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**Apparel sizing and fit preferences and problems of plus-size
Swazi working women**

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M Consumer Science (Clothing Management)**

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October 2010

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Swazi working women**

by

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**Dissertation submitted in partial fulfilment of the requirements for a
Master's degree in Consumer Science (Clothing Management)**

**In the Faculty of Natural and Agricultural Sciences
Department of Consumer Science
University of Pretoria**

Supervisor: Prof H M de Klerk

October 2010



DECLARATION

I declare that this dissertation, which I hereby submit for a Master's degree in Consumer Science (Clothing Management) at the University of Pretoria, is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution.

.....

Minah Thembi Nkambule

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ABSTRACT

Apparel sizing and fit preferences and problems of plus-size Swazi working women

by

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for a Master's degree in Consumer Science

Clothes are not only for body protection and covering, but they also have social and emotional aspects attached to them. For them to be appealing, they need to have a proper fit while remaining fashionable and aesthetically pleasing to the eye (Anderson, Brannon, Ulrich, Presley & Woronka, Grasso & Gray, 2000; Yoo, 2003). Swaziland has a large population of plus-size women who are working in different departments and need to dress for the job on a daily basis. Their apparel sizing and fit preferences and problems are not known. This research investigates apparel sizing and fit preferences and problems of the plus-size Swazi working women. It concentrates specifically on the functional, aesthetic and economic fit preferences, as well as on determining size labelling preferences, knowledge and clothing styles preferences and problems.

This was a descriptive study using a quantitative approach. Purposive sampling was used. This design was chosen as it focused on studying plus-size working women who were experiencing fit problems with the apparel they bought from local apparel retail shops. A survey using a questionnaire to collect data was done in exploring apparel sizing and fit problems and preferences of plus-size working women of Swaziland. A sample of plus-size Swazi working female teachers (n = 249) between the ages of 25 and 60 years who had indicated that they wore clothes of size 16 to

28+ or size 40 to 52+ participated in the study. A self-administered questionnaire was used to answer set objectives.

The results of the study indicated that the plus-size Swazi working women preferred clothes that were functionally comfortable, fitted well and were made in comfortable fabric. They also indicated that they preferred clothes that were well sized, had a fit that was functional, sensually and emotionally pleasing in respect of style, the fabric used and comfort. The study also reflected that plus-size Swazi working women experienced sizing and fit problems in most of the apparel they bought from local retail outlets. A high number of the plus-size women consumers reported experiencing difficulty in finding clothes that were aesthetically pleasing. They could not find clothes that were fashionable in their size nor clothes that could satisfy their emotional and symbolic egos. A high number of respondents also indicated that they experienced a lot of fit problems on several areas of their bodies. The waist, hips, buttocks, abdomen and upper arms seemed to be the most problematic body areas respondents reported to be having fit problems. The lengths were also a challenge as most had problems with sleeve and pants length. Findings in this study also reflected that sizing in clothes was still a major problem for most of the plus-size consumers. Many of the respondents had problems understanding information on the size tags. The sizing systems were most probably confusing for the consumer as some came in varying numbers and letters. This study may contribute to a better understanding of sizing and fit preferences and problems experienced by the plus-size Swazi working women with regard to work apparel. Consumers come in different shapes and sizes. The clothing producer has a task of ensuring that clothes are made to fit most of the prevailing figure types, rather than the common ideal figure.

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LIST OF ACRONYMS

- SADC – Southern African Development Community
STMA – Swaziland Textile Manufacturing Authority
SWASA – Swaziland Standards Authority



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CHAPTER 1 THE STUDY IN PERSPECTIVE

1 INTRODUCTION

Today's world has become very competitive and challenging to women. The last decade has seen many women filling higher paying jobs which were previously dominated by male professionals (Mandelson in Yoo, 2003). Working women are generally conditioned by society and culture to pay attention to their appearance and how they portray themselves, especially in the workplace.

According to Anderson, Brannon, Presley and Woronka (2000), the shapes and sizes of women have been changing over the past decade, while sizing standards and garment proportions used by apparel industries have not. This has seen especially many plus-size women experiencing many problems with regard to the fit of clothes. Wang Meng (2007) defines plus-size women as apparel consumers who dress in clothes of size 16 and above. The major problem mostly experienced by this group has been the inability to find well-fitting, fashionable clothes that fulfil their functional, economic and aesthetic needs. According to Goldsberry, Shim and Reich (1996), fit is one important aspect of clothing that contributes to a good feeling. Well-fitting clothes brings out an attractive appearance, freedom of movement and comfort, which in turn create positive feelings in the wearer. Plus-size women are generally stigmatised for being obese, thus they tend to have a negative image of their bodies. Extensive studies done by Kurt Salmon (in Alexander, Connell & Presley, 2005) indicated that fit has been the most frequently reported problem experienced by apparel consumers as they were doing their shopping. Plus-size women have been the most affected group in this respect.

Another aspect that causes sizing and fit problems for the plus-size woman, according to Brown and Rice (2001:146), is lack of standardised sizing systems. Current sizing systems, which differ from country to country, shop to shop and from one manufacturer to another, have resulted in wide size variation in the market. The poor sizing systems used by manufacturers create more fit problems, as consumers have to try on a garment before buying it or alter the garment before wearing it to

ensure a good fit (Labat & DeLong, 1990). There is also a significant amount of returns, clothes that get dirty during the fitting process, or torn due to over-handling. These spoiled clothes and returns incur unquantified losses to the apparel retailer (Anderson *et al.*, 2001). Workman (1991) adds that retailers are also finding it hard to keep in business as more merchandise is returned due to poor sales on clothes that have a poor fit.

Swaziland has a large population of plus-size working women who need to dress appropriately for work on a daily basis. Their specific apparel sizing fit problems, needs and preferences are not known. According to Du Preez and Visser (2003), the South African apparel industries supply and sell most of its apparel in the Southern African Development Community (SADC) countries, including Swaziland. About 90% of clothing sold in Swaziland comes from South Africa. On the other hand, Workman (1991) points out that for a population to ensure a good fit in clothes, there is a need for every country to update its anthropometric population data as population characteristics changes with time. Each retailer needs to understand, segment and profile their customers, so as to provide clothes that are most preferred by their consumers. That would significantly reduce fit problems for the plus-size woman. As Swaziland imports the bulk of its apparel from South Africa, there is a need for researched documented literature regarding the apparel sizing and fit preferences and problems of the plus-size Swazi working woman.

The problem is that there is currently no documented information on plus-size Swazi women's preferences with regard to the size and fit of their clothes and on the problems that they encounter with the fit of apparel that is currently available in stores. This leaves manufacturers and retailers in the dark regarding the preferences and problems of a valuable consumer target market, whose size and body shapes do not necessarily resemble the sizes and shapes of the South African female population for whom most of the custom-made clothes sold in Swaziland, were initially aimed at.

The purpose of the study is therefore to explore and describe the apparel sizing and fit preferences and problems of the plus-size, adult Swazi working women.

The findings of this study will help apparel developers and manufacturers to develop apparel with good fit, in fashionable styles preferred by the adult plus-size Swazi working women in relation to different sizes and body shapes based on the African figure (Mac-Duff & Smith, 2001). Clothing retailers will benefit in that they will know which sizes, styles and lines they will need to include in stock to cater for each consumer segment so as to avoid stock glut. Apparel consumers will also benefit as their sizing, fit and styling problems and preferences will be addressed by product developers. This will enable them to get the clothes they prefer from local retailers (Zangrillo, 1990:10). Academics could also benefit from this knowledge as they teach future designers and buyers to select merchandise most appropriate for their target market (Hisey, 2002).

2 THEORETICAL BACKGROUND

Consumers' spending on clothing has increased in the last decade as more women are joining the working force at a young age (Yoo, 2003). These individuals are determined to look presentable at all times. To do this, they need clothing that is functional, aesthetically pleasing and affordable. Clothing is not only developed to cover the body, but must fit to enhance the beauty of the individual (Stamper, Sharp & Donnel, 1991:297). A garment may be well constructed and have all the excellent functional and aesthetic features which may attract the attention of the consumer, but if it does not fit well, the consumer may not like it. Fit is defined as the way a garment conforms to the body or the relationship between the garment and the body, and is commonly seen as one of the most important indications of the quality of clothes (Brown & Rice, 1998:139).

Fit, according to Marshall, Jackson, Stanley, Kefgen and Tourchie-Specht (2004:127), should define the person's values, needs and preferences. A well-fitting garment must be functional. It should allow freedom of movement, be comfortable to wear, and have sufficient room for movement. A garment with a good fit should also be aesthetically pleasing, which means it should stimulate the wearer's senses, emotions and cognitions. Rudd and Lennon (2001) point out that the aesthetics in a garment addresses the activated processes or multi-sensory characteristics activated by the beauty of a garment in relation to what the consumer desires.

Aesthetic characteristics of a garment come in sensory, symbolic and emotional form, and can be greatly enhanced by the fit of the garment (Fiore & Kimle, 1998:26).

In ready-to-wear apparel, fit is one of the key factors shaping and determining consumer preference in clothes (Brown & Rice, 1998:154). Fit further influences other people's perceptions of one and tends to boost one's emotions. Fit preferences, according to Alexander *et al.* (2005), are subjective and vary from person to person. Defining and interpreting good fit is difficult and can only be defined by each individual. The apparel fit preferences of consumers differ greatly and are mostly influenced by attitudes, culture, perceptions, geographic location, social affiliations, education level of the individual as well as globalisation. Attitudes, according to Alexander *et al.* (2005), play a crucial role in determining individual preferences. The attitudes consumers have towards clothing fit, colour, fabric, design, brand, price and store quality greatly influence their individual apparel choices and preferences. Numerous studies have shown that poor fit in clothes is one major factor that has seen a lot of clothes being returned to retail outlets (Anderson *et al.*, 2000). Plus-size women are the most affected. They have indicated that they are not happy with the fit in clothes they buy for work from local clothing retail outlets, as most of it does not fit well (Zangrillo, 1990:3).

Consumer exposure to a lot of varying styles, sizes, colours and fabrics from local apparel outlets as well as from the media, has made apparel selection more of a problem for the consumer (Chae, Black & Heitmeyer, 2006). If fit problems are not addressed by the product developer in the production stage, it is likely that the emotional, sensory and symbolic preferences of consumers in relation to the garment fit will be greatly compromised. Kaiser (1998:107) points out that consumers will purchase only those products which give them maximum fit satisfaction and adhere to the elements that impact on fit, namely: ease, fabric grain, line, set and balance, as well as those that satisfy their emotional and psychological needs, often irrespective of price.

According to Brown and Rice (2001:146), many fit problems are not only caused by clothing manufacturers through using unrevised sizing systems, ideal figures, and

vanity sizing. It is also a result of the individual characteristics of the wearer. These characteristics include age, gender, cultural influence, type of body/figure, body size, posture, lifestyle trends, current fashion trends as well as personal clothing preferences of the person. Television, magazines as well as other media forums transmit vast fashion messages to women to emphasise that what they wear is important.

Fit problems of the plus-size women also often arise from variation in body types, posture and body size of each individual. These variations in the body tend to distort the fit of the garment, making the garment not to balance on the body. Proper sizing of a garment plays a very important role in camouflaging these body variations to ensure a good fit in a garment. Garments that are sized properly and according to fashion style and fabric used, and a garment that conforms to body measurements, fits well (Brown & Rice, 2001:153; Kinley, 2003). Use of sizing systems created from outdated anthropometric data as well as a lack of standardised size labelling systems by clothing manufacturers create a discrepancy in the sizing and fit of clothes (Ashdown, 1998). Current size labels on women's garments lack adequate information to guide consumers in proper selection of clothes. The use of numerical sizing codes usually do not relate to body dimensions of the individual, as they have been generalised. Women see the poorly sized garment that does not fit as a message that their bodies are less than perfect. Most plus-size consumers complain that sizing in clothes is very inconsistent. This inconsistency in sizing has resulted in confusion between manufacturers, consumers and retailers (Ashdown, 1998). Plus-size women are the ones who get more frustrated as it is not easy for them to get sizes in most apparel shops as retailers aim for the most fluid and profitable category. Most size labels attached to consumer garments do not have enough information on the basic body dimensions for which the garment has been designed. Consumers have to try on several different sizes before finding garments that fit. Apparel fit problems are costly and frustrating for the consumer, manufacturer and retailer (Chun-Yoon & Jasper, 2005). To understand the role of sizing in determining a good fit, one has to have enough and relevant knowledge on size labelling. Size label codes found on the garment, according to Anderson *et al.* (2001), communicates the size most likely to fit the individual before the person actually tries it on. Different manufacturers use their own size labelling systems to attract

consumers. This confuses most consumers and this leads to size variation from shop to shop. According to Brown and Rice (1998:43), incorrect sizing is the most common reason why plus-size female consumers return ready-to-wear apparel they had bought.

If clothing producers and retailers can take the initiative of understanding the plus-size Swazi women’s clothing preferences, and work towards solving their fit problems, one can assume that more and more women in this group would be seen frequenting most apparel shops. This will not only benefit the consumer, but the plus-size market will also pick up and generate more revenue to the clothing industry.

3 CONCEPTUAL FRAMEWORK, PROBLEM STATEMENT AND OBJECTIVES

The conceptual framework below is a proposed structure for the study. It illustrates the sizing and fit preferences consumers may have on garment fit and problems caused by poor sizing and fit in clothes. It also indicates the numbered objectives.

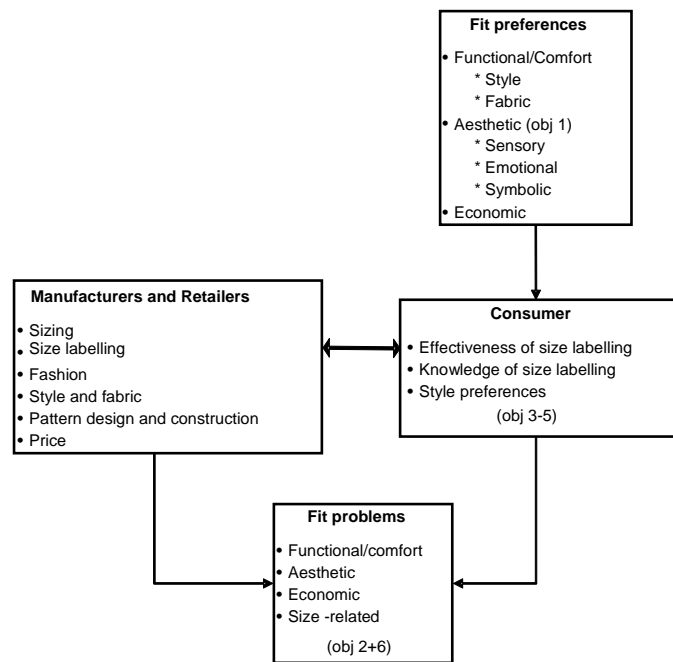


Figure 1.1: Conceptual framework of sizing and fit preferences and problems of the plus-size Swazi working women

It is clear from the schematic conceptual framework (Figure 1.1) that two main parties are involved in sizing and fit issues relating to the plus-size Swazi woman. On the one hand there are the manufacturers and retailers who are responsible for providing clothes that are correctly sized for this target market and that are fashionable and with a style and fabric choice that contribute to a comfortable and aesthetic fit. The apparel is also fashionable, designed and constructed with the elements of fit in mind, that clearly communicate the size to the consumer and that are affordable.

On the other hand, there is the Swazi plus-size female consumer with her specific functional, aesthetic and economic preferences regarding the fit of her clothes. There are also her preferences for a size labelling system, her knowledge on size labelling as well as her specific style preferences that she feels will complement her body.

Both parties may play a role in the problems that the plus-size Swazi woman experience with the fit of her clothes. This research concentrates specifically on the plus-size female Swazi consumer, and more specifically on her functional, aesthetic and economic fit-related preferences, her size labelling preferences and knowledge, styles that she prefers for her specific body, functional, aesthetic, economic and size-related problems, as well as specific fit problems. Information on these aspects could assist manufacturers and retailers in providing well-fitted clothes that are in line with the plus-size Swazi woman's fit-related preferences, while decreasing the number of problems that she experiences with the apparel that is currently available in clothing stores.

This study seeks to explore and describe sizing and fit preferences and problems of the plus-size Swazi working women with regard to work apparel.

The following research objectives were formulated for the study:

Objective 1

To explore and describe the importance of functional, aesthetic (sensory, symbolic, emotional) and economic apparel preferences of plus-size Swazi working women.

Objective 2

To explore and describe the functional, aesthetic (sensory, symbolic and emotional), economic and size-related apparel problems of the plus-size Swazi working women.

Objective 3

To determine the apparel style preferences of the plus-size Swazi working women.

Objective 4

To determine how plus-size Swazi working women rate the effectiveness of various apparel size description systems.

Objective 5

To determine plus-size Swazi working women's knowledge on apparel size labelling.

Objective 6

To explore and describe specific apparel fit problems experienced by the plus-size Swazi working women with regard to their work apparel.

4 UNIT OF ANALYSIS

The units of analysis of this study were plus-size working female teachers between the ages of 25 and 60 years. They are teaching in urban and peri-urban schools of Swaziland within the Mbabane and Manzini town districts, teaching in different Primary, Secondary and High schools of Swaziland. The target groups were plus-size teachers who were permanently employed. In this study, the respondents selected to the plus-size category, were those teachers who had indicated that they wore clothes sized from size 16 to 28+ or size 40 to 52+.

For this study, attributes for the demographic variables were classified as age 25 – 40 years (young adults) and 41– 60 years (mature adults). Their level of education ranged from certificates to diplomas, bachelor degrees and masters degrees. They indicated that they commonly wore clothes of size 16 and above for most of their work clothes, which included skirts, jackets, pants and blouses. They were willing to spend more than Emalangenani 200 (R200) per month on clothes for work. The type of

dressing style they commonly wore for work was basically business casual with no strict dressing code. They indicated that they bought most of their work apparel from supermarkets, chain stores, dressmakers as well as from boutiques. They rated fit from the chain stores and dressmakers as moderate, while the fit of clothes from boutiques was rated as good to excellent.

5 SAMPLING PROCEDURE AND DATA COLLECTING METHOD

This was a descriptive study using a quantitative approach. A survey was used to explore apparel sizing and fit preferences and problems of the plus-size working women of Swaziland. Purposive sampling was used for this study. This research design was chosen as it focused on studying plus-size working women who were experiencing fit problems with the apparel they bought from local apparel retail shops.

Two hundred and forty nine (249) respondents participated in the study. A self-administered questionnaire was designed to solicit information on sizing and fit preferences as well as problems that the plus-size working women experience with ready-to-wear clothes sold in local retail outlets. All female teachers who were willing to undertake the exercise, even if they were not under the plus-size category, were given questionnaires to answer. This was done to avoid stigmatisation of the plus-size group.

The questionnaire was divided into three sections (Sections A, B and C). In Section A, respondents had to provide demographic information. In Section B, respondents were asked to rate the importance of selected statements on functional, economical and aesthetic preferences, as well as on style and size labelling systems. In Section C, plus-size working women had to indicate the frequency of their encountering a specific fit problem in the clothes they buy for work.

6 PRESENTATION AND STRUCTURE OF THE DISSERTATION

Chapter 2

This chapter provides an overview of the theory on fit and concepts of fit, elements of fit which include garment ease, design ease and wearing ease. Elements of fit also include fabric grain, line, garment set and balance. Fashion, another factor that affects fit, is also included. Other areas that affect fit such as the role of body form, the role of sizing for good fit and how it is linked to the manufacturer, the retailer and the consumer are addressed. The role of the consumer's knowledge on size labelling provided an outline on why consumers have to have knowledge of the sizing systems and size labelling information found on clothes. The role of consumer preferences was also discussed. This included functional, aesthetic (sensory, emotional and symbolic) as well as economic preferences of the consumer.

Chapter 3

This chapter presents the research methodology that was used in this study. The conceptual framework of the study is presented to illustrate the variables that were studied. The research problem is stated, followed by the objectives of the study. Detailed sections on research strategy, research design and sampling plan which show the plan of the study are outlined, including operationalisation. Ways of validating and ensuring reliability of the study are outlined, as well as ethics and how the data will be presented.

Chapter 4

An explanation is provided of the results. At this stage the results are interpreted. Results of the demographic characteristics of the study are analysed. The data is reported and analysed according to the objectives of the study to get answers to the research questions. Results are presented in pie charts, tables and bar charts and are then interpreted.



Chapter 5

The conclusions are presented, the research is evaluated and the implications and recommendations are discussed. Some suggestions for future research are provided.

British English is used throughout the dissertation, while referencing is done according to the Harvard method adopted by the Department of Consumer Science, University of Pretoria.

CHAPTER 2 LITERATURE REVIEW

1 INTRODUCTION

Fit in ready-to-wear apparel is the key factor that shapes and determines consumer preference in clothes (Brown & Rice, 2001:153). Apparel that has been appropriately sized and fits the body contours of the individual well, is usually preferred by the consumer. The way the body is dressed and presented makes a statement and conveys the individual's physical, expressive and symbolic characteristics, which dictate and guide the person's preferences in clothes.

A garment may be well constructed and have all the excellent functional and aesthetic features which may attract the attention of the consumer, but if it does not fit, the consumer may not like it. Fit, according to Marshall *et al.* (2004:127), should define the person's values, needs and preferences. Apparel that has a good fit is functional. The consumer does not only keep it in the wardrobe but attractively coordinates it with other clothes to improve her self-image and appearance. Poor fitting clothes attract negative attention from people and make the individual feel uncomfortable (Anderson *et al.*, 2000).

Functional and well-fitting clothes should have all the elements of good fit. Plus-size women consumers complain a lot about garment fit (Kadolph, 1998:33). Due to their size and different body proportions, finding clothes with good fit has become a problem for them. They are forced to try on several garments in a shop so as to get a garment that fits before buying it. A poor labelling method used by apparel manufactures and chain stores as well as limited knowledge on size labelling have created more fit problems for the apparel consumer (Stamper *et al.*, 1991:296).

To address the apparel fit preferences and problems of the plus-size consumer and to reduce spoilt garments and returns from ill-fitting clothes, apparel retailers and developers need to have some understanding of what the plus-size consumers' fit problems are and what the individual prefers with regard to apparel fit. Anderson *et al.* (2001), emphasises that the understanding of consumer preferences could

harmonise differences of thought in relation to sizing and fit between apparel developers, retailers and consumers, so as to objectively address the apparel fit preferences and problems of the plus-size consumer.

2 THE CONCEPT OF FIT

Fit is defined as the way a garment conforms to the body or the relationship between the garment and the body. A well-fitting garment allows freedom of movement, is comfortable to wear and has sufficient room for movement. It does not leave wrinkles, is not baggy, and is fashionable and pleasing to look at (Stamper *et al.*, 1991:297). These fit qualities of the garment tend to appeal and create confidence in the wearer and also contribute to her feelings of self-worth and self-esteem (Marshall *et al.*, 2004:118-119). Garments that fit well look aesthetically pleasing and tend to meet the functional as well as the emotional needs of the apparel consumer.

Perfectly fitting garments are therefore attractive, enhance the wearer's appearance and contribute to one's psychological and social well-being while improving one's self-esteem and overall professionalism. Good fitting clothes also fall smoothly over body contours without clinging, pulling, binding or twisting, while drawing attention to the most attractive areas of the body (Brown & Rice, 1998:30; Rasband & Liechty, 2006:3). Poor fitting clothes on the other hand tend to focus on negative features of the body, gapes easily, creases, wrinkles and draws attention to the wearer. This may result in a feeling of insecurity and total discomfort for the individual (Brown & Rice, 1998:39; Marshall *et al.*, 2004; 320; Rasband & Liechty, 2006:4).

