body shape differences and female consumers' apparel fit problems. *International journal of consumer studies,* 38:183-191.

Maree, K. & Pietersen, J. 2016. Sampling. In Maree, K. (Ed.). *First steps in research.* 2nd ed. Pretoria: Van Schaik Publishers.

Moschis, G.P., Mosteller, J. & Fatt, C.K. 2011. Research frontiers on older consumers' vulnerability. *Journal of consumer affairs,* 45:467-491.

Nam, J., Hamlin, R., Gam, H.J., Kang, J.H., Kim, J., Kumphai, P., Starr, C. &

Richards, L. 2007. The fashion-conscious behaviours of mature female consumers. *International journal of consumer studies,* 31:102-108.

Neuman, W.L. 2011. *Social research methods: Qualitative and quantitative approaches.* 7th ed. London: Pearson.

Oliver, R.L. 2014. *Satisfaction: a behavioural perspective on the consumer* 2nd ed. New York: Routledge.

Oliver, R.L. 1980. A cognitive model for the antecedents and consequences of satisfaction decisions. *Journal of marketing research,* 17:460-469.

Palamutcu, S. & Goren, I. 2015. Functional Textile Preferences of Elderly People. *Mediterranean Journal of Social Sciences,* 6 (2):279-285.

Pietersen, J. & Maree, K. 2016. Standardisation of a questionnaire. In Maree, K. (Ed.). *First steps in research.* 2nd ed. Pretoria: Van Schaik Publishers.

Portacolone, E. 2013. The notion of precariousness among older adults living alone in the U.S. *Journal of aging studies,* 27:166-174.

Prinsloo, N. 2011. *Consumer satisfaction with food labels during the pre-purchase in-store evaluation: a study in Gauteng.* Potchefstroom: NWU. (Dissertation – Masters).

Rath, P.M., Bay, S., Petrizzi, R. & Gill, P. 2015. *The why we buy. Consumer behaviour and fashion marketing.* 2nd ed. Fairchild: NY

Rousseau, G.G. & Venter, D.J.L. 2014. Mall shopping preferences and patronage of mature shoppers. *South African Journal of Industrial Psychology/ SA Tydskrif vir Bedryfsielkunde*, 40 (1) 1175:1-12.

Rosenau, J.A. & Wilson, D.L. 2006. *Apparel merchandising.* Fairchild: NY.

Schiffman, L.G. & Wisenblit, J.L. 2015. *Consumer behaviour.* 11th ed. London: Pearson Prentice-Hall.

Seo, K. & Fiore, A.M. 2016. Effect of the fitting room environment on older clothing shoppers. *Journal of retailing and consumer services*, 32:15-22.

Shen, B., Wang, Y., Lo, C K.Y. & Shum, M. 2012. The impact of ethical fashion on consumer purchase behaviour. *Journal of Fashion Marketing and Management*, 16(2), 234 -245.

Slepian, M.L., Ferber, S.N., Gold, J.M., Rutchick, A.M. 2015. The cognitive consequences of formal clothing. *Social psychology and personality science,* 6(6):661-668.

Solomon, M.R. 2013. *Consumer behaviour – buying, having and being.* 10th ed. New Jersey:

Older female consumers' clothing quality perception: expectations and performance

Pearson/Prentice-Hall.

SPSS Inc. 2015. IBM SPSS Statistics Version 22, Release 22.0.0, Copyright© IBM Corporation and its licensors, viewed 3 October 2015 from http://www-01.ibm.com/software/analytics/spss/.

Starkey, S. & Parsons, J. 2016. Inclusive apparel design for baby boomer women. *International Textile and Apparel Association* (ITAA) *Annual Conference Proceedings* 118.

Statistics South Africa. 2002. *South African Statistics*, viewed 5 December 2017 from http://www.statssa.gov.za/publications/SAStatistics/SAStatistics2002.pdf.

Statistics South Africa. 2012. *Social profile of vulnerable groups 2002–2012.* Pretoria: Statistics South Africa. (No. 03-19-00).

Statistics South Africa. 2017. *Media release: Social profile of older persons 2011-2015 report,* viewed 29 November 2017 from http://www.statssa.gov.za/?p=9698.

Steyn, H.S. Jr. 2000. Practical significance of the difference in means. *South African journal in industrial psychology*, 26:1-3.

Sweeney, J.C. & Soutar, G.N. 2001. Consumer perceived value: the development of a multiple item scale. *Journal of retailing*, 77(2001):203-220.

Swinker, M.E. & Hines, J.D. 2006. Understanding consumers' perception of clothing quality: a multidimensional approach. *International journal of consumer studies,* 30:218-223.

Tyagi, I. & Goel, A. 2013. Factors Affecting Clothing Choices of Elderly Females. *Indian Journal of Gerontology*, 27(2):307–319.

Van der Merwe, D., Bosman, M., Ellis, S., Van der Colff, N. & Warnock, M. 2014. Consumers' knowledge of textile label information: An exploratory investigation. *International journal of consumer studies,* 38:18-24.

Van Staden, J. 2012. *The use of clothing labels by female black low-literate consumers*. Potchefstroom: NWU. (Thesis - PhD).

Vianna, C. & Quaresma, M. 2015. Ergonomic issues related to clothing and body changes of the new elderly women. *6th International Conference on Applied Human Factors and Ergonomics (AHFE 2015) and the Affiliated Conferences*, 5755-5760.

Visser, B., Van Wyk, R., Senekal, M. & Uys. 1993. Clothing needs and related problems of female social pensioners in Stellenbosch. *Southern African Journal of Gerontology*, 2 (2):17-22.

Yeh, S.J. & Sing, K.L. 2004. Living alone, social support, and feeling lonely among the elderly. *Social behaviour & personality: an international journal,* 32:129-138.