

**An exploration of female consumers' perceptions of garment fit and
the effect of personal values on emotions**

by

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I declare that

“An exploration of female consumers’ perceptions of garment fit and the effect of personal values on emotions”

is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

SIGNATURE

DATE

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SUMMARY

One of the greatest challenges facing the clothing industry worldwide, including South Africa is to provide well fitting garments to a broadly defined target population (Ashdown, Loker & Rucker 2007:1; Schofield, Ashdown, Hethorn, LaBat & Salusso 2006:147). Yu (2004:32) further states that from the consumers' perspective, physical and psychological comfort as well as appearance play an important role in determining a well fitting garment and these are most likely to be shaped by the individual's personal values. According to Kaiser (1998:290), personal values refer to standards or principles that guide an individual's actions and thoughts that help to define what is important by guiding one's choices or preferences of how the garment should fit. Hence garment fit and the subsequent appearance serves as a personal expression, communicating some personal values to others (Kaiser 1998:290) that can be achieved through the fitting of the garment. When female consumers encounter garment fit problems either through body shapes, garment sizing or garment size label communication, an emotional experience may result due to the failure to attain the personal values they are aiming to uphold or achieve. Cognitive appraisal theory of emotions is one of the theories among others that attempts to understand why people experience emotions. Lazarus (2001:55) defines cognitive appraisal theory of emotions as a quick evaluation of a situation with respect to one's wellbeing. The answers to these evaluations directly cause the emotions experienced by a person. Since clothing can be used to express personal values to others (Kaiser 1998:146), the social standards appraisal dimension which can be one of the evaluative questions in the theory of cognitive appraisal concerning a situation, was the relevant evaluative component which this study focused on. This appraisal dimension evaluates whether the situation, in this case the negative experience of an ill-fitting garment affects what the consumer aspires to achieve socially through garment fit. Numerous studies such as Horwaton and Lee (2010); Pisut and Connell (2007) and Alexander, Connell & Presley (2005) on the garment fit problems from a consumer's perspective have mostly been conducted in developed countries with limited research focusing on the consumers and their emotional experiences with garment fit. Understanding the factors that contribution to the garment fit problem currently being faced by female consumers in South Africa is an essential step in creating awareness of how this problem affects female consumers emotionally and the influence it has on their purchasing decisions. The purpose of this study is, therefore, to determine the female consumers' personal values attributed to garment fit and to identify the emotions resulting from the perceptions of garment fit.

This study predominantly employed an exploratory qualitative research approach. Data were collected from a purposive and convenient sample of 62 females from the UNISA – Florida Campus and King David High School in Victory Park in Johannesburg, South Africa through a self-administered questionnaire.

Data on the demographic profile that included the ethnicity and age of the participants as well as data on the psychographic profile of the participants concerning frequently patronized clothing retailers, garment fit preferences and self-reported body shapes were collected through closed-ended questions. These data were analysed using the quantitative method of descriptive analysis. In addition to the psychographic profile of the most frequently patronized clothing retailer and garment fit preferences, participants were further requested to provide reasons as to why they mostly patronized the clothing retailer they ranked number 1, and to provide a reason for their preferred garment fit option. Content analysis, a qualitative method, was used to analyse the reasons provided by the participants for both these questions. Content analysis was also performed on additional information on body shape and garment sizing as well as data on garment size label communication. Furthermore, the means-end chain approach through the hard laddering exercises was used to explore and determine the female consumers' personal values and emotions depicted through the perceptions of garment fit. Data from the hard laddering interviews on body shapes and garment sizing were carefully coded and categorized into attributes, consequences and personal values. Data were presented through the hierarchical value maps (HVMs) which were constructed through the software program Mecalyst V 9.1.

The analysis established that attributes such as *quality of garments*, *various garment styles*, *availability of sizes*, and *fashionable styles* directed female consumers' most frequented clothing retailers. These attributes seemed to be aligned with their personal values they seek when shopping for garments. The findings also showed that most female consumers in this study preferred semi-fitting pants, a blouse and garments in general, a reasonable number of the participants preferred tight-fitting pants (31%), and some participants preferred loose-fitting pants, a blouse and garments in general. The specific personal values such as the *comfortability* of the garment, *modesty*, *cover-up* perceived body shape "flaws" and *slimming effect* which female consumers in this study desire to achieved through clothing also influenced their garment fit preference. With regard to the perceived self-reported body shapes of the participants, the study reflected that the majority of the participants were triangular body shaped.

The study further found that female consumers in this study have expectations of how a garment ought to fit their body. Their expectations seem to be shaped by certain personal values such as “confidence”, “freedom” or “look good” which they aspire to achieve through clothing and garment fit. However, due to variations in body shapes, problems of garment sizing they encounter when purchasing ready-to wear garments and the incorrect information communicated on the size labels or the lack thereof, the majority of the female consumers failed to achieve their personal values. As a result mainly negative emotions such as “frustrated”, “sad”, “confused” and “depressed” were expressed by the participants. With regards to the effect of the perceived garment fit on the purchasing decision, the study found that *fit* of the garment is an important determinant of making a purchase. However, where female consumers in this study showed an interest of purchasing, while aware of some fit problems, the study found that exceptional conditions such as the possibility of *altering* the garments and *design features* such as colours that would conceal their perceived “figure flaws, made it easier for them to decide to purchase. The study further highlighted that some participants only purchased their ready-to-wear garment at *certain shops* where their needs were catered for and only when they had *enough time* to try-on the garment they intend to purchase instead of relying on the garment sizing and garment size label communication. Where participants indicated they would not purchase a garment with fitting problems, the study found that some female consumers in this study copied the designs of the garments in the clothing retailers and had someone reproduce it for them, whilst a few female consumers refused to purchase a garment whose size label was incorrectly communicated. Lastly the study also revealed that most female consumers thought that body shape, garment sizing and garment size label communication contribute to garment fit problems female consumers are currently facing in South Africa. It is, therefore, recommended that clothing manufacturers consider the various body shapes in their garment charts, know the needs of their target market and also use uniform sizing and size labelling systems that are easily understood by consumers that purchase ready-to-wear garments from retailers in South Africa.