Apparel fit problems are costly and frustrating for the consumer, manufacturer and retailer. Losses due to poor fit are reflected by poor sales for the retailer and lost time wasted in the fitting room by the consumer (DesMarteau, 2000). The consumer on her part tends to get desperate when she cannot find clothes that fit. Her shopping trips become few and shopping becomes a burden rather than a pleasure. A lot of hours are spent in the fitting room with very little results. This greatly drains the consumer emotionally and creates depression (Alexander *et al.*, 2005).

For fit to be functional, enough ease needs to be incorporated during the design stage. This will improve the appearance of the garment, making it more comfortable to wear. Fit is paramount to fashion changes. As fashion changes there is a need to ensure that new fashionable garments are made to conform to the body form changes of the plus-size figure. Plus-size consumers are always particular about apparel fit, so much so that they are prepared to scout for fashionable, well-fitting apparel (Ashdown & DeLong, 1995; Brown & Rice, 2001:39). In a study done by Li (in Swinker & Hines, 2006), it was found that there was a high demand for garments that were fashionable and had a good fit.

Therefore, if apparel fit is a problem for most consumers worldwide, it can be assumed that it can also be a problem for the plus-size apparel consumer in Swaziland. For one to address fit problems, one needs to understand the determinants of good fit. A perfect fit in apparel, according to Stamper *et al.* (1991:297), is determined by elements of fit such as garment ease, fabric grain, line, set and balance. Other factors that determine good fit in a garment include fashion, body form or proportions, garment sizing, as well as consumer knowledge on size labelling.

2.1 Elements of fit

The elements of fit, according to Stamper *et al.* (1991:297), refer to all the characteristics of quality that describe good fit in a garment. These elements help consumers understand the concept of fit as well as analyse and provide solutions for fit issues identified in apparel. These elements include fabric grain, ease, line, balance and set.

2.1.1 Garment ease/comfort

Garment ease, according to Alexander *et al.* (2005), is defined as the difference between the actual body measurement and the measured size of the garment as intended by the garment designer and style of garment. Ease determines the comfort and fit of the garment. The amount of extra fabric allowed in a garment determines the amount of ease given to ensure that it is comfortable to wear. Comfort is one

functional apparel quality feature that plays a very important role in a garment's fit. Comfort also describes how the textile product interacts with the body. Using comfortable, easy to stretch fabric as well as knits creates and develops a lot of comfort in a garment. The way a garment has been assembled also determines the amount of comfort in a garment. Bulky seams and stiff threads create the same discomfort as if the garment has a tight fit (Kadolph, 1998:30). Comfort allows bending, stretching and easy movement of the body, while improving the general appearance of the garment (Brown & Rice, 1998:44).

Ease in clothes is determined by fashion style, the fabric used, body proportions, as well as the needs and preferences of the consumer. According to Alexander *et al.* (2005), each garment design has its own defined ease. The more style ease a garment has, the greater the range of body variations the style will fit. Exact body measurements without ease reduces the size of the garment. Garment ease comes as wearing ease and design ease (Brown & Rice, 2001:158; Marshal *et al.*, 2004:322).

Design ease

This is ease that is developed in the designing stage of the garment. This type of ease can be used to determine whether the garment will be loose fitting, semi-fitting or tight fitting. The looseness or tightness of a garment will further determine the way of controlling the fullness to be used. Design ease is usually incorporated in the form of princess lines or darts or pleats (Marshall *et al.*, 2004:322). When one is using stretch fabric one has to ensure that less ease is added during the design stage, whereas one needs to add more ease when using heavy fabric or when designing loose-fitting garments such as jackets (Westfall, 2002:88). Design ease improves the freedom of movement of the garment as well as the comfort and general style of the garment (Prevailing fashion and fashion demands) determine design ease in a garment, for example, the current fashion in fit is tight fitting, asking for less design ease. This may impose a problem for designing fashionable and well-fitting clothes that are still comfortable for the plus-size woman.

Wearing ease

According to Marshal *et al.* (2004:322), wearing ease refers to the ease allowed in a garment for comfort and easy movement. Wearing ease is added to body measurements to allow for body movements, expansion and comfort. Fit and garment sizes are influenced by the ease allowed between body and garment (Huck, Maganga & Kim, 1997). The garment needs wearing ease for comfort when sitting, bending and for most movements of body parts. Brown and Rice (2001:158) point out that exact body measurements without ease reduce the size of the garment during the construction stage and eventually makes the garment fit the body contours tightly. Different garment designs allow varying amounts of wearing ease. Very little wearing ease allowed into the garment shows wrinkles, especially on the hips, the bust area or on the area that is tight. Wrinkles on a garment mean poor fit (Westfall, 2002:88; Marshal *et al.*, 2004:334). Different garments designs allow varying amounts of wearing ease. If a garment has enough wearing or design ease, it tends not to strain, pull or bind uncomfortably against the body – all indications of poor fit (Goldsberry, Shim & Reich, 1996; Brown & Rice, 2001:158).

2.1.2 Fabric grain

Fabric grain determines the final appearance of the garment. The fabric used will determine the appearance and set of the garment. The way the fabric has been cut and assembled brings out some of the best functional and aesthetic qualities of the garment (Brown & Rice, 2001:38). Functional fabric features of the garment, according to Rasband (2002:26), include use of good quality fabric that has a weave that holds together, yarn that lies on the grain and at right angles to each other to allow good drape, firm fabric to support the body form and aesthetically pleasing fabric for a better feel, admiration and easy laundering. Grain controls the way the fabric hangs and drapes on the body. Fabric with a balanced grain makes a garment that has balance and a good fit.

During the design process the product developer needs to select and choose proper fabric which is suitable for the style and for a good drape. The fabric should be cut correctly on grain so as to avoid grain distortion. If fabric grain is well aligned to the

body, a perfect fit will be achieved, which will be characterised by a good drape, a comfortable garment as well as an aesthetically pleasing, well-fitting garment (Stamper *et al.*, 1991:297). Garments cut and sewn off grain do not balance on the body as they hang oddly and untidily on the body contours. The pulled, puckered or twisted, saggy or baggy outfit disfigures the individual, thus showing a garment that is ill-fitting and of poor quality (Rasband & Liechty, 2006:21). Fabric content is very important to apparel consumers. Apparel consumers are looking for fabric that is aesthetically pleasing and feels good to the skin. Plus-size individuals usually prefer tweed and textured fabric that hide figure flaws. Stretch blends are also welcomed as long as they do not hug the body (Lee, 2005).

2.1.3 Line

According to Stamper *et al.* (1991:298), line plays a very vital role in fit. Line in ready-to-wear apparel includes seams, fabric grain, darts, hems, tucks and pleats. In a garment, line tends to create a visual impression that makes the wearer look shorter or taller, heavier or thinner. If lines are straight and follow body contours, the total appearance and set of the garment will be achieved. Style lines, the size of the lines and their direction on fabric relate directly to apparel coordination and fit on the body. Parallel vertical lines tend to make one look thinner and taller. Poor fit in clothing leads to the formation of tight or loose vertical, horizontal and diagonal lines in the garment. Poor fit wrinkles caused by a tight-fitting garment are not easy to iron out. Body shape and size contribute positively to proper line alignment (Rasband & Liechty, 2006:8).

2.1.4 Garment set

Set is defined as the smoothness of the final appearance of a garment. Set is characterised by the absence of undesirable crosswise, lengthwise or diagonal wrinkles when the garment is on the body. Wrinkles in a garment provide a clue of a fitting problem. Horizontal wrinkles indicate that the garment is too tight above or below bulges. Vertical wrinkles indicate that the garment is too large. Diagonal wrinkles indicate that there are bulges at the shoulder or hip area. These are all indications of poor fit (Marshal *et al.*, 2004:334). Fit wrinkles are not easy to iron out.

Loose vertical wrinkles indicate that the garment is large around the body. These wrinkles form when fabric sags. Loose horizontal wrinkles indicate that the garment is too long. Tight wrinkles form when the fabric is strained due to too little fabric used. Set in a well-constructed garment is affected by grain, balance, line and ease. If a garment has a good set, its final appearance will be smooth and will follow the body contours easily without strain (Stamper *et al.*, 1991:299).

2.1.5 Balance

According to Rasband and Liechty (2006:13-14), balance is the symmetrical relationship of the garment to the body. A feeling of balance is achieved in a design if the garment shows qualities of being able to carry the weight of the body. Garments that are in proportion have parts that are similar in scale. When one space or area overpowers another, it is said to be out of proportion. When design details agree to one another in relation to mood and occasion, good balance will be achieved. Poor quality fit contributes to imbalance as it causes the garment to shift or sag on the body, making a garment to be lopsided (Rasband, 2002:6).

All these elements of fit contribute positively to the final and total appearance of the garment. If any of these elements are not used properly, fit problems are likely to crop up as these features determine the final look of the garment. Rasband and Liechty (2006:4) state that the characteristics of a garment which has an aesthetically and functional fit appearance, include: shoulder seams that rest smoothly on the shoulders, waist seams that rest on the natural waist of the body, darts that taper smoothly towards the fullest part of the body, vertical lines that are straight along the body, a garment that hangs without excess fullness, a garment that has a smooth even appearance, long sleeves that stop at the wrist bone, hemlines that fall at an attractive point on the leg or ankle, a garment that does not restrict the range of body movements, armhole seams that cross the shoulder joint at the end of the collarbone, armholes that are large enough to allow easy and free movement of the arm without binding or gaping in upper arm area, and closures that hang straight and smooth without wrinkles or gaping across chest, bust, back, abdomen or hip area.

Other factors than the above elements of fit that greatly influence fit in ready-to-wear apparel include fashion changes, body form variation, garment sizing variation, and consumer knowledge on size labelling, as well as individual preferences which can be functional, aesthetic and economic in nature.

2.2 The role of fashion

Fashion is another factor that greatly affects the fit of apparel. Fashion, according to Sproles and Burns (1994:5), refers to the continuing process of change in dress styles, representing what is acceptable. Fashion is followed by a large group of people at any given time. Fashion styles vary in the way they fit the body contours. The vast variety of styles allows people the opportunity for self-expression and individuality in dress. Fashion changes over time may dictate different standards of fit. Changes in fashion greatly affect consumer fit preferences. When straight lines and styles (slim silhouettes) are in fashion, fit around the hips is crucial. When showing muscle definitions, fashionable fit of clothing around the arms and thighs is more important. Despite the continuous and vast fashion changes that occur every year and every season, plus-size women have not lost the zeal of fashion taste (Schupak & Macluaghlin, 2000; Marshall *et al.*, 2004:115).

North, De Vos and Kotze (2003) point out that those women who are continuously exposed to fashion, tend to respond more to fashion trends than those who are not. Television, magazines as well as other media forums transmit strong fashion messages to women, emphasising that what they wear is important to them. According to Fiore and Kimle (1998:41), if the garment fits well, and displays aesthetic fashion features as well as functional characteristics of appearance and comfort, the woman's emotions are lifted as the garment is put on, and she feels confident and proud wearing it.

According to Brown and Rice (2001:138), fashion comes and goes. Some fashions may be flattering to one body type and some may not. Clothes that have a simple design, line as well as shape with minimal details, tend to maintain good fit. Plus-size women have been victims of fashion. Finding attractive styles in their size has been an ongoing problem. Rasband and Liechty (2006:21) state that plus-size consumers

have more style problems than normal weight individuals, as the variety of styles in the market seldom cater for large sizes. The wide variation in body shapes within the plus-size category as well as quick drastic fashion changes has seen the plus-size woman struggling to get apparel with style and fit to suit her desired preferences. Zangrillo (1990:9) further points out that plus-size women admire and desire to have stylish clothes, just like their smaller sized counterparts.

Despite fashion style problems experienced by most plus-size women, current apparel manufacturers and retailers are trying all possible means to produce stylish clothes for the plus-size consumer. Designers are realising that the fashion tastes of plus-size women are not different from those of other women (Alexander *et al.*, 2005). Manufacturers and retailers need to accept and be committed to give their customers the comfortable, fashionable and flattering fashion styles they desire. The plus-size woman who fails to get fashionable, well-fitting clothes because of her size is likely to feel frustrated and depressed. This frustration will not only make her feel out of place with her colleagues, but is also likely to affect her work performance.

2.3 The role of body form

The shapes and sizes of today's women have been changing over the past decade due to improved standards of living and abundance of food. These changes have not only brought negative effects on the health status of plus-size women, but it has also made it difficult for the plus-size woman to get clothes that fit (Zwane & Magagula, 2006).

According to Xu, Huang, Yu and Chen (2002), designing garments that fit requires information about body size, body types and body measurements. The measurements help the designer to validate sizing proportions which act as a guide in deciding on the most relevant garment size the consumer may fit in. As we all know, body forms vary significantly in height, bone structure, weight, contours proportion and posture (Rasband, 2002:8).

Body form, according to Rudd and Lennon (2001), is defined as the distribution of size, shape and weight in various body parts. Differences in body forms arise from

the variation in body types, posture and body sizes. Proportion is defined as the relationship of each part of your body to one another and to the body as a whole. Contours refer to the curves of your body. Curves depend on bone size, structure of the body, weight, muscle distribution and posture. Ashdown (1998) points out that people's shape and proportion change over time as a result of changes in nutrition, lifestyle, ethnicity, age and grooming. These changes in body size tend to distort the body image of the individual, causing them to develop a feeling of insecurity as they perceive themselves to be unattractive. According to Rasband and Liechty (2006:3), one has to understand one's body type and physical body characteristics to be able to combine line, fabric scale and colour to complement one's physical characteristics with well-fitting clothes. When a garment does not fit, the plus-size consumer usually feels that the cause may be her unshapely body.

According to Alexander *et al.* (2005), wearing garments that do not fit focuses negative attention on one's body, while drawing attention away from others. A garment with a good fit should aim at balancing the figure proportion while also ensuring that it enhances the wearer's appearance (Kaiser, 1998:101).

Body forms come in different types, e.g. the hourglass/ ideal figure type, triangular/bottom heavy, triangular/ top heavy and rectangular. The hourglass is regarded as the ideal body form and is used by apparel designers to develop slopers for pattern making (Ashdown, 1998). The ideal figure is made up of proportional areas that are harmonious and pleasing to look at in length and in width. Differences in body forms arise from variations in body shapes, body type, proportion and body sizes (Fiore & Kimle, 1998:331). Apparel sizing and fit rely upon understanding body form variation in terms of dimensions and appearance. Research has shown that differences in body contours exist between different categories of people. According to O'Neal (1998), some women perceive figure flaws as the reasons for not finding apparel that fits from size ranges in the apparel shops. On the contrary. This is usually not the case. In a study by O'Neal (1998) on fit preferences, consumers perceived their bodies and not the clothing as the main cause of poor fit.

Other variables such as ease, design of the garment, sizing and appearance have to balance with body proportion for a good fit. The body form of the individual does not remain the same throughout life. People tend to lose or gain weight as they grow

older. The bulges and unevenness of the figure create fit problems for most plus-size consumers. Some women, especially the middle-aged, perceive personal figure flaws as a reason for not getting clothes that fit (Rocha, Hammond & Hawkins, 2005).

The body shapes and forms of women vary from country to country and they are also continuously changing. Variation in body form creates a lot of size variation from person to person, thus creating a lot of fit problems – especially for the plus-size figure. According to Chun-Yoon and Jasper (2005), good fit in clothes depend on accurate body measurements and sizing of the target group. Apparel sizing depends on understanding different body forms and structure variation. Although clothing industries still use the ideal figure form as a guide to determine good fit, fit problems continue to affect the plus-size figures, as the ideal figure does not represent the size and shape of that individual (Workman, 1991). These differences make it necessary for countries and apparel manufacturers to evaluate body forms and population measures of the apparel consumer for that country, so as to develop sizing systems relevant for use in developing apparel. This also helps product developers combine line, fabric, scale and colours to produce a garment that is flattering and fitting and which also complements the body without any strain while remaining comfortable and fashionable (Zangrillo, 1990:47). Most fit problems are centred on differing body shapes and proportions, especially those of the plus-size woman. There is a need for product developers and retailers to understand the physical characteristics of each figure form of the plus-size Swazi woman so as to classify different body forms and develop apparel that conforms to their preferences in each category. This will ensure that consumers purchase garments with a better fit.

2.4 The role of sizing

Sizing is another component of garment quality that determines good fit. Proper sizing of a garment plays a very important role in apparel fit. Garments that are sized properly and according to fashion style and fabric used, and that conform to body measurements, will fit well (Brown & Rice, 2001:43; Kinley, 2003). Size in a garment depends upon fashion style, ease and fabric used (Ashdown, 1998). Total consumer satisfaction with sizing and fit in apparel is usually measured at the point of sale. If a

consumer has to select the right garment size correctly, the size needs to be adequately described. A garment that is well-sized will fit and follow body contours without any strain. Understanding sizing and fit in a garment enables apparel consumers to make informed purchase decisions (Chun-Yoon & Jasper, 2005).

Sizing is a difficult issue for most consumers to understand as sizing standards and systems used by most apparel developers vary greatly (Anderson *et al.*, 2000). Sizing systems are based on a selection of dimensions from an anthropometric study of the population for which the sizing system is designed. The use of sizing systems created from outdated anthropometric data and the lack of standardized size labelling systems are causing the wide discrepancy in sizing and fit (Ashdown, 1998). Current size labels on women's garments lack adequate information to guide consumers in proper selection of clothes. Women see the poorly sized garment that does not fit as a message that their bodies are less perfect. Most plus-size consumers complain that sizing in clothes is very inconsistent. This inconsistency in sizing has resulted in confusion between manufacturers, consumers and retailers (Alexander *et al.*, 2005).

According to Workman (1991), sizing is used as a selling tool by both clothing producers and retailers. Apparel firms use sizing and fit variation as one tool in making their clothing designs look unique. Some apparel developers prefer to fit their garments generously, while others prefer a close fit for their designs styles. A single size can vary from 4,5 cm to 7,5 cm in nearly all dimensions between one firm and another (Farr, Stone, Auliff & Ouverson, 1996). A size designated on the garment label helps consumers to choose a garment size that would fit the body form of the individual.

Alexander *et al.* (2005) points out those sizing systems are developed based on a selection of dimensions from the population anthropometrics for which the sizing systems are designed. Sizing systems, according to Brown and Rice (2001:141), vary between different countries and are usually calibrated using numbers or letters. Numbers can be either in inches or in centimetres. Numerical size labelling has no real meaning to many female consumers. Sizing systems used in most countries that produce apparel are either the American, English or Continental version in

calibrations. The Americans use smaller numbers like 8, 10, 12, 14, 16, 18 etc. The English use larger numbers like 34, 36, 38, 40, 44, 48 etc. The continental people use numbers very close to those of the English. Lettered sizing systems such as small (S), medium (M), large (L), extra large (XL), are commonly used on mass-produced clothing as well as on one-size-fits-all patterns and also on knit and spandex fabrics. Lee (2005) points out that the lettered sizing system is more of a disadvantage to consumers, as they tend not to find a size that will accurately fit them, for the size range is large and may result in baggy outfits. Most developing countries in Africa, including Swaziland, use an adapted version of the British sizing system. The system is then adapted to suit the sizing needs of the South African population (Zwane & Magagula, 2006).

To attain a good fit in clothes, the basic body measurements of the individual need to be taken (Workman, 1991). Using an ordinary tape measure or dressmakers method or the three-dimensional body scanners, accurate body measurements can be attained and these can then be used to produce patterns for specific garment size lines. If measurements are inconsistent in relation to body form, fitting problems crop up (Xu *et al.*, 2002). Manufacturers develop their own vanity sizes to keep up with the market trends while at the same time creating a certain market for the type of size they develop. Some manufacturers prefer to fit their garments generously, while others prefer a fit that is closer to the body. Sizes are generally designated on garments to enable apparel consumers to choose a garment size that would best fit the individual. Each size on a garment should, however, represent information of the key body dimensions which include bust, waist, hips and shoulders as well as widths and lengths. Clothing manufacturers do not print specific body measurements on size tags on women's clothes, but use numbers or letters that tend to have no relationship to the actual body measurements of the individual (Loker, Ashdown & Connell, 2005).

The consumer has to find the best size by trying on the garment or using past experience to guess what the number or letter may mean. These dimensions differ from one manufacturer to another. If consumers are to select the correct garment size properly, the size needs to be adequately described for easier understanding and interpretation (Chun-Yoon & Jasper, 2005; Xu *et al.*, 2002).

In a study by LaBat (in Alexander *et al.*, 2005), on sizing, results indicated that consumers reflected their desire of having a size description system that would best cater for proper sizing needs of each consumer. Workman (1991) states that for the correct sizing system, body measurements charts need to be checked and revised on a ten-year cycle due to the changes in characteristics of the population so as to ensure that they cater for the fit needs of that population. Ashdown (1998) also adds that every country and every region within countries need to establish a sizing system – which can only be completed if the body form classifications are done together with accurate population measures for that country. Swaziland, according to Zwane and Magagula (2006), is still way behind with developing its own sizing system, as most of the apparel sold in the country comes from South Africa. Understanding sizing and fit enables consumers to make better informed clothing purchase decisions and aids fashion professionals to design better fitting apparel for their consumers (Marshal *et al.*, 2004:116)

It can be assumed therefore that fit problems affecting the plus-size women population in South Africa is also likely to affect the Swazi apparel consumer. Product developers and retailers need to have enough knowledge and information on the sizing systems used in that particular country and they should be able to interpret it properly so as to make informed sizing decisions (Marshal *et al.*, 2004:337).

2.5 The role of consumer's knowledge on size labelling

To understand the role of sizing in determining a good fit, one has to have enough and relevant knowledge on size labelling. Size label codes found on the garments, according to Anderson *et al.* (2000), communicate the size most likely to fit the individual before the person actually tries it on. A size on a garment tag represents a set of garment sizes in a sizing system that reflects the body measurements and sizes of most individuals in a population. Size tags should limit or control continuous fitting of apparel by consumers in the shop (Anderson *et al.* 2001; Xu *et al.*, 2002). Current size labels on women's garments lack adequate information to guide consumers in ensuring proper sizes in clothes. Finding the right size is frustrating for

the consumer as each manufacturer uses different measurements for size and size ranges. If clothing is to fit well, consumers must find clothing in both the correct size range and size. The extreme sizes, that is, largest and smallest in any size range, are difficult to find in most apparel outlets (Jasper & Quelette, 1994; Farr *et al.*, 1996).

Consumers need to be well educated on issues of apparel sizing and fit. Sizing codes on size tags do not relate to the key body dimensions necessary for the production of specific apparel items. Accurate measurement and use of key body dimensions in garment production reduce fit problems (Lee, 2005). When consumers purchase clothing, they select it through experience they have acquired through frequent buying of clothes and its use. A size description used previously on a well-fitting garment helps most consumers to select clothes that fit.

Retailers who are keen to satisfy their customers need to provide information to consumers on how to classify sizes and how to take body measurements. They should have enough information on different body types so as to assist them to select clothing that can fit. Through the use of magazines, brochures and electronic media, retailers can reach and educate a number of consumers who might not have enough knowledge on fit issues.

In many cases plus-size women are the ones who get frustrated as it is not easy for them to get sizes in most apparel shops, for retailers aim for the most fluid and profitable category. According to Brown and Rice (2001:147), most size labels attached to consumer garments do not have enough information on the basic body dimensions for which the garment is designed. The numbered or lettered sizes are not expressed as body measurements, but as numbers or letters that correlate with sets of unrevealed body measurements. These numbers or letters mean nothing to the consumer. They have to try on several different sizes before finding a garment that fits. Incorrect sizing is the most common reason why plus-size women consumers return ready-to-wear garments (Chun-Yoon & Jasper, 2005). Vanity sizing is another area in apparel sizing that creates problems for most apparel consumers. Low-priced garments are usually smaller in size compared to most garments of the same labelled size in other shops. Different manufacturers use their

own size labelling systems to attract consumers. This confuses most consumers and this leads to size variation from shop to shop. According to Brown and Rice (2001:43), incorrect sizing is the most common reason why plus-size female consumers return ready-to-wear apparel.

Apparel consumers in Swaziland are also likely to be confused by the size coding systems used in local clothing outlets in Swaziland. In South Africa most of the clothing is size-coded according to the British sizing system (Zwane & Magagula, 2006), and most of the clothes in Swaziland's retail outlets are imported from South Africa. Although working women are aware of these size labelling problems, they need to have some additional knowledge on how to interpret labels to their understanding, as their interpretation may be different from that of the product developer. It can therefore be assumed that this conflict of ideas in size labelling interpretation may create a distorted size labelling preference and this may further confuse the apparel consumer.

2.6 The role of consumers' preferences

Consumer apparel fit preferences may be defined as what the consumer desires from a garment with regard to fit. Fit preferences, according to Alexander *et al.* (2005), are subjective and vary from person to person. Defining and interpreting good fit is difficult; good fit can only be defined by each individual. Consumers' apparel fit preferences differ greatly and are mostly influenced by attitudes, culture, perceptions, geographic location, social affiliation of the consumer, education level of the individual, as well as globalisation.

Exposure to a lot of apparel products has seen a number of consumers having problems deciding which garment would satisfy their individual clothing needs due to the vast amounts of apparel they are exposed to as they do their shopping expeditions (Chae *et al.*, 2006). People with unique backgrounds evaluate apparel in relation to their own thoughts, feelings as well as individual beliefs. These characteristics shape and mould ones aesthetic preferences, which will eventually determine what each consumer prefers with regard to clothing fit (Marshal *et al.*, 2004:109).

Attitudes, according to Alexander *et al.* (2005), play a crucial role in determining individual preferences. Attitudes are individual clusters of beliefs oriented towards specific stimuli. They relate to perceived feelings or emotions, e.g. likes and dislikes which shape preferences and tastes. Attitudes consumers have towards clothing fit, colour, fabric, design, brand, price, store quality greatly influence the apparel choice and preferences of the consumer. The attitude a consumer has towards a garment may be affected by the looseness or tightness of the garment (Kadolph, 1998:16). Individuals, by their nature, tend to buy clothes that correspond to their own self-image (Fiore & Kimle, 1998:95; Jamal & Goode, 2001).

According to Yoo (2003), the educational level of the individual is another factor that shapes apparel fit preferences. Educated consumers are more globally minded, conscious of imports, and they demand what is best for their wardrobes. Johnson and Moore (2001:78-79) point out that women in careers use clothing as a strategy to acquire a sense of success. Women who are concerned about their appearance are keen to acquire substantial knowledge and total commitment about clothing, so as to enhance their analytical abilities and shape their preferences and perceptions on apparel products. Consumer's socialising lifestyle also determines their preferences. People use clothing to identify themselves with a certain social group, thus signifying their social class, dress style as well as financial position.

Identifying and addressing sizing and fit problems and preferences of the plus-size consumer, would reduce shopping time as well as make the consumer spend more money and frequent the apparel outlet more often. This in turn is likely to improve sales and profits for the retailer and manufacturer. In order to determine and be able to address consumers' apparel sizing and fit problems and the preferences of the plus-size working woman, one has to understand the functional, aesthetic and economic needs and preferences of these consumers.

2.6.1 Functional preferences

The functional features of a garment refer to the way the garment serves the consumer in relation to his or her expectations with regard to how the garment

performs (Stamper *et al.*, 1991:298). The functional performance of apparel fit is determined by comfort during moving, sitting and bending when the garment is worn. The way the garment has been constructed, the fabric and fashion style used determine how functional the garment will be with regard to fit as well as how it will perform during use (Brown & Rice, 2001:39). Consumers evaluate the functional qualities of apparel as they do the shopping, especially through window shopping and as they fit and try on the garment during shopping expeditions (Fiore & Kimle, 1998:26). Good fit is crucial for consumer satisfaction, and is determined by the final appearance of the garment, comfort when moving, sitting and bending as well as the fashion style used on the outfit. The beauty and functionality of the garment are destroyed if the garment does not fit (Brown & Rice, 2001:154).

According to Marshal *et al.* (2004:338), vanity sizing as well as using sizing systems of other countries, which do not relate to the body proportions of that country's population, coupled with the influx of cheap mass-produced apparel from other countries, has meant that the personal preferences of the plus-size woman have not been addressed by apparel producers. This has resulted in the plus-size working woman finding it more difficult to find apparel that fits.

The functional performance of a garment is very important, especially to the plus-size working woman. If manufacturers do not address garment fit, comfort, size, style as well as general appearance and workmanship of each garment to suit each body form, it is likely that the garment will not satisfy the consumer, and this would result in stock glut, loss of sales and profits for the apparel retailer and the manufacturer.

2.6.2 Aesthetic preferences

Apparel quality is usually judged by the performance features of a garment. Performance features of apparel include the functional as well as the general aesthetics or attractiveness of a garment. Attractiveness relates to the design, construction details, fabric used, trimmings, colour and final appearance of the garment (Brown & Rice, 2001:38). Rudd and Lennon (2001) point out that aesthetics in a garment addresses the activated processes or multi-sensory characteristics

activated by the beauty of a garment in relation to what the consumer desires. The aesthetic characteristics of a garment come in sensory, symbolic and emotional form (Fiore & Kimle, 1998:26).

In a study by Eckman, Damhorst and Kadolph (in Yoo, 2003) on aesthetics, the results reflected that there was a high demand for aesthetic as well as functional features, stylish and good fit in a garment. Consumer exposure to a lot of varying styles, sizes, colours and fabrics from local apparel outlets as well as from the media, has made apparel selection more of a problem for the consumer (Chae *et al.*, 2006). If these aesthetic features are not addressed by the product developer in the production stage, it is likely that the emotional, sensory and symbolic preferences of the consumer in relation to the garment fit will be greatly compromised.

2.6.2.1 Sensory- aesthetic preferences

The sensory stimulation of a garment focuses on how clothing affects our senses and how senses enhance and help the consumer select the best apparel from the shop. The beauty and texture of the fabric used, together with line, form rhythm and balance of the garment, may enhance one's purchase of apparel. The final look, comfort and construction details create a sensory enjoyment of having a garment that is attractive and appealing to the eye (Fiore & Kimle, 1998:28).

According to Kaiser (1998:301), individuals with high aesthetic values tend to emphasise and enhance their personal appearance. North, De Vos and Kotze (2003) point out that, as working women need to improve their appearance and image, their aesthetic preferences are also improved. Yoo (2003) further adds that image consultants advise working women to always dress for success so as to command authority and present the status of the job. He notes that authority, professionalism as well as competence are compromised if working women do not dress for the job. The tactile sensation of soft, delicate fabric on the body develops more appreciation from the consumer. Sensory stimulation from fabric, colour, texture, line, form, rhythm, balance as well as fit and proper sizing can be used to stimulate the senses, resulting in the sensory enjoyment of having a garment that is attractive and appealing to the eye. Sensory stimulation from clothes comes from fabric that feels

soft, luxurious to the touch and attractive. Comfortable fabric brings pleasure to the individual. In studies done by Eckman (1997) and Eckman, Damhorst and Kadolph (1990) (in Yoo, 2003) on fit and aesthetics in clothes, fit, fabric quality and colour as well as style were found to be the most preferred aesthetic features of a garment that affected consumer clothing preferences and purchase. Good fit is crucial to consumer satisfaction. The effect of gorgeous smooth fabric, stunning designs and professional workmanship are destroyed if the garment does not fit (Brown & Rice, 2001:154).

If the consumer does not have enough knowledge on the aesthetic sensory qualities of a garment, it is likely that the plus-size consumer may make a hasty wrong purchase decisions – which may result in rejection of the garment when it is used. Plus-size consumers were found to be loyal consumers. They frequently visited those apparel shops which provided them with aesthetically pleasing styles and fabric that contributes to the beauty of the fit, in that the style flatters the figure while still being fashionable (Zangrillo, 1990:9; Jamal & Goode, 2001).

2.6.2.2 Emotional-aesthetic preferences

The aesthetic features of a garment can also be expressive, that is, express the emotions of the intended consumer. Some attractive features of the garment, like interesting designs, professional construction of a well-fitting, comfortable garment as well as soft, smooth, attractive fabric features elevate, reflect and arouse the emotions of the wearer as he or she touches, handles and admires the garment (Fiore & Kimle, 1998:42-43; Yoo, 2003). For each clothing selection, the consumer requires a considerable degree of skill in coordinating colour, choosing fabric and style, and judging the quality of the garment. This accumulates through personal shopping experiences, friends, family, media, and observing clothing displays in shops. The beauty of the garment's fit may improve spiritual ecstasy, relieve a stressful work routine and make the wearer feel comfortable and develop more interest in the garment (Fiore & Kimle, 1998:79-80).

Emotions can also be elevated – even more so if the garment has a good fit which conforms to the body silhouette of the individual. Well-fitting clothes enhance a

sense of good feeling (Labat & DeLong, 1990; Kaiser, 1998:104; Rasband & Liechty, 2006:4). These authors point out that women in general are dissatisfied with their bodies, which tends to have a negative impact on their emotions. This is especially true for plus-size woman. They try all possible means to dress attractively in well-fitting clothes which bring out an attractive appearance, a feeling of comfort and freedom of movement. If poor fit is experienced, they feel uncomfortable with wearing that particular garment. Consumers in general tend to compare themselves to well-known fashion figures whom they feel dress to their style. They ultimately desire to look just like them. Thus, if what they see does not resemble their expectations, their emotional egos are destroyed (Kaiser, 1998:105).

2.6.2.3 Symbolic-aesthetic preferences

The symbolic aspects of aesthetics deal with how a garment communicates one's identity and self-expression through dress. It provides psychological comfort to the individual and brings freedom from doubt and worry, while improving self-acceptance and self-esteem through dress (Fiore & Kimle, 1998:67). Clothing, according to Feather, Ford and Herr (1996), has the potential to create a new and better looking individual, which in turn develops a better perception of oneself and one's body. A person with a weak body boundary may well be compelled to experiment with clothing so as to provide the self with a sense of reassurance and gratification. Plus-size women are such individuals who always seek ways to make their body look attractive through dress (Fiore & Kimle, 1998:107).

Evaluation of one's body is developed when a person critically compares him-/herself with what is prevailing in society and through interaction with others. According to Kaiser (1998:108), body satisfaction is closely linked to one's feeling towards the self. Consumers often buy products that they perceive to be similar to their own self-concept. Self-image affects our feelings about ourselves and represents a vital component of the physical self. Body image may become distorted when body size changes or when people focus on the weak or problem areas of the body. Plus-size women, due to their problematic body, tend to develop distorted body schemata which eventually leads to low self-esteem if the garments they are wearing are not fitting well (Jamal & Goode, 2001).

According to Marshal *et al.* (2004:127), perception of self is determined by the personality, attitudes, social affiliation, work status, culture and beliefs of the individual. Consumers generally buy products they perceive to be similar to their own self-image or self-concept. One's wardrobe choice reflects and expresses one's self-image. One's self-image is the mental picture one has of oneself. When one has an assessment of one's self-image, one can more accurately select clothing that reflects one's individuality. Working women, by virtue of their class, have their own self-image. Their appearance, modesty as well as social class make them dress differently from the other working groups. This projects a positive image and improves their work performance, which makes them feel more in control (Alexander *et al.*, 2005). A person with a weak body boundary may be compelled to experiment with clothing so as to provide herself with a sense of reassurance (Kaiser, 1998:106). One can evaluate one's body negatively or positively and this is usually done through interacting with others. Today, individuals are bound by standards of dress to try as much as possible to look and feel fashionable. Plus-size women are no exception.

According to Eicher, Evenson and Lutz (2000), cultural standards and social group's preferences differ significantly from one place to the other. Individual and group preferences of dress are guided by societal and cultural norms. Therefore, if symbolic apparel preferences of the plus-size Swazi woman are not met, it is likely that problems with regard to sizing and fit will not be addressed by retailer and product developers.

2.6.3 Economic preferences

Apparel consumers by their nature define the quality of clothing within a particular cost framework. Consumers' evaluation of aesthetic qualities centres on colour, style, fit and price of the garment (Fiore & Kimle, 1998:56). These quality features of the garment are judged by the consumer at the point of sale. According to Kadolph (1998:29), price influences the consumer's perception of quality. Most consumers believe that there is a relationship between price and quality fit.

Yoo (2003) points out that consumers' spending for women's clothing has increased in the last decade, as more women are joining the workforce at a young age. Brown and Rice (2001:48) further add that consumers are influenced by the aesthetic features as well as the price of the garment, and not only by the behaviour of other consumers to make a purchase. Consumers depend on price to make a decision to buy or not to buy. Kaiser (1998:107) further adds that consumers will purchase only those products which give them maximum utility and those that satisfy their emotional and psychological needs – irrespective of price. New products that are novel or different from others command a high price when first introduced in the market, especially new styles and high fashion designs.

According to Sproles and Burns (1994: 89), at each price level consumers demand more of fashion so as to conform to societal norms. Where consumers' demand is enhanced by high price, a certain segment of consumers will demand quality because of the exclusiveness and uniqueness of the style as well as the symbolic value of the garment. In a study by Sharma (in Kaiser, 1998:301) it was found that individuals who are guided by economic values when purchasing clothes tended to take their time when shopping, so as to select and satisfy themselves that what they have chosen is what they desire. It was also noted that at each price level, consumers demanded more fashionable and well-fitting clothes.

Plus-size women, according to Zangrillo (1990:15), can spend a fortune on clothes of their preference as long as such clothes satisfy their functional and aesthetic needs. However, what matters a lot to them is the fit of the garment. If these elements are not met, the plus-size woman is likely to return products, and to avoid purchasing apparel in those outlets, and the retailer is likely to lose customers.

3 IMPLICATIONS FOR THE STUDY

From the above, it is clear that there are two main groups or parties involved in sizing and fit issues, and specifically for this study which focuses on the plus-size working woman's apparel fit preferences and problems.

On the one hand there is the Swazi working woman with her specific body shape, fashion preferences and knowledge on sizing, but specifically also her functional, aesthetic and economic preferences with regard to the fit of her clothes. If these preferences are not addressed by the other party, namely the manufacturers and retailers, the plus-size Swazi working woman will most probably experience sizing and fit problems, whether the various elements of fit have been kept in mind, or not. In other words, manufacturers and retailers should take notice of these consumers' fit preferences in relation to firstly, comfort, and specifically with regard to the role that style and fabric play in establishing a comfortable fit. They should also take note of the plus-size woman's economic preferences when it comes to a fashionable fit, as well as her aesthetic preferences, in that the style, fabric and fashion ability of the garment please her on a sensory, emotional and symbolic level. Not only should sizes that fit well be provided, but the information on the size label should be clear to the consumer so as to enable her to choose the correct size.

Consumers, on the other hand, have the responsibility to acquire knowledge on the meaning of size labels and to voice their problems directly to retailers and manufacturers. Unfortunately this does not happen often, leaving manufacturers and retailers in the dark as to what the consumer's preferences are, as well as the problems that she encounters with the fit of her clothes.

A starting point for addressing the plus-size Swazi working woman's problems with regard to the fit of her clothes is therefore, firstly to determine her functional, aesthetic and economic fit preferences, and secondly to determine the fit problems that she encounters with the clothes that are currently available in the stores. That would enable manufacturers and retailers to develop and choose styles and fabrics that would contribute to the plus-size woman's satisfaction with the fit of available career wear, not only with regard to its functionality, but also with regard to its aesthetic quality and affordability.

In Chapter 3 the specific research objectives, the research design that was adopted and the methodologies that were followed in order to solve the problem are addressed.

CHAPTER 3 RESEARCH DESIGN AND METHODOLOGY

1 INTRODUCTION

A research design, according to Mouton (2001:55), (in De Vos *et al.*, 2005:132) refers to the plan on how one intends to conduct the research. In this study, the conceptual framework which describes the plan of the study is illustrated in Figure 3.1 and discussed in detail. The framework is followed by the research problem. Research objectives which clearly indicate the variables that are being studied to answer the research questions are also included. To clearly show the plan of the study, the research strategy, approach and design are discussed. A sampling plan which describes the unit of analysis, sample selection and sample size, determines who is being studied and where the study is being conducted. Data collection methods are discussed in detail, as well as the structure of the questionnaire. A general outline of the procedure of administering the questionnaire is given. A section on data analysis, which includes coding, data cleaning, capturing of data, operationalisation, explanation of statistical methods and quality of data, is also included.

2 CONCEPTUAL FRAMEWORK, PURPOSE AND OBJECTIVE

2.1 Conceptual framework

In this study the clothing consumer quality evaluation theory as a theoretical perspective by Brown and Rice (2001), as well as the aesthetic clothing theoretical perspective of Fiore and Kimle (1998), were used. From the literature review the following conceptual framework was developed (see Figure 3.1):

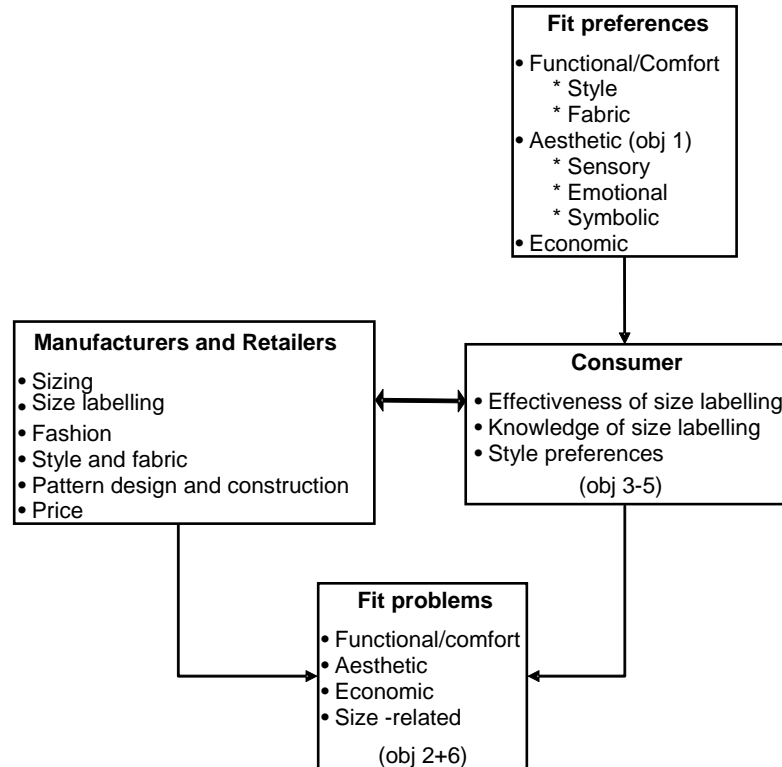


Figure 3.1: Conceptual framework of sizing and fit preferences and problems of the plus-size Swazi working women

It is clear from the schematic conceptual framework (Figure 1.1) that two main parties are involved in sizing and fit issues relating to the plus-size Swazi woman. On the one hand, there are the manufacturers and retailers who are responsible for providing clothes that are correctly sized for this target market, that are fashionable and with a style and fabric choice that contribute to a comfortable and aesthetic fit, that are designed and constructed with the elements of fit in mind, that clearly communicate the size to the consumer, and that are affordable.

On the other hand, there is the Swazi plus-size female consumer with her specific functional, aesthetic and economic preferences regarding the fit of her clothes, but also her preference for a size labelling system that clearly talks to her, her knowledge on size labelling as well as her specific style preferences that she feels will complement her specific body.

Both parties may play a role in the problems that the plus-size Swazi woman experiences with the fit of her clothes. This research concentrates specifically on the plus-size female Swazi consumer, and more specifically on her functional, aesthetic and economic fit-related preferences, her size labelling preferences and knowledge, styles that she prefers for her specific body, functional, aesthetic, economic and size-related problems, as well as specific fit problems. Information on these aspects could assist manufacturers and retailers in providing well-fitted clothes that are in line with the plus-size Swazi woman's fit-related preferences, while decreasing the number of problems experienced with apparel that is currently available in clothing stores.

2.2 Purpose of the study and objectives

This study seeks to explore and describe sizing and fit preferences and problems of the plus-size Swazi working women with regard to work apparel.

The following research objectives were formulated for the study.

Objective 1

To explore and describe the importance of functional, aesthetic (sensory, symbolic, emotional) and economic apparel preferences of plus-size Swazi working women.

Objective 2

To explore and describe the functional, aesthetic (sensory, symbolic and emotional), economic and size-related apparel problems of the plus-size Swazi working women.

Objective 3

To determine the apparel style preferences of the plus-size Swazi working women.

Objective 4

To determine how plus-size Swazi working women rate the effectiveness of various apparel size description systems.

Objective 5

To determine plus-size Swazi working women's knowledge on apparel size labelling.

Objective 6

To explore and describe specific apparel fit problems experienced by the plus-size Swazi working women with regard to their work apparel.

3 RESEARCH STRATEGY, APPROACH AND DESIGN

Rubin and Babbie (2001:107) (in De Vos *et al.*, 2005:133) describe a research design as decisions one makes in planning a study. The decisions include those about sampling, data collection, measurement issues as well as data analysis plans. This was a descriptive study using a quantitative approach. A survey was used to explore apparel sizing and fit problems and preferences of plus-size working women of Swaziland. In this survey, a questionnaire was used to collect data. Purposive sampling was used for this study. This design was chosen as it focused on studying plus-size working women who were experiencing fit problems with the apparel they bought from local apparel retail shops. Data was analysed statistically using mean, median, standard deviation and variance when comparing the problems and preference scores between different groups.

The research is cross-sectional, meaning that the observations were made at one point in time, and not over an extended period, as is the case with longitudinal research.

4 SAMPLING PLAN

4.1 Unit of analysis

The units of analysis of this study were plus-size working female teachers of Swaziland between the ages of 25 and 60 years. They were teachers who were still employed, were teaching in urban and peri-urban schools of Mbabane and Manzini towns, were permanently employed, were able to buy work clothes more often and were plus-size women wearing clothes between sizes 16 and 26+ / size 40 to 52+. Respondents had to meet certain criteria for them to be included in the study.

- Respondents had to be teachers between ages 25 and 60 years.

Teachers as young as 25 years are posted to different schools after attaining their teacher training certificates. These teachers are those who have certificates, diplomas as well as various degrees, teaching in Primary, Secondary and High schools of Swaziland. Most of these teachers retire at age sixty (60), which is the age at which most Government officials and teachers retire from service.

- Respondents had to earn a certain amount of money per month.

Teachers are paid monthly for their services, or once after every three months – depending on whether they are on contract or permanent. Permanent teachers get paid monthly according to qualification and experience in the field. To look presentable at all times, some of these teachers buy clothes weekly, monthly, seasonally or once a year. Most of these teachers earn a monthly income of R 3 000 and above. Of this amount, they would spend a certain amount on their clothing needs.

- Respondents had to fall in the plus-size category for them to be included in the study.

The target group was supposed to be plus-size women who were permanently employed and who wore clothes ranging from size 16 to 28+ or size 40 to 52+. In this study, the respondents selected to the plus-size category, were those teachers who had indicated that they wore clothes of size 16 and above or size 40 and above. For ethical reasons, during data collection, all those female teachers who were willing to take part in the study were encouraged to do so. It was only during data sorting that those respondents who were not a plus-size were eliminated.

- Teachers had to be working in schools situated in urban or peri-urban areas of the Hhohho and Manzini regions.

Respondents were teachers from schools around Mbabane (Hhohho region) and Manzini (Manzini region). These schools were selected as they were within easy reach. The researcher was able to access public transport easily from town to these schools. These schools were also walking distance from the main road, therefore making data collection easy. Most of these schools were well developed as they had water, electricity and telephones. The researcher had minimal problems in setting up appointments that suited everyone in the school, as this exercise was not supposed to interfere with the school learning system.

4.2 Sample and sampling procedure

A non-probability sampling method was used in this study. Purposive or judgemental sampling was used, together with convenience and snowball sampling. In purposive sampling, the sample is selected on the basis of knowing certain elements of the population, which in this case were plus-size Swazi working women. Once the individuals were identified, convenience and snowball sampling were used to help the researcher get more people who had the same characteristics through using other participants who knew individuals who were also plus-size (De Vos *et al.*, 2005:330; Babbie, 2008:204).

4.2.1 Sampling procedure

Swaziland is divided into four administrative regions, that are, Hhohho, Manzini, Lubombo and Shiselweni. The sampling frame was done in two Administrative regions of Swaziland. These were the Hhohho (Mbabane) and Manzini (Manzini town) regions. The study concentrated around the urban and semi-urban schools of these two regions. Teachers who were included in the study came from Primary, Secondary and High schools of these two regions. These were schools in and around Mbabane and Manzini and surrounding areas less than 10 km from these two cities. These areas were chosen as they were schools that were closer to the main road and travelling, using public transport, was easy.

Data for schools around the areas where sampling was done were obtained from the Ministry of Education regional offices. The numbers of the female participants were

also obtained from each school's administration office. A sample of 249 teachers was used for this study. Seaberg (in De Vos *et al.*, 2005:195) points out that, if one has a population of 1000+, the representative sample should be 10% of the population so as to control sampling error.

5 DATA COLLECTION TECHNIQUE

A self-administered questionnaire was designed to solicit information on sizing and fit preferences, as well as problems that the plus-size working women experience with ready-to-wear clothes sold in local retail outlets.

5.1 The structure of the questionnaire

A questionnaire was designed and used to collect data. This questionnaire was designed after extensive study of the literature, previous studies done on this subject, Internet sources and from magazines, after which the problem to be studied was identified. After the extensive review of the literature by the researcher on sizing and fit problems commonly encountered by the plus-size working woman, with regard to finding well-fitting clothes for work, as well as identifying the preferences of such women in this regard, it was important to eventually develop the conceptual framework of the study. Conceptualisation, according to Babbie (2008:136), is a mental process whereby unclear and imprecise ideas are made more specific and precise.

Once the researcher had conceptualised the study and developed the research objectives, the variables to be studied under each objective were developed. Once the variables were developed and validated, they were then operationalised.

According to De Vos *et al.* (2005:174), Likert scaling was mostly used for the questionnaire. Close-ended questions were also used when a substantial amount of relevant literature on the subject had been gathered and the response options were known. The questionnaire was divided into three sections (Sections A, B and C).

Section A addressed the demographic information. Demographic information included the age of the individual, qualifications, and clothing size commonly worn in skirts, jackets, pants and blouses. Information on how much each consumer was willing to spend on clothes per month, their work dressing style, how often they bought clothes from selected retail outlets, how they rated the fit of clothes from these different retail outlets, their fit preference as well as their fabric preference, were collected.

Section B addressed the functional, aesthetic (sensory, emotional and symbolic) and economical apparel fit preferences as well as style and size preferences. Functional variables measured included style, fit, comfort and material that stretches comfortably. Sensory aesthetic variables measured included fit that flatters the figure and style that is fashionable with a good fit. Emotional fit preference variables measured included outfits that make one feel more like a professional, and the price of the garment which makes me feel that I am wearing something special. Symbolic variables measured included style that shows that one is a professional, colleagues complimenting one on the fit of the garment, and an outfit that shows that one is wearing something special. Economic variables measured included the outfit being affordable. Respondents had to indicate the level of importance of these variables, ranging from very important to unimportant. Respondents were also asked to choose a style from a range of jackets, skirts and pants which they thought was suitable for their figure type (question 12). In question 13 respondents had to rate the effectiveness of sizing description systems which guided them in selecting well-fitting clothes. Questions 14 and 15 were testing respondents' level of understanding the size description systems used on clothes they buy from local retail outlets.

Section C addressed apparel sizing and fit problems which the respondent commonly experienced in clothes worn daily. The respondent also had to indicate areas of the body where the garment was too tight or too loose, too long or too short. A covering letter accompanied the questionnaire. The covering letter stated the purpose of the research, how long it would take the respondent to complete the questionnaire, assurance of anonymity, plea for cooperation as one was answering the questionnaire, how the research was going to help apparel retailers, manufacturers and educators, as well as the general clothing consumer. This

questionnaire was written in simple easy-to-read English. The questionnaire consisted of 8 pages and respondents were to give responses to all the variables in the questionnaire. The questionnaire was pre-tested for clarity amongst 20 Swazi working women.

5.2 Questionnaire outline

The structure of the questionnaire is outlined in Table 3.1 in relation to section, aspects measured and question number addressing a specified variable being studied, with the statement given.

TABLE 3.1: THE STRUCTURE OF THE QUESTIONNAIRE

SECTION	ASPECT MEASURED	QUESTION NUMBER
A	Demographics	
	Age	1
	Tertiary qualification	2
	Clothing size you wear	3
	Work dressing style	5
	Clothing outlets you buy from	6
	Amount consumers willing to spend on clothes	4
	Apparel fit from different retail outlets	7
	Functional performance (comfort and fabric performance)	8,9
B	Perceived apparel fit preferences	
	Apparel functional fit preferences	10
	Apparel economic fit preferences	10
	Apparel aesthetic fit preferences	10
	Apparel size labelling preferences	13,14,15
	Apparel fashion style fit preferences	12
C	Perceived apparel fit problems	

	Functional apparel fit problems	16
	Economic apparel fit problems	16
	Aesthetic apparel fit problems	16
	Problems with knowledge on size labelling	16
	Specific apparel fit problems	17

5.3 Procedure for administering the questionnaire

The researcher was the one responsible for conducting the research. The researcher visited two schools per day until the sample was sufficiently representative. The researcher also had to do two visits per school. The first visit was intended to meet the school administration to inform them they were in the sampling map and that they were requested to participate in the exercise. It was also to explain the study and to request permission from the school Principal to talk to the teachers about the study. Permission to address teachers was sought from the Ministry of Education Headquarters as well as from the Regional Education officers in Manzini and Mbabane. An appointment for administering the questionnaire was then made so that teachers were made aware of the project and for the school to make proper arrangement on dates when they would be ready to answer the questionnaire.

On the set date and day of the appointment, the researcher arrived with the questionnaires, and checked with the administration of the school whether a classroom was available. The classroom was prepared and teachers were informed that they would start at the set time. All female teachers who were willing to undertake the exercise, even if they were not in the plus-size category, were given questionnaires to complete. This was done to avoid stigmatisation of the plus-size group. A self-administered questionnaire was used. The researcher briefly explained to the participants how to go about completing the questionnaire, and if respondents had any questions or difficulty regarding any statement, the researcher gave the relevant clarification. The respondents completed and returned the questionnaire on the same day. This ensured that all the questionnaires were returned and that the correct representative sample of female teachers in the school answered the

instrument. A total of 350 questionnaires were returned between January and May, 2009. The researcher then sorted the questionnaires according to the clothing sizes of the respondents. Questionnaires indicating that the respondent wore size 16 and above or size 40 and above were selected for coding purposes. Questionnaires which were not completed were put aside. Only 249 questionnaires were eventually used for the final data analysis.

6 DATA ANALYSIS

Data analysis, according to De Vos *et al.* (2005:218), takes place when the researcher gives meaning to collected data, makes inferences to research relations and makes meaningful conclusions with collected data. In this study the researcher used frequencies and percentages to analyse the data, as well as Fisher's Exact Test to compare scores on preferences and problems. Pie charts, bar charts and histograms were used to present data for nominal scaling such as age and education level, to represent the data.

6.1 Coding and capturing of the data

According to Babbie (2008:443), once data has been collected it needs to be quantified so that it can easily be interpreted. Data first needs to be coded to make the processing easier. Coding is done to reduce variation of information to a more manageable size for quicker and faster data capturing purposes. The codes represent attributes measured in the study.

All the variables measured in the questionnaire were given a code, and these codes were edge-coded at the edge of the questionnaire. Edge-coding refers to codes written in spaces at the edge of the questionnaire for the attributes being studied. Once coding was done, data was sent to the statistical unit of the University of Pretoria, where it was captured by the data capturing unit.

Once the data was captured, it was returned to the researcher for cleaning purposes. Data cleaning includes checking whether the codes for each attribute were entered correctly. This was done to reduce errors and to enhance reliability and validity. The

data was sent back to the Department of Statistics for corrections. The data was then analysed using the SAS statistical software. The data was further analysed using frequencies and percentages as well as Fisher's Exact Tests to test for statistically significant differences between scores on a 5% level of significance ($p < 0.05$).

6.2 Operationalisation

Table 3.2 indicates the objectives along with the variables measured, including the statistical methods used to analyse data for each variable.

TABLE 3.2: OPERATIONALISATION IN TERMS OF OBJECTIVES, QUESTIONS AND STATISTICAL METHODS

	Objectives	Question number	Questions (v=variable)	Statistical methods used
1	To explore and describe the importance of functional, aesthetic (sensory, symbolic, emotional and economic) apparel preferences of plus-size Swazi working women.	10	Section B: (V31, 32, 33, 34, 35, 36, 37, 38, 39, 40.)	Frequencies and percentages were calculated and data presented in tables, and Fisher's Exact Test (p-value significant on 5% level).
2	To explore and describe the functional, aesthetic (sensory, symbolic and emotional), economic and size-related apparel problems of the plus-size Swazi working women.	16	Section C: (V60, 61, 62, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73).	Calculation of frequencies and percentages. Fisher's Exact Test (p-value significant on 5% level) was used to test the

				significance level.
3	To determine the apparel style preferences of the plus-size Swazi working women.	12	Section B: (V 41, 42, 43.	Frequencies and percentages were calculated and Fisher's Exact Test (p-value significant on 5% level) was used to test the significance level.
4	To determine how plus-size Swazi working women rate the effectiveness of various apparel size description systems.	13	Section B: (V44, 45, 46, 47, 48, 49.)	Frequencies and percentages were calculated. Fisher's Exact Test (p-value significant at 5% level) was used to test the significance level.
5	To determine plus-size Swazi working women's knowledge on apparel size labelling.	14, 15	Section B: (V50, 51, 52, 53, 54, 55, 56, 57, 58, 59)	Frequencies and percentages were calculated.
6	To explore and describe specific apparel fit problems experienced by the plus-size Swazi working women with regard to their work apparel.	17	Section C: (V74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85,	Frequencies and percentages were calculated.

			86, 87, 88, 89, 90, 91, 92.	
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6.3 Explanation of statistical methods used in this study

6.3.1 Percentages and frequencies

In this study relative frequency distribution was used. In this type of frequency analysis, data indicates the proportion of the total number of cases that are observed for a particular value. Cumulative frequencies were also indicated. Cumulative frequencies are obtained by adding individual frequencies successively to add up to 100. A cumulative frequency table, showing values that accumulate to 100, is shown. Percentages were then used to calculate the data. The data is then presented in graphic form as bar graphs, histograms and pie charts as well as in tables (De Vos *et al.*, 2005:225).

6.3.2 Fisher's Exact Test

This test is an extension of the Chi-square test and may be used when the expected number of responses is small. It evaluates exactly the same null hypothesis as the chi-square test. The outcome of the test is simply an exact probability value which can be compared to a preset significance level (e.g. 5%) to determine whether any significant differences exist between groups (Diamantopoulos & Schlegelmilch, 1997:178). In this study Fisher's Exact Test was done to determine statistically significant differences between the responses of younger and mature Swazi working females. It was also done to determine statistically significant differences between very important and important preferences and less frequent and rarely experienced problems of selected statements (Table 4.4).

7 QUALITY OF THE DATA

7.1 Validity

According to De Vos *et al.* (2005:160), validity ensures that the instrument is measuring what it is supposed to measure accurately. Validity, according to Babbie (2008:160), refers to the manner in which the scale was constructed and its ability to predict the results of the study. The validity of this study incorporates conceptualisation, study objectives, sampling, operationalisation and data analysis. Validity measurements that were used in this study include content validity, face validity, criterion, construct and inferential validity.

7.1.1 Content validity

Babbie (2008:161) describes content validity as item sampling adequacy. The content must be relevant to the questions asked in the instrument. Content validity is concerned with ensuring that content is well covered in relation to the problem to be answered. A thorough literature review was done to enhance content validity. To ensure validity, a few questionnaires were given to fashion subject specialists who had taught and had been in the field for more than ten years. These included two Home Economics Lecturers, one from Ngwane Teacher Training College and one from Manzini Nazarene Teacher Training College, two Fashion and Art teachers from local high schools, a Curriculum designer, a Clothing and Textiles Lecturer from the University of Swaziland as well as Home Economics inspectors. These individuals have taught clothing management for some time and are specialists in the clothing and textile field. These specialists critically analysed the instrument and checked whether it measures what it was supposed to measure in relation to each objective of the study. They then made the necessary recommendations, to ensure that the instrument was simple to be followed and easily understandable by the plus-size Swazi working women – the clothing consumer respondent.

7.1.2 Face validity

Face validity refers to whether the instrument measures what it is supposed to measure. In this study the questionnaire was checked several times by selected specialists, that is the Supervisor of the study and apparel specialists from the University of Swaziland, in relation to the objectives to see whether it tests what it is supposed to test, which in this case was exploring apparel sizing and fit problems and preferences of the plus-size Swazi working women (De Vos *et al*, 2005:161). Once checking was done, the instrument was pilot-tested to ensure that it measured what it was supposed to measure.

7.1.3 Criterion validity

This is validity that checks whether the instrument accurately predicts current or future behaviour (Babbie, 2008:161). It estimates the behaviour and quality of the instrument at a present time without predicting the future. In this study the questionnaire was checked by the researcher to ensure that each objective has been operationalised and is able to be tested at the end. A table showing the objectives to be tested as well as how each objective was to be analysed helped address criterion validity.

7.1.4 Construct validity

Construct validity is concerned with understanding the meaning of the instrument and how and why it operates the way it does. It also addresses the extent to which the measuring instrument accurately measures the theoretical construct that it is supposed to measure (De Vos *et al.*, 2005:162; Babbie & Mouton, 1998:123). In this study the objectives measured were thoroughly addressed in the questionnaire using operationalisation. The researcher together with the subject specialists in fashion and arts were used to validate the questionnaire, and to ensure that the variables measured in the objectives were measurable and were within the scope and content of the study. It was again pilot-tested, rechecked and corrected, until it was suitable for use in the field.

7.1.5 Inferential validity

Inferential validity is concerned with the validity of the statistical method used to interpret the data collected. In this study all the objectives were operationalised and appropriate statistical methods were used to interpret the data. This included frequencies and percentages. Fisher's Exact Test was used to test for statistically significant differences between the young and the mature groups.

7.2 Reliability

According to De Vos *et al.* (2005:162), reliability refers to the stability and consistency of the measurement. This means that, if the instrument is administered consistently under the same conditions, similar results will be obtained. To achieve reliability in this study, pilot-testing on a target group was done. A total of twelve (12) teachers who represent the plus-size individuals within the urban and surrounding schools from the nearby High School, Primary school, Teachers Training Colleges, as well as some Home Economics Regional inspectors, were given the questionnaire to answer. Each participant was given enough time to complete the questionnaire. Each respondent had to make comments and indicate difficulties encountered as the questionnaire was being answered. Respondents used the same questionnaire that was to be used for the study after it had been validated. This ensured that method error was eliminated. This further facilitated correcting and adjusting items in the instrument, before the instrument was used by the actual target sample population. The researcher also ensured that a classroom similar to that which the respondents would use was used by these individuals pilot-testing the instrument. The researcher made sure that the respondents sat comfortably as the researcher needed to prepare them emotionally and ensure that they were physically fit and ready to take the test. A thorough explanation on how to go about answering the questionnaire was given, and participants who had difficulty in understanding the instrument statements were helped. The same questionnaire using the same respondents and same questionnaire under the same conditions was done three weeks later to validate test score reliability. The researcher ensured that the scores were recorded correctly in the correct columns.

8 ETHICAL ISSUES

The researcher had to seek permission to conduct the study from the Ministry of Education in Swaziland, the Regional Education Officers in the regions as well as from school Principals from where the participants undertaking the study came from. The researcher also had to seek permission from the participants as fording the individuals to do the research was strictly forbidden. The researcher had to keep the norm of confidentiality, especially regarding those personal details of the individual and sensitive information regarding particulars of the person to avoid psychological harm. The respondents were also assured that the information gathered would not be of public consumption but will be kept secret, and only conclusive results and references to data would be used for the research (De Vos *et al.*, 2005:67-69; Babbie, 2008:307).

9 DATA PRESENTATION

The raw data was statistically analysed using the SAS software program. The data conversion is available in hard copy in the researcher's files, and an electronic copy is kept at the Department of Statistics of the University of Pretoria. The results of the study are presented in Chapter 4.

CHAPTER 4 ANALYSIS AND DISCUSSION OF RESULTS

1 INTRODUCTION

This chapter focuses on analysing the collected data, interpreting it as well as discussing the findings obtained from evaluating the primary objectives of the study. As explained above, the objectives address apparel sizing and fit preferences and problems of plus-size Swazi working women with regard to work clothes.

2 DEMOGRAPHIC ANALYSIS AND BACKGROUND INFORMATION

2.1 Age distribution (V2)

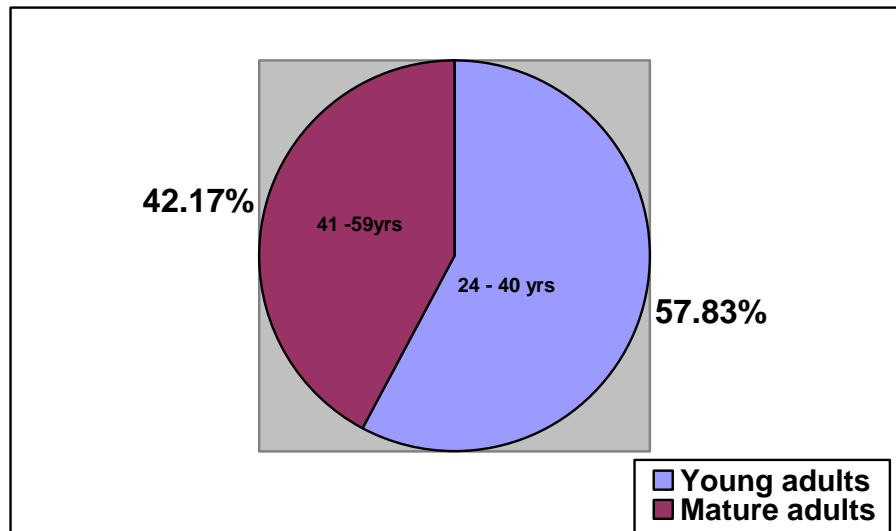


Figure 4.1: Age distribution (n = 249)

Figure 4.1 presents the age distribution of the respondents who took part in the study. There were 249 respondents who completed the questionnaire. The ages of these respondents ranged between 24 years and 59 years. They were categorised into two groups, namely young adults from ages 24 to 40 and mature adults from ages 41 to 59. The highest representation in this study came from young adults with 57, 83%, while 42, 17% of the population represented the mature adults. The young adults, when further categorised, indicated that there were 19,05% respondents

between the ages of 24 and 30 years, and 38,95% were those between the ages of 31 and 40 years. When further categorising the mature adults, it was found that there were 26,51% of adults between ages 41 and 50 years, while 15,66% of respondents were aged between 51 and 59 years.

2.2 Education level of participants (V3)

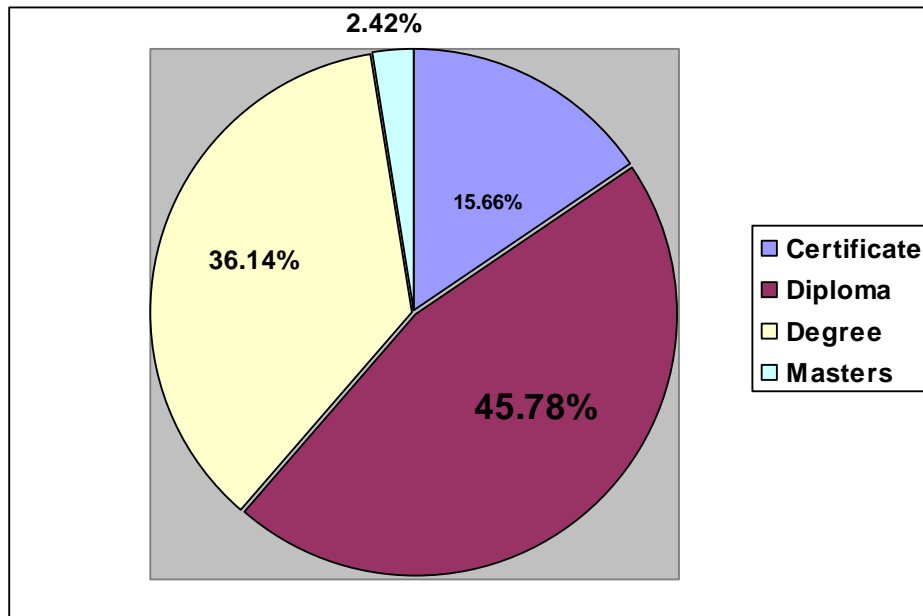


Figure 4.2: Level of education (n = 249)

The results (Figure 4.2) indicate that the respondents had certificates, diplomas, Bachelor degrees as well as Master's degrees in different categories of the education system. The results indicated that 45, 78% of the respondents had a diploma qualification, while 36, 14% had degrees and 15, 66% had certificate qualifications. Only 2, 42% respondents indicated that they had masters' degrees in the field of education. All the respondents were professionals in the teaching profession. The assumption made here was that their being able to earn an income on a monthly basis would enable them to buy clothes for work so as to look presentable at all times. The level of qualification also indicates how much one is able to spend on clothes. The more qualified the consumer is, the better the salary. One can further assume that some of the money will go to clothing.

2.3 Clothing size commonly worn on a daily basis (V4 –V7)

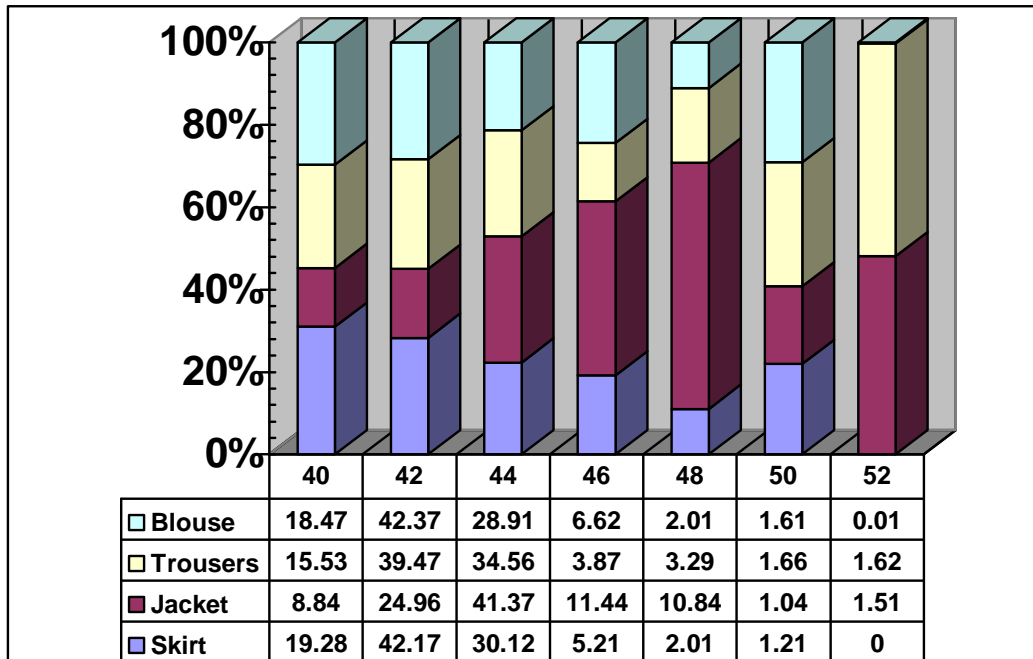


Figure 4.3: Garment sizes commonly worn at work (n = 249)

Figure 4.3 illustrates sizes of garments commonly worn at work. With regard to skirts the majority of the respondents (42, 17%) indicated that they wore size 42, while those who wore size 44 followed with 30, 12%. A substantial number of respondents (19, 28%) wore skirts of size 40, while about 10, 22% of these respondents wore skirts of size 46 and above. The majority of the respondents (41, 37%) indicated that they wore jackets of size 44, followed by those who wore size-42 jackets (24, 96%). Very few respondents indicated that they wore size 46 and above. With regard to pairs of trousers, the majority of respondents did not respond to this question (97 missing) – probably due to the fact that they do not wear trousers. A majority of those who responded (39, 47%) indicated that they wore size 42, followed by those who wore size 44 with 33,55%. The majority of the respondents (41, 37%) indicated that they wore blouses of size 42, while 28,11% indicated that they wore blouses of size 44.

The results show that a high percentage of plus-size Swazi working women wear work clothes between sizes 42 and 44. A very low percentage of this group wears

clothes between sizes 46 and 52 in most of the work apparel. The results imply that clothing retailers and manufacturers have to note that a high percentage of plus-size working women wear clothes of size 42 to 44.

2.4 Amount that consumers are willing to pay for work apparel (V 8)

This statement was addressed by question 4 in the questionnaire. It seeks to establish the amount of money that consumers are willing to spend on clothes per month.

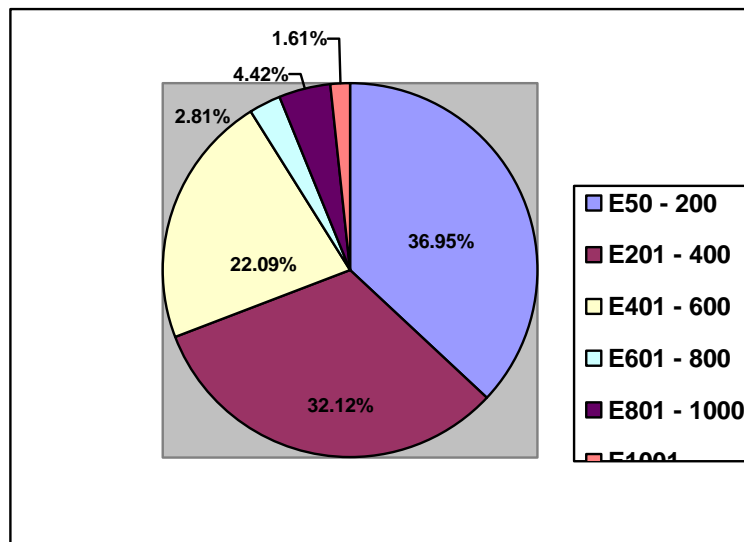


Figure 4.4: Amount consumers are willing to spend on clothes per month (n = 249)

The results in Figure 4.4 indicate that 32,12% of the respondents were willing to spend between E201,00 and E400,00 on clothes per month (1E is equivalent to 1 South African rand). More than 35% were willing to spend between E50 and E200, while only 22, 09% respondents were willing to spend between E401 and E600 on clothes per month. A very small percentage of the respondents (2, 81%) were willing to spend between E601 and E800 per month. Less than 5% of the respondents indicated that they were willing to spend E801 – E1000 on clothes, while 1, 61% of the respondents indicated that they were willing to spend between E1001 and E1600 on clothes per month. The results imply that these plus-size professional Swazi women are willing to spend a substantial amount of income on clothes.

2.5 Work dressing style for plus-size Swazi working women (V9)

TABLE 4.1: WORKING WOMEN’S DRESSING STYLES

Dressing style	Frequency (n = 249)	Percentage %
Casual (jeans allowed)	16	6,43
Business casual (no jeans allowed but no strict dress code)	141	56,63
Business formal (a formal dress code is in place)	87	34,93
Formal (a jacket is required at all times)	5	2,01

Table 4.1 illustrates the responses on the dressing styles used by working women in their workplaces around the country. The majority of the respondents (56,63%) indicated that a business casual style of clothing was the most used as a dressing style in a number of schools, while business formal (a formal dress code in place) followed, with 34,94%. Very few of the respondents (6, 43%) indicated that they dressed casually (jeans allowed). The formal dress code was the least used in most schools. Only 2, 01% reported using it in their schools. The results imply that Swazi career women dress professionally for work. The business casual dressing code allowed in most schools makes dressing for work friendly, while allowing variety and comfort in dress.

2.6 Frequency of buying clothes from different retail outlets (V10-15)

This statement was addressed by question 6. Respondents were asked to indicate how often they bought clothes from selected apparel retail shops in the country’s major towns. Results are reflected in Figure 4.5 below.

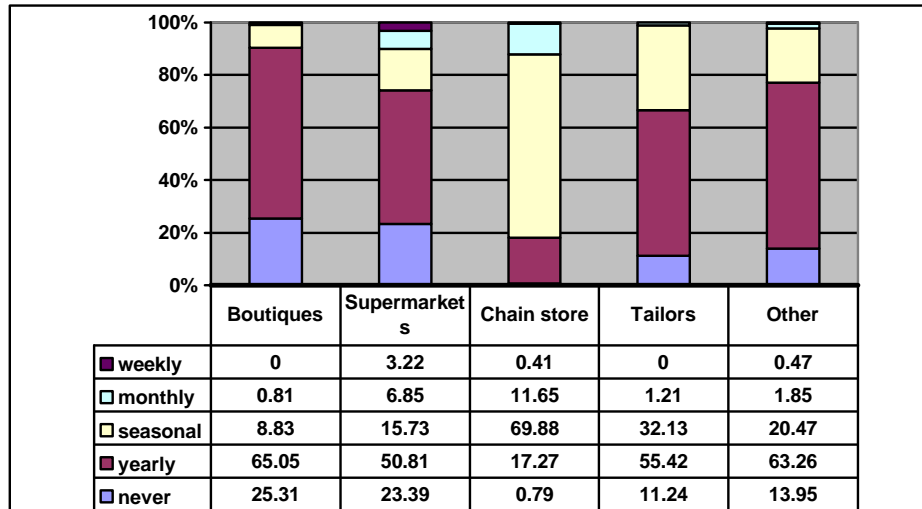


Figure 4.5: Frequency of buying clothes from local retail clothing outlets (n= 249)

Figure 4.5 illustrates the respondents' frequency of buying clothes from selected clothing outlets in Swaziland. From the results, 65% of the respondents indicated that they bought clothes once a year from boutiques, while 25% indicated that they never bought clothes from boutiques. Less than 10% of the respondents indicated that they bought clothes from boutiques either seasonally, or monthly or weekly.

About half (50, 81%) of the respondents indicated that they bought clothes once a year from supermarkets, while 15,73% indicated that they bought their clothes seasonally and 23,39% reported that they never bought from supermarkets. A high percentage of respondents (69, 88%) indicated that they bought their clothes seasonally from chain stores, while less than one third bought their clothes there yearly or monthly. It was also indicated from the results that 55, 42% of the respondents bought their clothes from tailors and dressmakers once a year, while 32,13% bought their clothes from other clothing shops seasonally. Less than 12% of the respondents indicated that they never used tailors or dressmakers for their clothes. The results imply that plus-size Swazi women buy their clothes more often from chain stores. Boutiques are used by some of these individuals once a year. The results indicate that consumers prefer to buy their clothes more from chain stores than from the other outlets, probably because chain stores may be offering more

affordable clothes with more choice on style and aesthetic qualities as compared to the other outlets.

2.7 How plus-size Swazi working women rate the fit of clothes from various retail outlets (V16-19)

Question 7 measured plus-size Swazi career women’s rating of the fit of clothes from various retail outlets in Swaziland. The results were analysed and are shown in Figure 4.6 below.

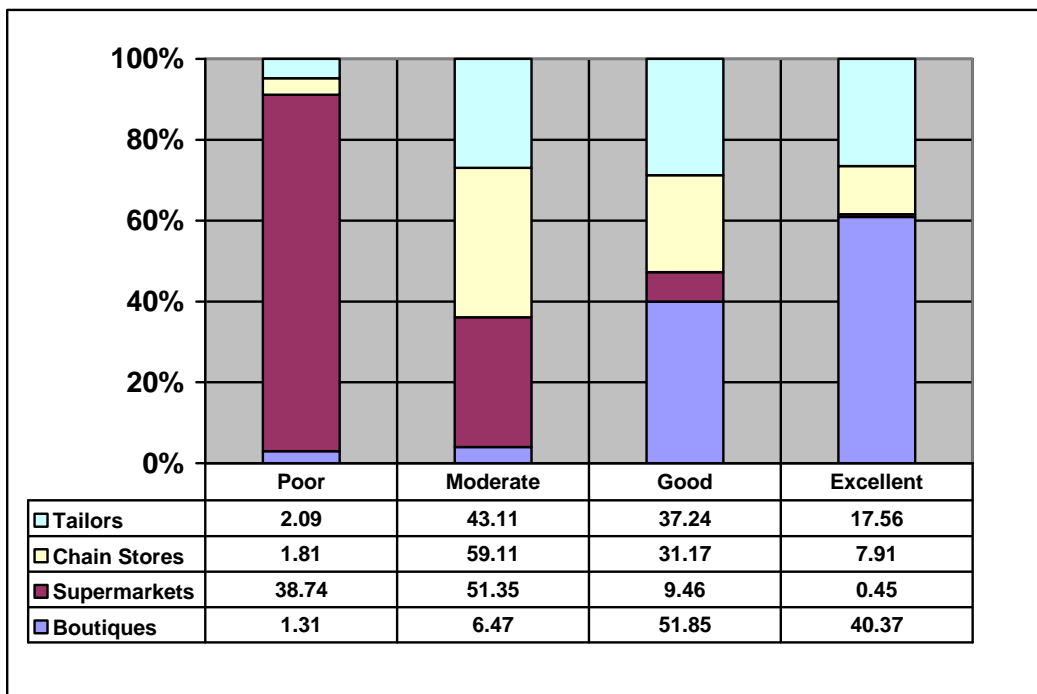


Figure 4.6: Fit of apparel sold in different retail outlets (n = 249)

The results in Figure 4.6 indicate that respondents found the fit in clothes sold in most boutiques to be good (51,85%), while 40,37% reported that the fit was excellent. Approximately 8% of the respondents indicated that the fit from boutiques was moderate to poor. A high percentage of respondents (51, 35%) also indicated that clothes bought from supermarkets had a moderate fit, while less than 10% reported that the fit was good to excellent. Approximately 40% of the respondents (38, 74%) indicated that it was poor. Fit in clothes bought from most chain stores was reported to be moderate by a majority of respondents (59, 11%), while 31, 17%

indicated that it was good and 7, 91% reported that it was excellent. The results also reflected that 43, 11% of the respondents reported a moderate fit from tailors, while 37, 24% reported a good fit and 17, 56% reported an excellent fit. Bearing in mind that most plus-size Swazi working women bought their clothes from chain stores (Figure 4.5) and were willing to spend quite a lot of money on clothes (Figure 4.4), it is sad that they actually rate the fit of clothes from chain stores as only moderate.

2.8 Plus-size Swazi working women’s preferences for a specific fit in clothes (V20-22)

Question 8 was used to determine working women’s clothing fit preferences for their work apparels. The results were presented in Figure 4.7 below.

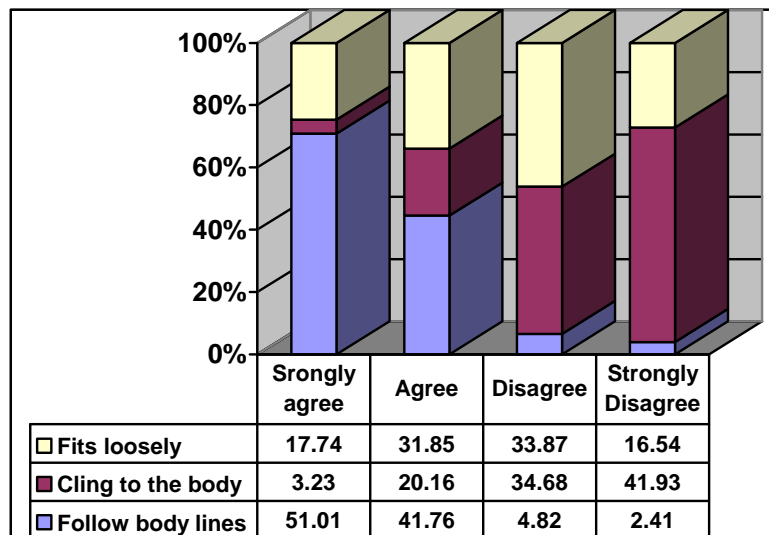


Figure 4.7: Garment fit preference (n = 249)

Figure 4.7 illustrates the results from the respondents with regard to their fit preferences for work apparel. The results indicate that 51,01% of respondents reported that they strongly agreed with the statement that says, garments must follow body lines without any strain, while 41,76% agreed with the statement. Quite a high percentage of more than 75% of the respondents (41, 93% strongly disagree + 34, 68% disagree) indicated that they did not prefer clothes that clung to the body. The results also indicate that about 50% (33, 87% + 16, 54%) of the respondents reported that they did not like loose-fitting clothes.

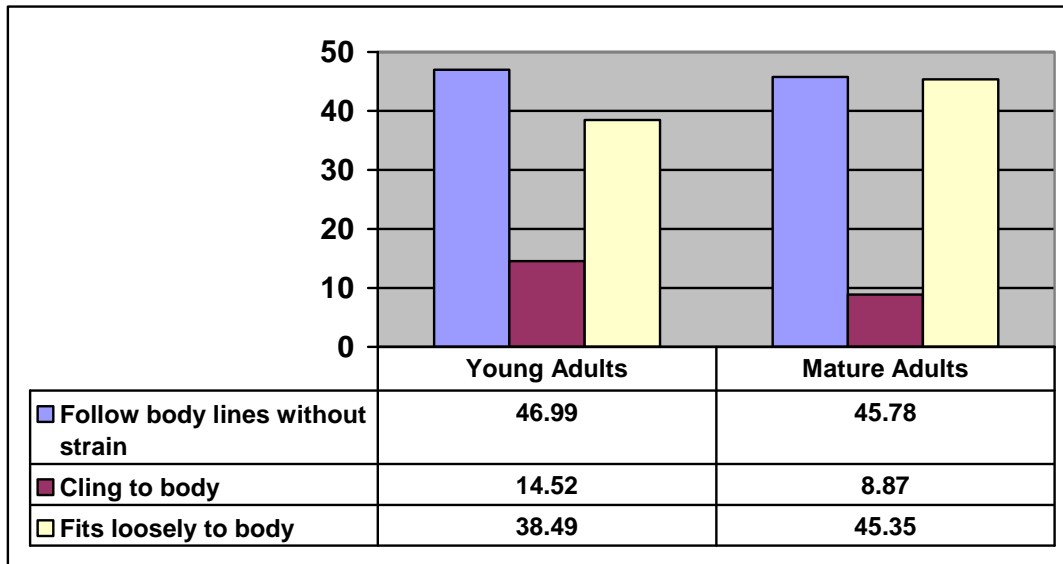


Figure 4.8: Garment fit preferences of young and mature adults (n = 249)

When the results were analysed further to determine which group of the respondents preferred clothes that follow the body line without any strain, the results reflected that 46,99% of the young adults preferred clothes that follow body lines without strain, while 45,78% of the mature adults also preferred this fit. In young adults 14, 52% indicated that they preferred a clinging fit, while only 8,87% of mature adults indicated that they preferred that kind of a fit. The results further reflected that 45, 35% of mature adults showed a preference for a loose-fitting style, while only 38, 49% of the young adults preferred this kind of a fit. The results imply that most Swazi working women prefer clothes that are not too loose or too tight. They are more comfortable with clothes that follow body lines without any strain, and are not comfortable with clothes that cling to the body or those that are too loose.

Fisher's Exact Test was done to determine whether there were any statistically significant differences between the fit preferences of younger and mature plus-size Swazi working women ($p < 0,05$). The results reflected that there is a significant difference ($p = 0,0221$) between the younger and the mature plus-size working women's preferences regarding a fit that clings to the body. Young plus-size Swazi working women's preference for this fit is significantly higher than the mature women's preference.

2.9 Fabric preference of the plus-size Swazi working women (V23-30)

Working women were asked to state their preference for knitted fabric or woven fabric, as to which they thought gave them the best fit on clothes they bought for work. Figure 4.8 below illustrates the results of question 9.

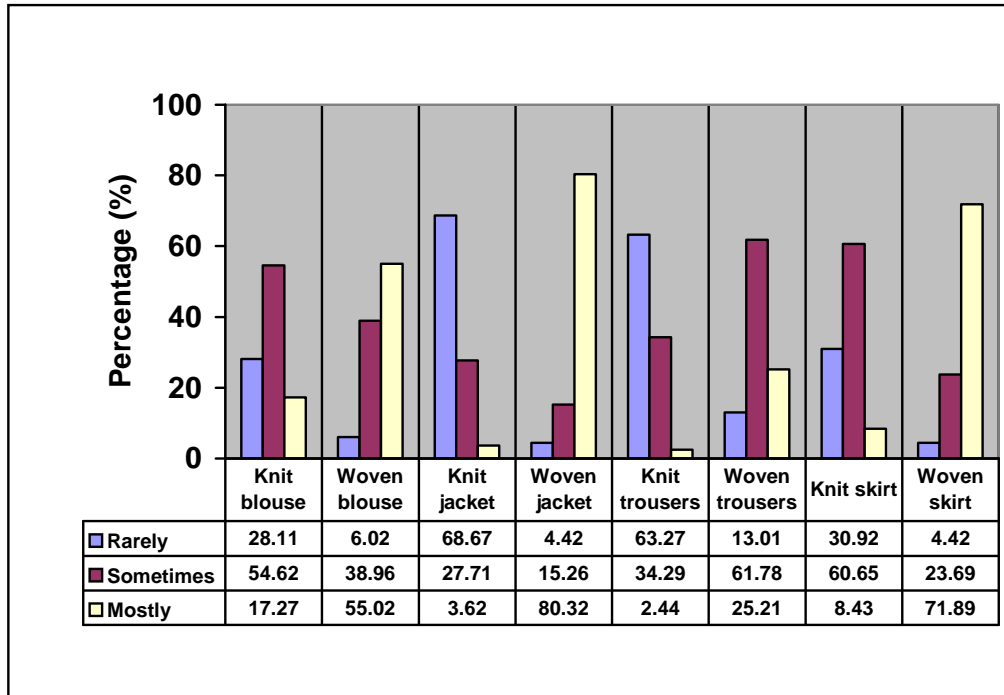


Figure 4.9: Woven and knitted fabric preference (n = 249)

The results in Figure 4.9 clearly indicate how often plus-size working women use woven and knitted fabric for their work clothes. The results indicate that woven fabric was mostly used for jackets (80,32%), skirts (71,89%), blouses (55,02%) and trousers (25,21%) respectively, while a very small percentage of the respondents used knitted fabric mostly for their blouses (17,27%), jackets (3,61%), trousers (2,44%) and skirts (8,43%). Some of the respondents indicated that they used woven fabric sometimes for trousers (61, 78%) as well as in skirts (60,65%) and in blouses (54,62%) respectively. A low percentage of respondents (3.61%) reported using knitted fabric mostly for jackets (68, 67%) – probably because knits are not

commonly used for tailored garments due to their stretchy characteristics which may distort the shape of the jacket.

The above results clearly show that woven fabric is the most preferred fabric for plus-size working women; they feel it is appropriate for their work clothes. Although knitted fabric was sometimes chosen for work clothing, a very small percentage of the respondents indicated using it for their work apparel. Fisher's Exact Test shows no statistically significant differences ($p > 0.05$) between the younger and the mature plus-size Swazi working women's fabric preferences.

3 ANALYSIS AND DISCUSSION OF RESEARCH OBJECTIVES

3.1 Objective 1: To explore and describe the importance of functional, aesthetic and economic apparel fit preferences of the plus-size Swazi working women (V31-40)

Question 10 measured Swazi career women's functional, aesthetic (sensory, emotional and symbolic) and economic fit preferences. The respondents were asked to rate the importance on a 4-point scale where 4 indicated very important, 3 indicated important, 2 indicated less important and 1 indicated unimportant. The results or statements that measured the same concept were added together and the average was calculated. For purposes of analysis, the averages of very important and important were calculated together, and the averages of less important and unimportant were calculated together. Table 4.2 below shows these results.

TABLE 4.2: APPAREL FIT PREFERENCES OF THE PLUS-SIZE CONSUMER
(n = 249)

	V	Clothing preference	Very Important (%)	Important (%)	Less important (%)	Unimportant (%)	Total very important +	Total less important +
SENSORY	31	The fit flatters my figure	42,57	46,18	6,83	4,42	88,75	11,25
	34	The style is fashionable with a good fit	47,79	36,95	11,24	4,02	84,74	15,26
Average			45,18	41,57	9,04	4,20	86,75	13,25
EMOTIONAL	35	The outfit makes me feel professional	54,62	34,54	9,64	1,20	89,16	10,84
	39	The price makes me feel that I am wearing something special	20,48	32,93	31,93	14,66	53,41	46,59
Average			37,55	33,74	20,79	7,93	71,29	28,71
SYMBOLIC	36	The style shows that I am a professional	40,56	37,75	19,28	2,41	78,31	21,90
	37	My colleagues compliment me on the fit	24,90	35,74	29,32	10,04	60,64	39,36
	38	The outfit	22,48	42,17	24,10	11,25	64,65	35,35

		shows that I have style						
Average			29,31	38,55	24,23	7,90	67,87	32,13
FUNCTIONAL	32	The style fits me comfortably	71,89	24,90	3,21	-	96,79	3,21
	33	The material stretches comfortably	49,0	43,78	3,61	3,61	92,78	7,22
Average			60,45	34,34	3,41	1,81	94,79	5,21
ECONOMIC	40	The outfit is affordable	75,90	20,08	2,41	1,61	95,98	4,02

It is clear from Table 4.2 that plus-size Swazi working women rated all the preferences as important or very important, with economic preferences (95,98%), functional preferences (94,79%) and sensory preferences (86,75%) on average as the highest three. Although emotional preferences (71,29%) and symbolic preferences (67,87%) were rated lower, they were still very important or important to the plus-size Swazi working women. In some cases there were, however, large percentage differences between the various statements that measured a specific preference. One should therefore also look at the statements individually.

The fact that an outfit is affordable (average 95,98%) and comfortable (96,79% and 92,78%) seems to be of the utmost importance to the respondents. This is understandable, as these women are teachers who need more than one outfit, but most probably only have a limited budget to spend on work clothes. The nature of their job and the fact that they do not spend their time behind a desk also calls for comfortable career wear.

It is further clear that the sensory dimension and specifically the fit of their clothes is of high importance to the plus-size working women, where both statements relating to fit were rated as important or very important by more than 80% of the respondents. It is further clear that the fact that they feel professional in the outfit

(89,16%) and that the style shows to others that they are professionals (78,31%) were considered as very important or important to these plus-size Swazi working women. It is, however, less important to the respondents that their colleagues should compliment them on the fit (60,64% rated it as important or very important), and that the outfit shows that they have style (64,65% rated it as important or very important), while only 53,41 of the respondents indicated that it was important or very important that the price contributed to their feeling that they are wearing something special.

It therefore seems that these plus-size Swazi working women were more concerned about the career wear being affordable and comfortable, with good fit and a professional appearance, than about external aspects such as the opinion of others.

Fisher's Exact Test was done to determine whether there was any statistically significant difference between the preferences of the younger and the more mature plus-size Swazi working women ($p < 0,05$). No statistically significant differences were found between the preferences of the younger and those of the mature plus-size Swazi working women.

3.2 Objective 2: To explore and describe the functional, aesthetic (sensory, emotional, symbolic), economic and size-related apparel fit problems of the plus-size Swazi working women (V60-69)

Question 16 measured this objective. The respondents were asked to rate the frequency of fit-related problems using a 4-point scale where 4 indicated very frequent, 3 indicated frequent, 2 less frequent and 1 rarely. For purposes of analysis, the averages of most frequent and frequent were calculated together, and the averages of less frequent and rarely. Table 4.3 shows these results.

TABLE 4.3: APPAREL FIT PROBLEMS OF THE PLUS-SIZE SWAZI WORKING WOMEN (n = 249)

	V	I find it difficult to...	Most frequent	Frequent (%)	Less frequent	Rarely (%)	Total most	Total less frequent
Sensory	62	- Get apparel that fits my figure beautifully	17,7	47,79	24,90	9,64	65,46	34,54
	63	- Find apparel styles that fit my figure well	22,49	44,56	22,09	10,86	67,05	32,95
Average			20,08	46,18	23,50	10,25	66,26	33,74
Emotional	68	- Find latest fashion styles I like	17,27	43,78	28,92	10,03	61,05	38,95
	69	- Find a fit that would make me feel professional	14,06	43,78	32,13	10,03	57,84	42,16
Average			15,67	43,78	30,53	10,03	59,45	40,55
Symbolic	66	- Find a fit that shows that I am a professional	10,44	45,38	34,54	9,64	55,82	44,18
	67	- Find a fit that colleagues would compliment me on	8,44	35,74	42,97	12,85	44,18	55,82
Average			9,44	40,56	38,76	11,25	50,00	50,00
Functional	64	- Find work apparel that fits comfortably	37,35	32,53	20,48	9,64	69,88	30,12
	72	- Get quality fabric that	14,46	44,18	30,92	10,44	56,64	41,36

		drapes well to ensure a neat fit						
	73	- Find clothes with a firm fabric to support my body form	13,36	41,30	34,82	10,52	54,66	45,34
	63	- Find fashionable work apparel that fits my figure well	21,29	44,98	24,10	9,63	66,27	33,73
Average			21,62	40,74	27,58	10,06	62,36	37,64
Economic	60	- Get well-fitting clothes that I can afford	15,66	36,14	33,73	14,47	51,80	48,20
Average			15,66	36,14	33,73	14,47	51,80	48,20
Size-related	61	- Get the correct size for my figure type	21,69	31,33	28,07	18,91	53,02	46,98
	70	- Understand the size labels	34,94	31,33	18,07	15,66	66,27	33,73
	71	- Get the latest fashion in my size	30,92	34,14	21,69	13,25	65,06	34,94
Average			29,18	32,27	22,61	15,94	61,45	38,55

It is clear from Table 4.3 that plus-size Swazi working women experience problems with all the dimensions of available career wear, where averages of 80% and more on all dimensions indicate that these respondents most frequently and frequently experience problems with fit in clothes. It seems that on average, they experience the most problems on sensory aspects (66,26%), followed by functional aspects (62,36%) and size-related aspects (61,45%). This is alarming since these respondents indicated very high preferences for these dimensions (Table 4.2). What

is further alarming is that the respondents indicated very high preferences for functional and sensory aspects, and apparently frequently and most frequently experienced problems in this regard, indicating that their needs for these aspects are most probably not being fulfilled by what is commonly available for them in the market. It is further interesting to note that 61,45% indicated that they frequently and most frequently experienced problems with size labelling issues. Bearing in mind that 94,79% of the plus-size Swazi women have indicated that it was very important or important to them that clothes should be affordable, it is encouraging to note that only 51,80% of the respondents indicated that they frequently or most frequently found it difficult to get well-fitting clothes that they could afford.

As was the case with preferences, one should again for interpretation purposes also consider the various statements that measured a specific dimension, individually. With regard to the functional aspects of clothing, it is clear that respondents experienced problems in finding comfortable work clothes, where 69,88% of the women indicated that they frequently or most frequently experienced problems in this regard. This is again alarming, as it was clear from Table 4.2 that comfort is of the utmost importance to these women. In general, it is clear that the functional aspect of fit poses a problem for these women and that they frequently or most frequently find it difficult to find clothes where the fabric provides a neat fit (58,64%), where the fabric supports their body form (54,66%), and where the fit is actually fashionable (66,27%). Bearing in mind what is currently in fashion, as well as what is available for the plus-size in the market, this is understandable. The current fashion allows for a close fit, with either stretchable fabric or fabric with a soft hand that complements a closer fit. However, the styles that are generally available in the market for the plus-size women are mostly loose-fitting styles with a softer fabric that drapes well, but that does not necessarily support the body. In addition, the respondents have indicated in question 8, that they prefer a closer fit that follows body lines, and have indicated in question 9 (Figure 4.9) that especially for jackets and skirts, they would mostly prefer a woven fabric (which usually supports the figure better than stretchable fabric).

The plus-size Swazi women have indicated (Table 4.2) that the sensory dimension of fit is very important to important to them. However, it is now clear from Table 4.3 that

they frequently or most frequently find it difficult to get apparel that fits the figure beautifully (65,47%), or to find styles that fit well (67,05%), indicating that their sensory apparel fit preferences are most probably not met by what is available in the market. With regard to their understanding size labels of the plus-size, 66,27% of the plus-size Swazi working women indicated that they frequently found it difficult to understand the size labels. This corresponds with what they have stated in objective 4 (Figure 4.11) in that they found lettered and numbered size labelling systems that are mostly used on the size labels, ineffective and even extremely ineffective, though their knowledge on sizing in objective 5 (Figure 4.12) seemed to be fair.

With regard to size-related problems, the plus-size Swazi working women indicated that they also frequently or most frequently experienced problems in getting the latest fashion in their sizes (65, 06%). They also indicated in V68 that they frequently or most frequently found it difficult to find the latest fashion styles that they liked (61,05%). As previously explained, this is understandable because what is available for the plus-size women in the market in many cases does not resemble the current fashion styles of the smaller sizes, and also does not resemble what is presented to them through fashion images.

Although the plus-size Swazi working women here indicated that it was important to them to feel and look professional, they seemed to encounter fewer problems in this regard. Only 57,84% of the women indicated that they frequently or most frequently experienced problems with a fit that made them feel like professionals, while only 55,82% of the women indicated that they frequently or most frequently found it difficult to find a fit that showed that they are professionals.

In contrast to the above, most plus-size Swazi working women less frequently or rarely found it difficult to find a fit that their colleagues would compliment them on (55,82%), most probably because that was also not so important to them that they should receive compliments from their colleagues on the fit. As was the case with the preferences, Fisher's Exact Test was done to determine whether there were any statistically significant differences between the problems of the young and the mature plus-size Swazi working women ($p < 0.05$). No statistically significant

differences were found between the problems of the young and those of the mature plus-size working women ($p > 0,05$).

With regard to preferences versus problems, one would prefer plus-size Swazi working women not to frequently experience problems with regard to important apparel fit preferences. A Fisher's Exact Test was also done to determine statistically significant differences between very important and important preferences and less frequent and rarely experienced problems of selected statements (Table 4.4).

TABLE 4.4: PLUS-SIZE SWAZI WORKING WOMEN'S FIT PREFERENCES VERSUS PROBLEMS (n = 249)

	V	Very important/ Important preferences	%	Less frequent/ Rarely experienced problems	V	%	P Value
Sensory	34	The style is fashionable with a good fit	84,74	Find fashionable work apparel that fits my figure well	63	32,95	0,5289
Sensory	31	The fit flatters my figure	88,75	Get apparel that fits my figure beautifully	62	34,54	0,5786
Emotional	35	The outfit makes me feel professional	89,16	Find a fit that would make me feel like a professional	69	42,16	1,000
Symbolic	36	The style shows that I am a professional	78,31	Find a fit that shows that I am a professional	66	44,18	0,3555
Symbolic	37	My colleagues compliment me on the fit	60,64	Find a fit that colleagues would compliment me	67	55,82	0,1921

				on			
Functional	32	The style fits me comfortably	96,79	Find work apparel that fits comfortably	64	30,12	0,2471
Economic	40	The outfit is affordable	95,98	Get well-fitting clothes that I can afford	60	48,20	0,1046

It is clear from Table 4.4 that there was in no case statistically significant differences ($p < 0,05$) between the very important and important preferences, and the less frequent and rarely experienced problems in all cases ($p > 0,05$). One can therefore infer that the plus-size Swazi working women indeed experience problems in finding working clothes that comply with their sensory, emotional, symbolic, functional and economic preferences. This most probably results in plus-size Swazi women being frustrated and dissatisfied with what is being offered in the marketplace.

3.3 Objective 3: To determine the apparel style preferences of the plus-size Swazi working women

Question 12 measured this objective. Respondents were asked to choose a style from a selection of jackets, skirts and pants, the fit of which they thought was suitable for their figure type. Figure 4.10 below presents the results on the different clothing style preferences.

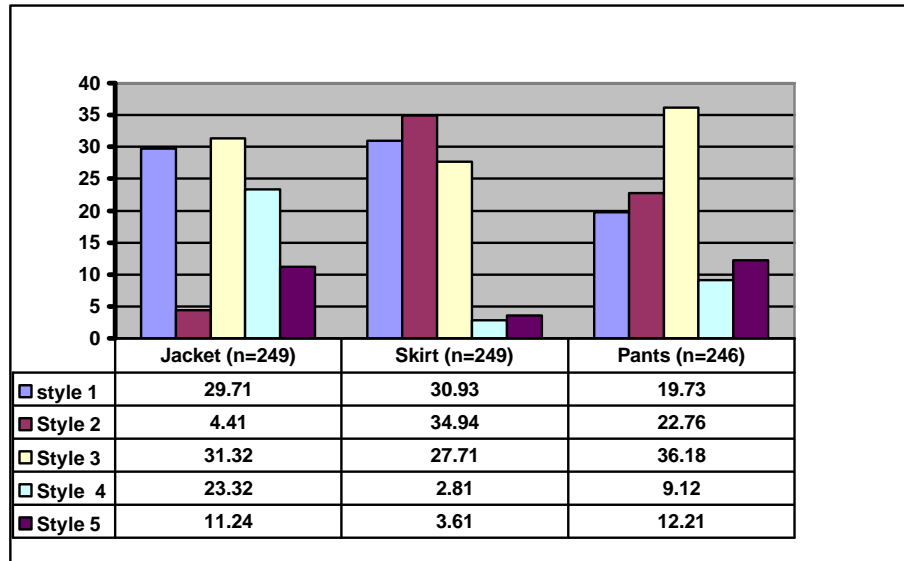


Figure 4.10: Suitable style preferences (n= 249)

Figure 4.10 presents the results on the respondents' preferences for the most suitable clothing style for jackets, skirts and pants in respect of five (5) different clothing styles. With regard to jackets, the results indicate that 31,32% of the respondents reported that they thought style (3) was the most suitable style, followed by style (1) with 29,71%, then style (4) with 23,32%. Style (2) was the least suitable style, with 4,41%, and style (5) with 11,24%. It was clear from the results that respondents were going for the more fitted jackets that follow body lines without strain. Very few respondents opted for the loose-fitting style.

With regard to skirts, 34,94% of the respondents indicated that they thought style (2) was the most suitable style, followed by style (1) with 30,93%, and style (3) with 27,71%. Less than 10% of the respondents indicated that styles (4) and (5) were suitable for their figure types. The styles chosen indicate that respondents were going for comfort as well as style for their work clothes. Styles (1) and (3) are more classic and current, and blend well with the chosen jackets, but is most probably less appropriate for the extreme plus-size as they were more body-hugging. Current prevailing skirt styles are semi- fitting, and some are body-hugging, which may probably be why most respondents chose these types of styles.

With regard to pants, more than 30% thought that style (3) was the most suitable, while 22,76% indicated that style (2) was also suitable. About 20% indicated that style (1) was suitable, while less than 15% reported that styles (4) and (5) were suitable. In general, the respondents opted for the more tailored semi-fitted pants. These results correspond with results in question 8, Figure 4.7, where most of the respondents indicated that they preferred garments that follow body lines without clinging to the body.

The Fisher's Exact Test was done to determine whether there were any statistically significant differences between the younger and the mature plus-size Swazi working women's style preferences ($p < 0,05$). A statistically significant difference was found for the preferences for style two (2) between the younger and the mature women ($p = 0,0045$). Mature women significantly preferred this style more as their first choice (21,69%) than the younger women (13,25%).

3.4 Objective 4: To determine how plus-size Swazi working women rate the effectiveness of various size description systems (V44-49)

Question 13 measured this objective. The investigation was to determine how plus-size Swazi working women rate the effectiveness of sizing systems used in clothes sold in local apparel retail outlets. Figure 4.11 shows the results of the respondents' responses on this subject.

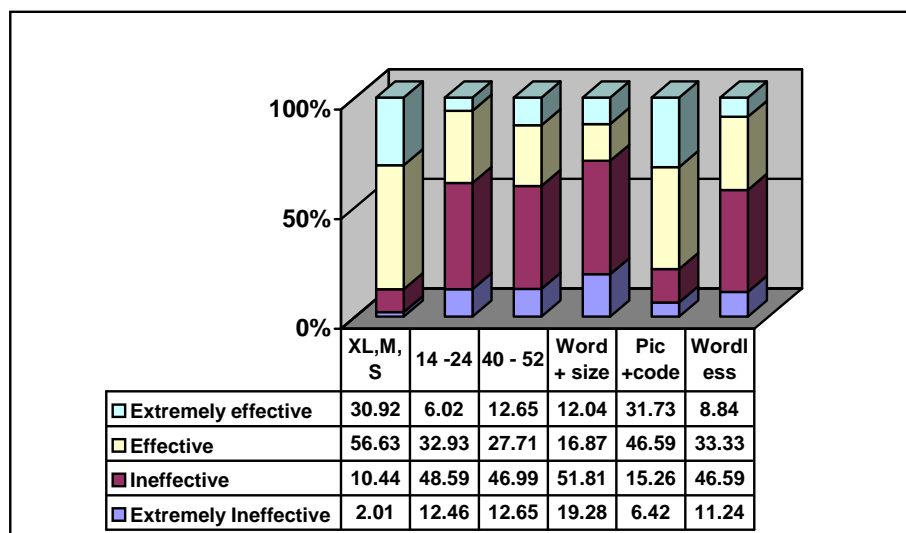


Figure 4.11: Effectiveness of sizing systems (n = 249)

The results in Figure 4.11 indicate that 56,63% of the respondents reported that garments marked with lettered size codes (XL, L, M, S) were effective in determining well-fitting garments, while 30,92% of the respondents reported that this system was extremely effective. When using size labels of 14 – 28 that is, the British sizing system, more than 60% (48,59% + 12,46%) of the respondents indicated that this system was ineffective or extremely ineffective, while only 32,93% indicated that it was effective. On the size 36 -52 category, 46,59% of the respondents reported ineffectiveness of the system. The wordless size codes were rated ineffective by more than 70% of the respondents. The only sizing system that was highly rated was the picture plus code sizing system. More than 70% (46,59% effective + 31,73% extremely effective) of the respondents indicated that it was effective. The wordless pictogram was rated ineffective by more than 55% (46,59% + 11,24%) of respondents. The results imply that Swazi plus-size consumers perceive lettered sizing systems to be the most effective when selecting clothes that could give them a good fit. This could probably be attributed to the fact that most of these consumers buy their clothes from chain stores and supermarkets (Figure 4.5), where these size description systems are mostly used.

A Fisher's Exact Test shows no statistically significant difference between the younger and the mature adult plus-size Swazi working women's effectiveness rating ($p > 0, 05$).

3.5 Objective 5: To determine plus-size Swazi working women's knowledge on apparel size labelling (V50-59)

Respondents were asked to give their own interpretation of information commonly found on a size label of clothes they commonly buy for work. The results are presented in Figure 4.12 below.

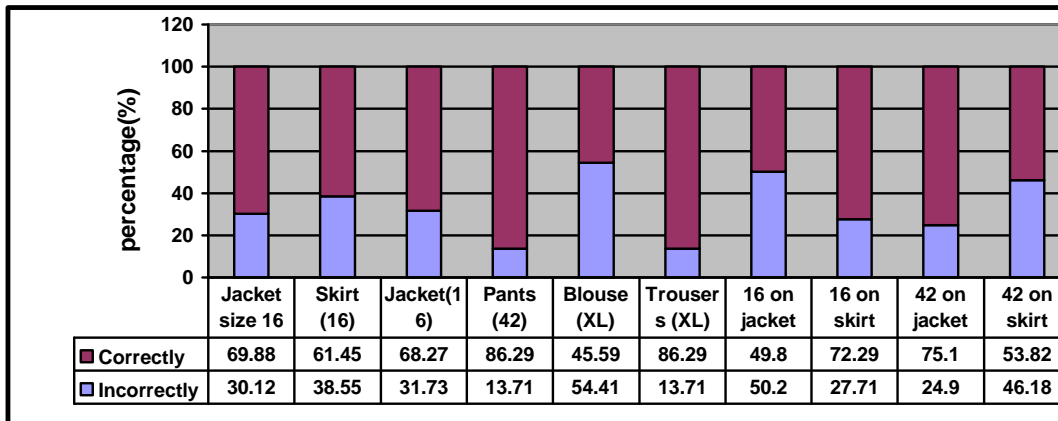


Figure 4.12: Consumers' knowledge on apparel size labelling (n = 249)

The results from Figure 4.12 indicate that the respondents are knowledgeable about sizes given in lettering or numbering on garments. The results also indicate that 69.88% of respondents were knowledgeable on size labels on jackets, followed by 61.45% on shirt size (16), 68.27% on jacket size 42, and 86.29% on trousers. Less than 50% were not sure what (XL) on a blouse meant, while 50% demonstrated that they knew the meaning of these size labels. On trouser sizing, more than 50% of the respondents demonstrated that they knew the meaning of these lettered sizing codes.

The respondents were also asked what they understood by size 16 on jacket, skirt etc. The results indicate that most respondents were knowledgeable, as 75, 10% responded correctly on jacket size, while 72,2 % answered correctly about 16 on a skirt. Again, 69, 88% answered correctly for 16 on a jacket. Only 53, 82% gave a correct answer for 42 on a skirt. The results imply that plus-size Swazi working women may be familiar with the lettering and numbering of size labels as they are professionals, but this may not mean that they understand what the number or letter may mean with regard to helping a consumer find well-fitting clothes. Frequent shopping practices may make consumers more familiar with size labels. Yet, exposure to size labels and shopping experience may still not guarantee consumer knowledge about size labels due to vanity sizing. Variation in sizes from shop to shop may frustrate most plus-size Swazi consumers, as they have to fit clothes before making any purchase. This may reduce shopping pleasure or make these consumers opt for loose-fitting garments.

3.6 Objective 6: To explore and describe specific apparel fit problems experienced by the plus-size Swazi working women with regard to their work apparel (V74-92)

This objective was addressed by question 17 of the questionnaire. The question intended to find out as to which areas of the body the respondents experienced more fit problems. Tables 4.5 a, b and c present the results of the fit problems experienced.

TABLE 4.5: (a) FIT PROBLEMS EXPERIENCED IN THE UPPER PART OF THE BODY

Fit point	Fit problem		Frequency (n = 249)	Percent- age (%)	Total % problems
Neckline	Tight		26	10,44	
	Loose	Fit problems	90	36,14	46,58
	Normal/ acceptable		133	53,42	
Shoulders	Tight		71	28,51	
	Loose	Fit problem	109	43,78	72,29
	Normal/ acceptable		69	27,71	
Back width (shoulder blades)	Tight		80	32,13	
	Loose	Fit problem	106	42,57	74,70
	Normal/ acceptable		63	25,30	
Bust	Tight		108	43,37	
	Loose	Fit problem	118	47,39	90,76

	Normal/ acceptable		23	9,24	
Nape to waist	Short		55	22,09	
	Long	Fit problem	81	32,53	54,62
	Normal/ acceptable		113	45,38	
Front neck to waist	Short		55	22,09	
	Long	Fit problem	77	30,92	53,01
	Normal/ acceptable		117	46,99	
Waist	Tight		66	26,51	
	Loose	Fit problem	169	67,87	94,38
	Normal/ acceptable		14	5,62	
Blouse length	Short		50	20,08	59,44
	Long	Fit problem	98	39,36	
	Normal/ acceptable		101	40,56	

TABLE 4.5: (b) FIT PROBLEMS ENCOUNTERED ON THE ARM AREA

Fit point	Fit problem		Frequency n = 249	Percentage (%)	Total fit % problem
Armhole (armscye)	Tight	Fit problem	80	32,13	
	Loose		74	29,72	61,85
	Normal/ acceptable		95	38,15	

Upper arms	Tight	Fit problem	87	34,94	
	Loose		78	31,33	66,27
	Normal/ acceptable		84	33,73	
Elbows	Tight		62	24,90	
	Loose	Fit problem	69	27,71	52,61
	Normal/ acceptable		118	47,39	
Lower arms	Tight		53	21,29	
	Loose	Fit problem	82	32,93	54,22
	Normal/ acceptable		114	45,78	
Sleeve length	Short		57	22,89	
	Long	Fit problem	130	52,21	75,10
	Normal/ acceptable		62	24,90	

TABLE 4.5: (c) FIT PROBLEMS ENCOUNTERED AT THE LOWER BODY AREA

Fit point	Fit problem	Frequency (n = 249)	Percentage (%)	Total fit problem %	
Waist	Tight	66	26,51		
	Loose	Fit problem	169	67,87	94,38
	Normal/ acceptable		14	5,62	
Abdomen	Tight		84	33,73	
	Loose	Fit problem	147	59,04	92,77
	Normal/ acceptable		18	7,23	
Hips	Tight	Fit problem	137	55,02	

	Loose		95	38,15	93,17
	Normal/ acceptable		17	6,83	
Buttocks	Tight	Fit problem	136	54,62	
	Loose		96	38,55	93,17
	Normal/ acceptable		17	6,83	
Thighs	Tight	Fit problem	127	51,00	
	Loose		96	38,55	89,55
	Normal / acceptable		26	10,44	
Skirt length	Too short		44	17,67	52,61
	Too long	Fit problem	87	34,94	
	Normal/ acceptable		118	47,39	
Trouser length	Too short		38	15,26	70,28
	Too long	Fit problem	137	55,02	
	Normal/ acceptable		74	29,72	

It is clear from Table 4.5 (a, b, c) that plus-size working women experience many fit problems with their career wear. It seems as if most of the problems are experienced in the lower part of the body, where they have indicated about 90% width problems in all areas. It further seems as if the clothes are too loose at the waist and abdomen areas and too tight in the hips, buttocks and thigh areas, while trousers are mostly too long.

From Table 4.5 (a), it is clear that these women also experience many fit problems in the upper parts of the body, with more than 70% of the respondents indicating fit

problems with shoulder and back widths, and more than 90% of the respondents indicating fit problems with the bust and waist widths. A high percentage of respondents have indicated that they encounter more problems with garments that fit too tightly on the lower body (especially hips, buttocks and thigh area). They also indicated that in many cases, they experience that clothes fit too loosely in the upper part of the body.

From Table 4.5 (b) it is clear that respondents experienced fewer fit problems in the arm areas, with too long sleeves being the most common problem (52,21%). In order to understand the plus-size Swazi working women's fit problems, one should look at the various fit points and problems as a whole and against the background of their body shapes, their fit preferences and available styles for the plus-size women. Swazi women mostly have pear-shaped bodies, with broader hips and buttocks and a smaller upper body and waist. It is further a well-known fact that women with pear-shaped bodies tend to put any extra weight on the lower body, specifically the hips, buttocks and thigh areas. That may be the reason why the respondents in Table 4.5 (c) indicated that they mostly encounter a too tight fit in those areas. In order to get a good fit in the lower body areas, the bodice part of the dress would then most probably be too loose fitting, as was indicated by the respondents. A too loose fit in the upper part of the body would also be related to a specific style choice. The respondents have indicated (question 8) that they prefer a garment to follow their body lines without strain, and have indicated in question 12 that they prefer semi-fitted garments, but tailored (styles 1 and 3). Many of the styles for blouses and jackets that are commonly available in the shops for the plus-size women are loose-fitting styles – which most probably are not these women's first choice. Another reason for a too loose fit in the bodice as well as the sleeve areas, and trouser lengths that are too long may be the grading rules followed to grade a rather large size from a smaller sized pattern.

Current sizing systems do not adequately address variations in population measurements, partly because they are based on the principle that differences between sizes are measurable in equal linear distances. Linear increments between sizes in a sizing system facilitate pattern making and grading. Actual human measurements, however, do not support the assumption that the difference between

the principle girth is a constant, leading in many cases to a too loose fit in the neck area, shoulder seams that are too loose and a bodice and sleeve lengths that are too long.

4 DISCUSSION AND INTERPRETATION OF THE RESULTS

It was reasoned in Chapter 2 that fit plays an important role with regard to the plus-size Swazi working women's clothing quality preferences. It is not only the functional aspects but also aesthetic (sensory, emotional and symbolic) aspects that determine good fit in clothes. These fit preferences are influenced by factors such as how the garment fits on the figure, whether the style is fashionable and comfortable, whether the fabric is fashionable and comfortable, and whether the fit as such and the style, as an important determinant of fit, evoke preferred emotions and symbolic meanings in the wearer. The first main aim of the study was therefore to explore fit and fit-related preferences of the plus-size Swazi working women.

It was secondly reasoned in Chapter 2 that, if these women experience difficulty in finding the working clothes with a fit that she prefers, she will encounter problems with many of the quality dimensions of her clothes where fit has an impact on. Problems with finding an appropriate fit would then impact negatively on a functional, aesthetic (sensory, emotional, symbolic) and economic level, while she might also experience size-related problems. The second main aim of the study was therefore to explore and describe the plus-size Swazi working women's fit and fit-related problems with regard to their working clothes.

With these aims in mind, several objectives were put forward for the study and the results have been discussed in section 4.3 of this chapter. In order to understand the consequences of the results, it is necessary to discuss and interpret the results as a whole.

From the demographic and background information and from previous literature, it was reasoned that one could divide the sample into a younger and a mature group, as younger plus-size Swazi working women might have different preferences and

problems than mature plus-size Swazi working women. With the exception of three cases, that was however not the case: no statistically significant differences could be found between the younger and the mature groups. Results for the study are therefore discussed and interpreted for the sample as a whole.

Most of the respondents in the sample had a degree or diploma, thus tertiary education. The respondents wear plus-sizes ranging from a size 40 to a size 52, with most of them wearing sizes 42 and 44. These women were willing to spend a substantial amount of money on their working clothes and would then most probably expect value for their money. Most of the respondents maintained a business casual or a more formal business dressing code, and most of them indicated that they mostly bought their clothes seasonally from chain stores or yearly from boutiques. They rated the fit of the available clothes as moderate at chain stores, moderate to poor at supermarkets and good to excellent at boutiques (although they bought from boutiques only on a yearly basis).

The demographic and background information therefore indicates that these plus-size Swazi working women were educated, were willing to spend on a regular basis a substantial amount of money on the business casual and more formal business career wear, which they mainly bought on a seasonal basis from clothing chain stores and to a lesser extent from supermarkets. This therefore seems to be a valuable target group for clothing manufacturers and retailers. Unfortunately they rate the fit of the plus-sizes available to them, mostly as just moderate. This may pose a major problem for plus-size clothing manufacturers and retailers whose target market is most probably not satisfied with the fit of the clothes that are available to them.

Beautiful and well-fitting apparel is not only attractive, but also enhances the appearance of the wearer, because apparel is an extension of the self. According to Marshal *et al.* (2004:61), it serves as a second skin. Well-fitted and beautiful apparel leads to the customer's loyalty to the store that satisfies her needs, and therefore also adds profits to the manufacturer and retailer (Rasband, 2002:19; Bougould, 2007:108). The plus-size Swazi working women in this study considered fit to be a very important indicator of the quality of her clothes. They preferred a style and fabric

that would ensure a comfortable but fashionable fit. These results support the findings in the study of Alexander *et al.* (2005), who reported that most plus-size consumers regard garment comfort as a very important aspect of fit. Unfortunately most of the plus-size Swazi working women felt that they found it difficult to find clothes with a style and fabric that ensure a beautiful fashionable and comfortable fit. Dicosse (1990:92) notes that fabric influences the amount of ease as well as the drape of the garment, and this determines how the garment fits the body. The plus-size Swazi working women in this study indicated that they preferred a firm fabric that supports the body. They also indicated that they preferred a fit that followed the body lines, and therefore opted for a more tailored style for jackets and skirts. The jackets should preferably be made from a woven fabric. Such a garment would most probably ensure the business casual and professional appearance that they prefer. For skirts and blouses they preferred a knitted fabric, most probably to ensure comfort which was reported as important by them. This confirms the study of Lee (2005), who found that most female consumers preferred knitted fabric, especially for blouses and tops, as they felt that it tended to have a slimming effect on the body and does not add extra volume to the already plus-size figure.

As was found by Eckman, Darmhorst and Kadolph (1990), the plus-size Swazi working women in this study have a high preference for sensory-aesthetic qualities of their working clothes. It was important to them that the fit flatters their figures and that the style is fashionable. These results tally with those of Davis and Lennon (1991), who found that one's self-perception of one's body build relates to fashion and use of clothing.

With regard to the fit's contribution to the emotional and symbolic qualities of their clothing, it should be noted that it is very important for the plus-size Swazi working women to feel professional in her working clothes and that the style should show that she is a professional. As mentioned earlier, she therefore also opts for the more tailored styles. The importance of symbolic and emotional qualities in female consumer's apparel was also underlined by the studies of Goldberry, Shim and Reich (1996), Alexander *et al.* (2005), and De Klerk and Lubbe (2004).

As was pointed out in the study by Goldsberry *et al.* (1996), it was clear from the study that plus-size Swazi working women encounter many problems with regard to the fit of their clothes. Bearing the importance of their fit and fit-related preferences in mind, this is alarming, as they are most probably dissatisfied with most of the fit-related qualities of their work clothes. It was also clear that these women found it difficult to find fashionable styles with a fit that could make them feel professional. They reported that they found it difficult to get the correct size for their figure type and also to get the latest fashion in their size. It was clear too that these women found it difficult to find styles and fabrics that ensured a neat and comfortable fit.

According to Darmhorst *et al.* (1999), plus-size women are offered very few fashionable styles, and in most cases, these do not fit their bodies well. This seems to still be the case for most plus-size working women. To make things worse, they also encounter difficulties in understanding the size labels, which they have mostly rated as ineffective. The way size labels are presented to the consumers plays a major role in their apparel selection (Kaiser & Garner, 2005:336; Farr *et al.*, 2006). In Swaziland, the numbered or lettered size labelling systems are used for size labelling of women's wear. Size is not expressed as body measurements, but as arbitrarily chosen numbers or letters that only correlated with a set of unrevealed body dimensions, which in many cases are almost meaningless to consumers. This supports the findings of Mastamet-Mason and De Klerk (2008), who found that female Kenyan consumers found it very difficult to understand the size labels and also have a poor knowledge on sizing and fit issues. To make it worse for consumers, there is also no standardisation in the sizing of women's clothes, leaving the consumer to go from one store to another trying on various clothes and sizes in order to find the correct size. What complicates the matter further for the plus-size Swazi working women is the fact that most clothes that are sold in Swaziland, especially those made by South African manufacturers, are imported from South Africa or elsewhere. The Swazi women's body shape is not necessarily the same as female bodies from other countries for whom the garments were made for. This is reflected by the many specific fit problems that the plus-size Swazi working women reported, and which contributed to their finding it difficult to get well-fitted clothes that fit their bodies beautifully and that provide the preferred level of comfort.

Overall, it is therefore clear from this study that the preferences of a valuable target market in Swaziland, namely the plus-size working women, are currently not catered for by what is available to them in the market. They therefore experience many sizing and fit-related problems with regard to most of the quality features of their working clothes. This most probably leave them frustrated and dissatisfied – not only with the fit of their clothes (which is an indicator of quality), but also with their entire wardrobe.

CHAPTER 5 CONCLUSIONS, EVALUATION AND RECOMMENDATIONS

1 INTRODUCTION

This chapter presents conclusions, evaluation, implications and recommendations for the study. Some suggestions for future studies are also included.

2 CONCLUSIONS

The overall conclusion that can be drawn from this study is that plus-size Swazi working women experience many problems with sizing and fit in clothes they buy from local retail outlets. Beside problems, they have also indicated their preferences with regard to functional, aesthetic and economic aspects they would like to have in clothes sold in local retail outlets. Although this study was generalised to plus-size working women in Swaziland, teachers between the ages of 25 and 59 years represented the working group of women. Most of these teachers had certificates, diplomas and degrees in the teaching profession. They were able to earn a decent amount of money monthly, making it possible for them to buy clothes they desired. The teachers sampled were in the plus-size category as they wore clothes ranging from size 40 to 52 (16 and above). They indicated that they preferred the business casual type of dressing style for work with a semi-hugging and body-hugging fit, especially for the young adult. Woven fabric was preferred for all outfits, while knitted fabric was preferred for blouses and skirts.

Most of these respondents indicated that they bought most of their clothes from chain stores, dressmakers and tailors, as well as from supermarkets and boutiques on a monthly, seasonally and yearly basis. This frequency made it possible for this group to continuously evaluate the clothes so as to be able to give their opinion on sizing and fit issues.

Although most respondents bought their clothes seasonally and some annually from local clothing retail outlets, they indicated that they were not happy with the fit of clothes bought from local chain stores and supermarkets, as the fit was moderate to

poor, while the fit of clothes bought from boutiques and tailors was good to excellent. This inability to get well-fitting clothes from these affordable retail outlets creates a lot of challenges for these working women. This means they have to spend a lot of time scouting for clothes that fit well, from one clothing outlet to the other, while also doing a lot of fitting, which can always be frustrating and time consuming.

The final conclusion of this study attempts to answer the research questions of this study. Based on the conclusions, recommendations and suggestions for future studies are made.

2.1 Objective 1: The importance of functional, aesthetic (sensory, symbolic, emotional) and economic apparel fit preferences of plus-size Swazi working women

Functional, economic as well as aesthetic qualities of garments contribute immensely to the functionality and beauty of a garment (Brown & Rice, 1998:38). The results in this study clearly show that functional features of apparel, such as garment comfort, were rated as very important by most respondents in this study. The study shows that the plus-size Swazi working women expected to find clothes that were comfortable and fitted well. Comfortable clothes are not only attractive, but fit body contours with ease. Fabric comfort was also highly preferred by most of the respondents. The type of fabric used in garments is determined by current style trends, season of the year, cost limitation as well as garment style being made. Fabric choice also determines the quality of the garment (Rasband & Liechty, 2006:11). In this study, respondents indicated that they preferred fabric which was comfortable to the skin and stretched comfortably. They also showed preference for woven fabrics which comes in different colours, weights, textures as well as in different forms, for most of their work apparel. According to Yoo (2003), appealing aesthetic garment qualities have a positive influence on the emotional and symbolic satisfaction of the individual. Career-focused women place great emphasis on the appropriateness of a garment – so much so that choosing clothes for work is taken very seriously. Clothes that fit well enhance the aesthetic beauty of the garment, which in turn stimulates the wearer on the sensory, emotional and symbolic level, leading to the appreciation or rejection of the garment during use.

The aesthetic apparel features of a garment determine the beauty of the garment. The attractiveness, design features, fabric choice, construction details, colour, shape and line in a garment all contribute to the aesthetic appeal of the garment. Aesthetic variables measured in this study included sensory, emotional and symbolic variables. In this study, the results reflected that the sensory aesthetics was very important. The plus-size Swazi working woman expects her clothes to fit and flatter her figure. As the garment follows her body contours, the smooth feel of the fabric, and the unstrained lines of the garment bring about a good feeling to herself, thus creating more admiration for the outfit.

The respondents also felt that the emotional part of aesthetics in clothes was very important. To them, a garment should have an attractive fit and style that make them feel more like professionals. The type of work she does makes her a model to students, the community as well as to her colleagues. Although price is important, it is usually only known by the buyer. Well-known clothing brands are the only type of clothing known to cost higher than normal types of clothes. The quality of the fabric, its sizing, fit, design and construction details usually signify the quality of the garment. When the fit and style of the garment are good, people will admire the look, thus elevating her emotions, which in turn can make her feel comfortable with herself and around her colleagues.

Symbolic aesthetics relating to fashion style and what others say about the garment beauty was also found to be important to the plus-size working women. In this study all the symbolic preferences were rated highly, such as “style shows that I am a professional” and “colleagues compliment me on the outfit”. The results signify that symbolic preferences are seen as important clothing attributes which consumers rate very highly as they choose and use the garment.

The cost of a garment is another variable consumer perceives to be very important. Most consumers believe that cost is an indicator of quality. This is confirmed by Kadolph (1998:29) who points out that price influences consumer’s perception of garment quality. In many cases, especially if they do not know how to evaluate the quality, consumers believe that if a garment is expensive, it reflects quality – which

may of course not always be true. Most respondents in this study indicated that they preferred to buy clothes that were affordable. Although they have the money to spend on clothes, their only problem was finding clothes in a size, style and fit they preferred.

The results clearly showed that plus-size Swazi working women are passionate about clothing. They would like to see clothes they buy from local retail outlets having most of the characteristics indicated above. This would make their shopping easy as it would be easier to find clothes to their requirements.

2.2 Objective 2: Functional, aesthetic (sensory, symbolic, emotional) and economic apparel fit problems of the plus-size Swazi working women

The study reflects that plus-size Swazi working women experience sizing and fit problems in most of the apparel they bought from local retail outlets. A high number of the plus-size women consumers reported experiencing difficulty in finding clothes that had most of the fit qualities. This was further attested by the amount of fit problems they indicated to be having at different areas of the body. Respondents indicated that they were experiencing more fit problems around the waist, hips, buttocks, abdomen and upper arm. The lengths were also a challenge as most had problems with the length of sleeves and pants. These problems did not come singly, so that finding clothes that fit was a great challenge to this group. Most respondents indicated that it was difficult to find apparel that fitted comfortably on their body. Finding fashionable styles in the size and fit was also another challenge these consumers were frequently experiencing. These problems of not finding clothes that were functional may have negative effects on the consumer. They are likely to shun the shops, opt to either use tailors or boutiques which have been reported to provide clothes that have good to excellent fit. These working women also indicated that they were not finding clothes that were fashionable, well-sized, fitted the figure beautifully and made them look more like professionals. This may have had negative effects on their emotions as they are not likely to make good clothing choices (Anderson *et al.*, 2001). In desperation, they are likely to buy garments they will only wear once and thereafter keep it in the wardrobe, as it would not satisfy their sensory, emotional, or symbolic needs.

It is further alarming that these plus-size Swazi women frequently and most frequently experience problems with many aspects of the fit of their clothes. Although it is important or very important to them that the style should be fashionable and that the fit should flatter their figure, they frequently and most frequently cannot find fashionable career clothes that fit their figure well and beautifully. Although it is on an emotional level important and very important to them that the style of their clothing should make them feel professional, they frequently or most frequently cannot find a fit that makes them feel professional. On a symbolic level, it is important to them that style should show that they are professionals. Again they frequently or most frequently experience problems in this regard. While it is (most) important to them that the style should fit comfortably, they (most) frequently experience problems in finding career clothes that fit comfortably and that are affordable. This most probably results in plus-size Swazi women being frustrated and dissatisfied with what is being offered in the market.

Size and size labelling information was also a challenge to most of the respondents. Most could not get correct sizes for their figure types or fashionable styles in their sizes. Most indicated that they could not understand the size labels on the size tags. This was a challenge to the plus-size women and shopping became a burden rather than joy. These problems pose a great challenge to the clothing retailers and manufactures as they need to address these concerns of the plus-size market.

2.3 Objective 3: Apparel style preferences of the plus-size Swazi working women

Fashion is another aspect of clothing that determines fit. Some styles are more suitable for smaller figures, while some are more suitable for bigger figures. Interesting fashion styles are often common in smaller sizes, while the simple styles are common for the larger sizes (Brown & Rice, 2001:146). Results in this study as to which style the respondents thought was suitable for their figure types, reflected that respondents were going for the body-hugging and semi-hugging styles. They also indicated that they could not find fitting fashion styles as they could not find sizes in their category. The styles chosen also indicate that fashion was more

important to them than merely choosing a style which was available in the bigger sizes.

From what has been observed in the marketplace in Swaziland, with regard to the styles available in the bigger sizes, the respondents' problems with regard to finding well-fitted, fashionable styles in bigger sizes are understandable. The styles of bigger sizes are mostly loose-fitting – especially the tops and jackets – and most often do not represent the current fashionable semi-fitted or body-hugging styles.

2.4 Objective 4: How plus-size Swazi working women rate the effectiveness of various apparel size description systems

Size labels are supposed to assist consumers in choosing apparel that fits their bodies well. It should also help consumers with choosing apparel that fits their body lines without any strain, while bringing out the beauty and style line of the garment (Anderson *et al.*, 2001). Findings in this study reflected that sizing in clothes was still a major problem for most of the plus-size consumers. Many of the respondents had problems understanding the information on the size tags. The sizing system was most probably confusing for the consumer as some came in numbers and others came in letters. These letters and numbers were meaningless to the consumer. They also indicated that they could not find clothes with sizes that were fashionable and fitted their body types.

This sizing problem could be attributed to consumers' lack of knowledge on their body measurements, or to them not being able to interpret the meaning of the letters and numbers on the size tag of the garment (Kinley, 2003). The use of vanity sizing by product developers and retailers to boost their sales, and the use of unrevised sizing systems which do not relate to the Swazi body form also contributed to the size variations in clothes sold in local outlets. The use of the English sizing systems for the Swazi figure could also contribute to the size variation and sizing problems of the plus-size Swazi working women. Dissatisfaction with fit of ready-to-wear apparel sold in most local retail outlets indicates that there is a sizing problem. This size variation from shop to shop creates frustration and confusion among apparel consumers as they flip through apparel, and try on one garment after another – just

to try and get the right size (Goldsberry *et al.*, 1996). The results in this study also indicated that the lettered and picture + code types of sizing system were rated as effective in guiding them to find clothes that fit.

2.5 Objective 5: Plus-size Swazi working women's knowledge on apparel size labelling

Information on the size of a garment is very important to the apparel consumer. The size tag is supposed to guide the consumer in selecting clothes that would fit the body proportions of the individual. Garments need to be sized according to the key dimensions of the body form to come up with a garment that fits well. According to Kaiser and Garner (2003:315), consumers need to be well informed on issues of sizing and fit and the body characteristics to successfully choose apparel that fits the body well. In this study respondents were supposed to give the correct interpretation of given sizes in terms of the key dimensions it represented on a given apparel item. The results indicated that a substantial number of respondents indicated they understood what these numbers represented on the key dimensions stipulated. This could probably be due to these consumers' level of education as they are teachers, and to their becoming more familiar with the numbers and letters as they buy clothes frequently due to the nature of their job. According to Chun-Yoon and Jasper (2005), most women sizes are not expressed as body measurements, but rather as chosen numbers or letters that correlate with sets of unrevealed body measurements. These unrevealed body measurements may vary from one manufacturer to the next, making one size to differ from one shop to the next. When body measurements are not revealed, these numbers and letters confuse the consumer and also become meaningless to the consumer. This was reflected in the problems that consumers indicated to be having in this regard. A high percentage of the respondents indicated that they had difficulties in understanding size labels and that the numbered and lettered sizing systems were not effective in guiding them to finding a size that fitted their bodies well without having to alter the garment.

It can therefore be assumed that the plus-size Swazi working women's extensive experience with size labels does not guarantee knowledge about the numbers on the size tags. Respondents' desire to have a sizing system they will understand; as well

as interpret properly in relation to their body measurements indicates that there is a need to educate the consumer. This can best be done by clothing retailers through the use of magazines, brochures and media.

2.6 Objective 6: Specific apparel fit problems experienced by the plus-size Swazi working women with regard to their work apparel

Respondents indicated that they were experiencing more fit problems around the waist, hips, buttocks, abdomen and upper arm. Hips and abdomen contours are the most problematic areas of the body where fat is easily accumulated. Their body fluctuation with every weight gain or loss makes fit more of a problem in these areas. It was further clear that more problems were experienced in the lower parts of the body with clothes that are too tight over the hips, buttocks and thighs, and too loose in the waist and abdomen areas. These respondents also experienced fit problems with garments that have to fit the upper body where they indicated a too loose fit around the neckline and bust as problematic. As was discussed in Chapter 4, the typical Swazi body shape (large buttocks and hips and smaller upper body), the fact that sizing is done is done for the hourglass figure and not specifically for the Swazi figure, and the fact that most styles for tops for the plus-size woman are more loose fitting, could have contributed to the fact that these women experienced a too tight fit in the lower parts of the body and a too loose fit in the upper part of the body.

3 EVALUATION OF THE RESEARCH

3.1 Quality of the results

In this study, validity and reliability were key factors used to determine the quality of the results. Validity, according to De Vos *et al.* (2005:160), refers to whether a measuring instrument measures what it claims to measure. Validity measures used in this study included content validity, face validity, criterion validity, construct validity as well as inferential validity.

3.1.1 Validity

3.1.1.1 Content validity

Content validity is concerned with ensuring that the content of the study is well covered in relation to the problem to be investigated. In other words, a test with content validity has items that satisfactorily assess the content being studied (De Vos *et al.*, 2005:160; Babbie, 2008:161). In this study, the literature review was used to ensure that the content required was covered to answer the questions being studied and to establish or find other theories relating to sizing and fit problems and preferences which were done by other researchers in previous studies. Content (literature) was also used to formulate questions that would lead to one answering the research question being studied, which in this case was sizing and fit. Literature was also used to ensure that the researcher kept within the scope and limits of the objectives being studied.

In this study, a purposive and snowball sampling method was used as a sampling design. The sample frame consisted of 249 plus-size Swazi working women between the ages of 25 and 60 years. They were in the teaching profession, wore clothes ranging from size 16 to 28 (40 to 52+) and were based in peri-urban and urban schools of the Hhohho and Manzini regions. A questionnaire was used to collect data.

To ensure the quality of the study, Home Economics specialist with a vast experience with the subject matter was engaged to thoroughly check each variable in the instrument, so as to check whether it measured the set objectives. Beside the Home Economics specialist that is; Lecturers, one from Ngwane Teacher Training College and one from Manzini Nazarene Teacher Training College, two Fashion and Art teachers from local high schools, a Curriculum designer, a Clothing and Textiles Lecturer from the University of Swaziland as well as Home Economics inspectors. The researcher together with the study leader made additions and adjustments where necessary to ensure that the instrument measured what they intended it to measure. The questionnaire proved to be a valuable instrument for gathering the data regarding the plus-size Swazi women's fit preferences and problems. In most

cases, multiple indicators were used to measure the constructs. However, for future use of the instrument, it is proposed that the same number of indicators are used to measure all the constructs for both the preferences and the problems, and that all the indicators in preferences and problems be structured in exactly the same way, so as to be able to determine statistically significant differences between preferences and problems with regard to all the indicators and constructs.

3.1.1.2 Face validity

This refers to the face value of the instrument. Does the measurement technique used in the study measure the variables it claims to measure? (De Vos *et al.*, 2005:161). In this study the subject specialist in Home Economics was used to check face validity.

3.1.1.3 Criterion validity

This type of validity checks whether the instrument accurately predicts current and future behaviour (Babbie, 2008:161). In this study, the objectives were addressed and operationalised in the questionnaire and were able to be tested at the end. The method of analysis was also indicated for each variable being tested.

3.1.1.4 Construct validity

Construct validity is concerned with understanding the meaning of the instrument and how and why it operates the way it does (De Vos *et al.*, 2005:162; Babbie, 2008:161). In this study, to ensure construct validity, all the objectives were thoroughly addressed. As discussed under face validation, although the questionnaire was pilot-tested and it seemed to be working properly, it was in the end not possible to test the statistically significant differences between all the indicators for preferences and problems.

3.1.1.5 Inferential validity

Appropriate statistical methods were used, which included frequencies and percentages. Fisher's Exact Test was used to test for statistically significant differences between the young and the mature groups, as well as between very important and important preferences and less frequent and rarely experienced problems.

3.1.2 Reliability

Reliability refers to the consistency or stability of a measuring instrument. This means the measuring instrument must measure exactly the same way every time it is used (Babbie, 2008:157). In this study the researcher collected data by means of a questionnaire. School principals assisted by arranging a classroom, and informing the teachers on time about the exercise to prepare them mentally for the proper administration of the instrument. All the teachers who were willing to complete the questionnaire were the ones who were given questionnaires to answer. This ensured that the information gathered was reliable as it came from a willing heart. The same questionnaire was used in all the schools. The researcher made sure that the questionnaire was read through together with the respondents, to ensure that they understood what was required in each question before they answered the questionnaire. If any one had problems with language use and terminology, the researcher was close by to assist. Once respondents finished answering, questionnaires were collected, sorted according to clothing size and level of completion and coded accordingly for data analysis.

3.2 Ethical issues

Permission to do the research in schools was granted by the Chief Inspector Secondary schools. Permission to administer the questionnaire in each selected school was granted by the Head Teacher after consultation, to set a date for administering the questionnaire. Participants who were willing to answer the questionnaire also gave their consent by signing the questionnaire before answering it. Respondents willing to answer the questionnaire were the ones who signed. The

norm of confidentiality was also adhered to. Respondents who were not willing to write their names on the consent letter were not forced to do so. Most respondents only wrote their initials instead of the names. The proposal for the study and the questionnaires were presented to and approved by the Ethics Committee of the Faculty of Natural Sciences of the University of Pretoria.

3.3 Contribution to theory

This study contributed to a better understanding of sizing and fit preferences and problems experienced by the plus-size Swazi working women with regard to work apparel. Each apparel consumer has her own preferences with regard to sizing and fit. Consumers come in different shapes and sizes. The apparel clothing producer has a task of ensuring that clothes are made to fit most of the prevailing figure types, rather than the common ideal figure. Clothes in the market are usually targeted for a specific group of people who have different preferences and images of the types of clothes they would like to have for work. The study therefore signifies that plus-size female consumers want clothes that are functional, well-sized and fit properly. This means that, as clothing is being produced for this category of individuals, product developers should know what the consumer wants in clothes, rather than developing clothes that will not sell. Well-sized clothes are comfortable to wear and one does not struggle to put them on. The study also shows that clothes need to be fashionable with a good fit for them to be functional. Every consumer has a desire to have clothes that are fashionable while fitting well. The study also shows that when one is choosing clothes, the garment must have aesthetic qualities. These beauty qualities attract consumers to make a purchase. They also evoke sensory, emotional and symbolic feelings, which make the person feel attractive, admired and fit in with a social group in the community. These qualities of garments are also desired by the plus-size women, as it reduce stigmatisation and makes the person felt welcomed in a group.

The study also focuses on the importance of price as one buys a garment. Branded clothing are usually priced higher compared to unbranded clothing. Consumers learn that the price of a garment is not all that important if compared to quality sizing and

fit. If garments have a good fit and are comfortable to wear, consumers are willing to spend their money on the items.

The study also shows that plus-size women continue to have multiple sizing and fit problems, which manufacturers, retailers and product developers need to address. Poor sizing in clothes has been cited as the main culprit in ill-fitting garments. Most consumers are used to size tags found in ready-to-wear clothing, but they cannot use these sizes to find a garment with a perfect fit. Consumers have to know that sizes vary from manufacturer to manufacturer, due to vanity sizing and to make as much profit as possible. This has created a lot of problems for the plus-size women, who eventually get discouraged if they do not get clothes that fit well. These problems create havoc with the emotional and symbolic qualities of the consumer.

The study also creates awareness of the common sizing and fit problems these women experience on different areas of the body. Their bodies come in different shapes and sizes. If clothes bought from retailers are poorly sized, dressing that person will always be a challenge. The study therefore points out that there is a need to update the sizing systems used to develop clothing for the plus-size Swazi working women. To do this, product developers need to have population measurements for this group, determine the different shapes and then develop a sizing system that will address the sizing needs of the plus-size Swazi working woman.

4 IMPLICATIONS AND RECOMMENDATIONS

The results in this study reflect that still a lot has to be done about sizing and fit issues relating to the plus-size Swazi working women. Stakeholders in the apparel industry, which include apparel consumers, retailers, product developers, clothing manufacturers, designers as well as educators and researchers, should work together to address the sizing and fit problems and preferences of the plus-size Swazi working women.

The results in the study indicated that plus-size consumers were experiencing a lot of problems to find clothes that had a comfortable fit and in the sizes and styles they

preferred. Consumers indicated that they had problems in understanding the meaning of the sizes on the size tags of most of their clothes sold in local retail outlets. Consumers need to seek more information on what these numbers and letters mean on the size tags. Although these letters and numbers are confusing, fitting clothes before buying them and then noting the size that fits well may guide the consumer to a number or letter that may indicate a relationship between body size and the sizing number or letter. It could also help the consumer to choose one or two shops with clothes that has most of the qualities she likes, to do this exercise. This will guide her on the sizing difference between the two retail outlets.

Extensive educational workshops on consumer sizing needs could be run by clothing specialists and Home Economics specialists to help develop consumers' awareness on sizing and fit issues. With more education, consumers are likely to be made aware of the importance of sizing and fit in clothes. Consumers should be made aware that they need to know their body measurements to assist them in choosing clothes with body measurements similar to those on the labels. They should also continuously take and know their body measurements so as to change the sizes in the event of weight gain, weight loss or age effects, so that finding clothes that fit will be an easy task. In case they do not get the sizes they may desire, they should be able to voice their concerns to clothing retailers, who will in turn work together with clothing developers to get clothes that are preferred by their market category. Consumers also need extensive consumer education programmes to be easily available. In schools the teachers, especially Home Economics teachers, can help in providing information on apparel sizing needs and the body to young and teenage girls so as to help them develop skills in dressing and in choosing clothes. Apparel retailers can play a pivotal role in educating their clients on selecting and choosing clothes for the plus-size. This can help consumers to make a better informed decision when selecting clothes for work. Shop assistants working in most of the clothing outlets should also be trained and be knowledgeable about fabric, sizing and fit of clothing components. This will make it easy to advise and guide the consumer as she selects and buys clothing. They will then also be able to give feedback to the clothing retailer on what the consumers want. This will help retailers to put in the kind of stock that consumers prefer when buying clothes for work.

Retailers and clothing manufacturers also have a huge task to address the fit issue so as to avoid the huge losses caused by returns and garment spoilage through excessive fitting. Unquantifiable amounts of clothes are spoiled or returned to retailers as consumers are not satisfied with the fit of the garments. Some of this merchandise is put on sale or given to charity organisations as it is not worth to be on the shelves. To reduce the excessive markdowns and losses caused by these returns, clothing retailers have to work towards improving the fit of garments so that they are consistent with the preferences of the consumer, while working tirelessly to address the fit problem. Apparel retailers have a task to communicate the fit problems of their customers to clothing developers, who in turn could communicate with pattern developers to address the consumers' concerns. There is also a need to have customer-friendly fitting rooms in all retail outlets that sell clothing. This is to make it possible for a consumer to fit and evaluate the fit of the garment before making a purchase. A complaint service facility in retail outlets can help consumers lodge complaints regarding any problem they may be having regarding the clothing item. This can help consumers to voice their problems and preferences. This can also help retailers to gather data so that they know what the consumer prefers in clothes. This data can also help clothing developers to have an idea where to start as they design and make the garments.

Literature and studies done on sizing and fit show that proper sizing in garments can only be achieved through taking proper measurements at the correct points of the different shapes of the human body, then developing a sizing system that can be used to develop patterns that can fit the consumer (Istook & Hwang, 2001). Retailers, working closely with product developers, need to do several studies on the sizing and fit suitable for the plus-size working woman. By using population measurements suitable for this group, they will be able to develop a sizing system that will conform to the body form and body measurements of the average plus-size Swazi working woman. According to Labat and DeLong (1990), an accurate sizing system reduces fit problems, thus benefiting both consumer and retailer.

Understanding the fit preferences of consumers could help apparel developers to provide better fitting apparel products to the consumer, improve consumer confidence in them, boost company sales and lower production costs, and reduce

markdowns of clothes that are ill-fitting. Apparel retailers, together with clothing manufacturers, need to work hand in hand with clothing research educators and Universities and should try and study and understand more about the sizing and fit needs of the plus-size consumer. The most critical one is updating the old English sizing system used in the South African clothing industry to conform to the body structure of the South African and Swazi consumer. This will help to reduce most of the fit problems the consumers encounter with clothes bought in the local market. Design educators can also focus on how to manipulate patterns so that they can develop styles that are able to fit different body types without compromising the fit of the garment. The Swaziland Standards Authority (SWASA) quality control unit in the office of the Ministry of Commerce Industry and Trade, should strengthen its supervision section and ensure that all clothing imported to Swaziland and those made in Swaziland should meet the sizing system quality standards of the country. This will control and eliminate the influx of clothing with poor fit standards from other countries invading the country.

Apparel manufacturers, working together with the Swaziland Textile Manufacturing Association / Authority (STMA), and apparel retailers together with the University of Swaziland textile section, need to do more studies on fit issues of the plus-size consumer, as well as conduct population studies to determine body types and population body measurements of the Swazi population. This data will help clothing manufacturers and retailers to have an idea of the sizing needs of the Swazi population, so as to produce clothes that will fit the Swazi plus-size population.

5 LIMITATIONS AND SUGGESTION FOR FUTURE STUDIES

The sizing and fit issue continues and will continue to be a problem to the Swazi consumer, unless it is properly addressed. This study was limited to plus-size Swazi working women. Apparel manufacturers and retailers, consumers, educators and researchers need to work hand in hand in sharing information about clothing fit preferences and problems the Swazi consumer encounters on a daily basis as she buys clothes. This problem does not end with the plus-size consumer, but extends to other age groups of male and female apparel consumers. Studies on preferences, problems, satisfaction and sizing and fit in apparel for the general consumer, the

teenagers and elderly need to be done to determine the extent of the problems. This study can also be repeated using the qualitative method and may be compared to this quantitative method. Comparison of findings can then be made on the results to see whether there are any differences in the results.

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***ADDENDUM A:
QUESTIONNAIRE AND LETTER OF CONSENT***



Faculty of Natural and Agricultural Sciences

Department of Consumer Science

Questionnaire: Apparel sizing, fit problems and preferences

Dear Participant

I am a student at the University of Pretoria currently undertaking Master’s studies in the Department of Consumer Science. My research topic is to explore apparel sizing, fit problems and preferences of the Swazi working woman. Findings of this study are hoped to address the sizing and fit concerns of the female population of Swaziland while also addressing and creating a bank of knowledge for the clothing industry on what you, the consumer prefer with regard to ready to wear apparel.

You have been identified as a most valued person to contribute to my study. Filling in this questionnaire is not compulsory. You are free to withdraw at any time, but I would prefer that you participate freely without any coercion.

You are thus requested to take a few minutes of your time to complete this questionnaire. Please give your honest opinion throughout. The majority of the questions do not have a “right” or “wrong” answer. Only your opinion or experience is sought. All information you provide will be treated with the utmost confidentiality and your identity will not be revealed.

Thank you for your participation which you are respectfully asked to indicate below.

Your faithfully

Minah T Nkambule
(Student registration number: 26404983)

PARTICIPANT’S CONCENT

I, hereby give my consent to participate in the study on Apparel sizing, fit problems and preferences

Signatute of participant:..... **Date:**



QUESTIONNAIRE: APPAREL SIZING, FIT PROBLEMS AND PREFERENCES

Respondent number

V1 1

Please answer the questions by circling a number in a shaded box or by writing your answer in the shaded space provided

SECTION A:

1. What is your **age** in completed years?

V2 4

2. What is your **highest qualification**?

V3 6

3. What is the **clothing size** of the garments listed below that you **wear** on a **daily basis** (e.g. 10, 12, 14, 16, etc)?

Garment	Size
Skirt	<input type="text"/>
Jacket	<input type="text"/>
Pair of trousers	<input type="text"/>
Blouse	<input type="text"/>

V4 8

V5 10

V6 12

V7 14

4. How much are you willing to spend on **work clothes per month**?

V8 16

5. How would you describe your **work dressing style**? (Circle **one** number only)

Casual (Jeans allowed)	1
Business casual (No jeans allowed, but no strict dress code)	2
Business formal (A formal dress code is in place)	3
Formal (A jacket is required at all times)	4

V9 20

Question 6 follows on the next page ...



6. How **often** do you **buy clothes** from the **clothing outlets** listed below
(Circle only **one number per row** where appropriate)

I buy my clothes from	Weekly	Monthly	Seasonally	Once a year	Never
Boutiques	5	4	3	2	1
Supermarkets	5	4	3	2	1
Clothing chain stores (Woolworths, Jet, Truworths etc)	5	4	3	2	1
Tailors/Dressmakers	5	4	3	2	1
Other clothing shops (specify)	5	4	3	2	1

V10	<input type="text"/>	21
V11	<input type="text"/>	22
V12	<input type="text"/>	23
V13	<input type="text"/>	24
V14	<input type="text"/>	25
V15	<input type="text"/>	<input type="text"/> 26

7. How do you rate the **fit of the clothes** from the outlets listed below?
(Circle only **one number per row** where appropriate)

Outlet	Excellent	Good	Moderate	Poor
Boutiques	4	3	2	1
Supermarkets	4	3	2	1
Clothing chain stores (Woolworths, Jet, Truworths etc)	4	3	2	1
Tailors/Dressmakers	4	3	2	1

V16	<input type="text"/>	28
V17	<input type="text"/>	29
V18	<input type="text"/>	30
V19	<input type="text"/>	31

SECTION B:

8. Please indicate your **agreement** in respect of **body proportion and fit preferences** of your clothes

I prefer a garment that	Strongly agree	Agree	Disagree	Strongly disagree
follows my body lines without and strain	4	3	2	1
clings to my body and shows off my body lines	4	3	2	1
fits loosely on me	4	3	2	1

V20	<input type="text"/>	32
V21	<input type="text"/>	33
V22	<input type="text"/>	34

Question 9 follows on the next page ...



9. Please indicate your **agreement** in respect of **each** of the following statements

I prefer		Mostly	Sometimes	Rarely		
knitted fabrics for my	blouses	3	2	1	V23	35
	jackets	3	2	1	V24	36
	trousers	3	2	1	V25	37
	skirts	3	2	1	V26	38
woven fabrics for my	blouses	3	2	1	V27	39
	jackets	3	2	1	V28	40
	trousers	3	2	1	V29	41
	skirts	3	2	1	V30	42

10. Indicate the **importance** of each of the following statements when you **select** or **buy career ware**

Statement	Very important	Important	Less important	Unimportant		
The fit flatters my figure	4	3	2	1	V31	43
The style fits me comfortably	4	3	2	1	V32	44
The material stretches comfortably	4	3	2	1	V33	45
The style is fashionable with a good fit	4	3	2	1	V34	46
The outfit makes me feel professional	4	3	2	1	V35	47
The style shows that I am a professional	4	3	2	1	V36	48
My colleagues complement me on the fit	4	3	2	1	V37	49
The outfit shows that I have style	4	3	2	1	V38	50
The price makes me feel that I am wearing something special	4	3	2	1	V39	51
The outfit is affordable	4	3	2	1	V40	52

Question 12 follows on the next page ...



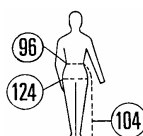
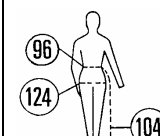
12. Please choose **one style** from each of the **jackets, skirts** and **pants** that you think is **suitable** for your **figure type**

Jackets				
1	2	3	4	5
V41 <input type="checkbox"/> 53				
Skirts				
1	2	3	4	5
V42 <input type="checkbox"/> 54				
Pants				
1	2	3	4	5
V43 <input type="checkbox"/> 55				

Question 13 follows on the next page ...



13. Please rate the **effectiveness** of the following **size description systems** in terms of guiding you to **select well-fitting outerwear garments**

Size description System	Extremely effective	Effective	Ineffective	Extremely ineffective	
Lettered coded labels such as small (S), medium (M), large (L), extra-large (XL) for example: <div style="text-align: center; border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> XL </div>	4	3	2	1	V44 <input type="text"/> 56
Numbered coded labels such as 14, 16, 18, 20, 22, 24 for example: <div style="text-align: center; border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> 16 </div>	4	3	2	1	V45 <input type="text"/> 57
Numbered coded labels such as 36, 38, 40, 42, 44, 44, 48, 50 for example: <div style="text-align: center; border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> 42 </div>	4	3	2	1	V46 <input type="text"/> 58
Size code and important measurements for example <div style="text-align: center; border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> Size code-14 Length---96cm Bust---112 Hip---108 </div>	4	3	2	1	V47 <input type="text"/> 59
Illustrated figure, size code and measurements of some important body parts of a specific garment for example <div style="text-align: center; border: 1px solid black; padding: 10px; margin: 0 auto;"> <p>Size 18 Waist – 96 cm Hips – 124 cm</p>  <p>Length – 104 cm</p> </div>	4	3	2	1	V48 <input type="text"/> 60
Illustrated figure, size code and measurements indicated on a figure for example <div style="text-align: center; border: 1px solid black; padding: 10px; margin: 0 auto;"> <p>Size 18</p>  </div>	4	3	2	1	V49 <input type="text"/> 61

Question 14 follows on the next page ...



14. Please **circle** an appropriate **number in Column 3** against only one appropriate **measurement presented in Column 2** which is used to determine the **size description system given in Column 1**

Column 1 Size description system	Column 2 Measurement	Column 3	
Size 16 on a jacket (16)	Shoulder measurement	1	V50 <input type="checkbox"/> 62
	Bust measurement	2	
Size 16 on a skirt (16)	Waist measurement	1	V51 <input type="checkbox"/> 63
	Hip measurement	2	
Size 42 on a jacket (42)	Shoulder measurement	1	V52 <input type="checkbox"/> 64
	Bust measurement	2	
Size 42 on a pair of trousers (42)	Length measurement	1	V53 <input type="checkbox"/> 65
	Hip measurement	2	
Extra large size on a blouse (XL)	Bust measurement	1	V54 <input type="checkbox"/> 66
	Body measurement	2	
Extra large size on a pair of trousers (XL)	Hip measurement	1	V55 <input type="checkbox"/> 67
	The size of the body	2	

15. Please **circle** an appropriate **number in Column 3** against only one appropriate **answer presented in Column 2** for the **question given in Column 1**

Column 1 Question	Column 2 Answer	Column 3	
What does the number 16 on a jacket indicate?	16 inches (41 cm) shoulders	1	V56 <input type="checkbox"/> 68
	40 inches (102 cm) bust	2	
What does the number 16 on a skirt indicate	26 inches (66 cm) waist	1	V57 <input type="checkbox"/> 69
	44 inches (112 cm) hips	2	
What does the number 42 on a jacket indicate?	18 inches (46 cm) shoulders	1	V58 <input type="checkbox"/> 70
	40 inches (102 cm) bust	2	
What does the number 42 on a skirt indicate?	42 inches (107 cm) waist	1	V59 <input type="checkbox"/> 71
	44 inches (112 cm) hips	2	

SECTION C: follows on the next page ...



SECTION C:

16. Please **circle** an appropriate **number** to indicate how you **experience** the **fit problems** listed below

I find it difficult to ...	Most frequently	Frequently	Less frequently	Rarely		
get well fitting clothes that I can afford	4	3	2	1	V60	72
get the correct size for my figure type	4	3	2	1	V61	73
get work apparel that fits my figure beautifully	4	3	2	1	V62	74
find fashionable work apparel that fits my figure well	4	3	2	1	V63	75
find work apparel that fits comfortably	4	3	2	1	V64	76
find apparel styles that fit my figure	4	3	2	1	V65	77
find a fit that shows that I am a professional	4	3	2	1	V66	78
find a fit that my colleagues would complement me on	4	3	2	1	V67	79
find a fit in the latest fashion style I like	4	3	2	1	V68	80
find a fit that would make me feel professional	4	3	2	1	V69	81
understand the size labels	4	3	2	1	V70	82
get the latest fashions in my size	4	3	2	1	V71	83
get quality fabric that drapes well to ensure a neat fit	4	3	2	1	V72	84
find clothes with a firm fabric that supports my body form	4	3	2	1	V73	85

17. Please **circle** a number under “Too tight” or “Too loose” to indicate the nature of the **fit problem** you **commonly experience** with **ready made garments** at the **specific garment locations** indicated

Specific garment location of fit problem experienced	Too tight	Too loose		
Neckline	1	2	V74	86
Shoulders	1	2	V75	87
Back width (shoulder blades)	1	2	V76	88
Bust	1	2	V77	89
Nape to waist	1	2	V78	90
Front neck to waist	1	2	V79	91
Armhole (armscye)	1	2	V80	92
Upper arms	1	2	V81	93
Elbows	1	2	V82	94
Lower arms	1	2	V83	95
Sleeve lengths	1	2	V84	96
Waist	1	2	V85	97
Abdomen	1	2	V86	98
Hips	1	2	V87	99
Buttocks	1	2	V88	100
Thighs	1	2	V89	101
Skirt length	1	2	V90	102
Trouser length	1	2	V91	103
Blouse length	1	2	V92	104

Thank you for your time and valued assistance