KEYWORDS: garment fit, body shape, garment sizing, garment size label communication, cognitive appraisal, emotions, means-ends chain, laddering, personal values, South Africa

TABLE OF CONTENTS

DECLARATION	i
ACKNOWLEDGEMENTS	ii
SUMMARY	iii
LIST OF TABLES	xiii
LIST OF FIGURES	xiv
LIST OF APPENDICES	xv
CHAPTER 1 THE STUDY IN PERSPECTIVE	1
1.1 BACKGROUND AND MOTIVATION	1
1.1.1 Body shapes as a contributing factor to garment fit problems	3
1.1.2 Garment sizing as a contributing factor to garment fit problems	4
1.1.3 Garment size label communication as a contributing factor to garment fit problems	5
1.2 COGNITIVE APPRAISAL THEORY OF EMOTIONS AND APPRAISAL DIMENSIONS	7
1.3 EVALUATING GARMENT FIT PROBLEMS THROUGH THE SOCIAL STANDARDS APPRAISAL DIMENSION	8
1.4 THE INFLUENCE OF EMOTIONS ON CONSUMER PURCHASE DECISION	8
1.5 CONCEPTUAL FRAMEWORK	10
1.6 PROBLEM STATEMENT	13
1.7 AIMS AND OBJECTIVES OF THE STUDY	13
1.8 METHODOLOGY	15
1.8.1 Data gathering instrument	15
1.8.2 Data analysis	16
1.9 PRESENTATION AND STRUCTURE OF THE DISSERTATION	17
1.10 DEFINITION OF TERMS	19
1.11 ACRONYMS	21

CHAPTER 2 ASSESSMENT OF GARMENT FIT	23
2.1 INTRODUCTION	23
2.2 THE ELEMENTS USED TO EVALUATE GARMENT FIT	25
2.2.1 Fabric grain	26
2.2.2 Garment ease	27
2.2.3 Line	28
2.2.4 Garment set	28
2.2.5 Balance	29
2.3 FACTORS THAT CONTRIBUTE TO GARMENT FIT PROBLEMS	30
2.3.1 Ashdown's model on fit issues	33
2.3.2 Ashdown's model on communication of sizing and fit	34
2.4 CLASSIFICATION SYSTEMS OF BODY SHAPES	35
2.4.1 Somatotyping technique method	35
2.4.2 Graphic somatometry method	36
2.4.3 3-D body scanning technique method	36
2.4.3.1 Body Shape Assessment Scale (BSAS)	37
2.4.3.1 The Female Figure Identification Technique for apparel (FFIT)	37
2.4.4 Observation method	38
2.5 BODYSHAPE ILLUSTRATIONS FOR IDENTIFICATION OF PERCEIVED OWNBODYSHAPES	39
2.6 THE RELATIONSHIP BETWEEN BODYSHAPES AND GARMENT FIT	42
2.7 THE RELATIONSHIP BETWEEN BODY IMAGE AND GARMENT FIT	44
2.8 THE RELATIONSHIP BETWEEN GARMENT SIZING AND GARMENT FIT	45
2.9 THE RELATIONSHIP BETWEEN GARMENT SIZE LABEL COMMUNICATION AND GARMENT FIT	48
2.10 SUMMARIZING THE PROBLEMS	51
2.11 CONCLUDING SUMMARY	53
CHAPTER 3 THEORETICAL APPROACHES TO THE STUDY	54
3.1 INTRODUCTION	54
3.2 DEFINING EMOTIONS	55
3.3 A BRIEF OVERVIEW OF THE THEORIES OF EMOTIONS	56
3.3.1 Physiological theories	56
3.3.2 Two-factor theories	56
3.3.3 Cognitive theories	57
3.4 COGNITIVE APPRAISAL THEORY OF EMOTIONS	57

3.4.1	Primary appraisals	59
3.4.2	Secondary appraisals	59
3.5	APPRAISALS DIMENSIONS	60
3.5.1	Novelty dimension	63
3.5.2	Valence dimension	63
3.5.3	Goals/needs dimension	64
3.5.4	Agency dimension	65
3.5.5	Norms/values dimension	66
3.6	USING SOCIAL STANDARDS APPRAISAL DIMENSION TO EXPLAIN THE ROLE OF PERCEPTIONS OF GARMENT FIT ON PERSONAL VALUES AND EMOTIONS	68
3.7	MEANS-END CHAIN THEORY	70
3.7.1	Attributes	71
3.7.2	Consequences	72
3.7.3	Values	72
3.8	IDENTIFICATION OF EMOTIONS THROUGH MEANS-END CHAIN THEORY	73
3.9	SUMMARIZING THE PROBLEMS	74
3.10	CONCLUDING SUMMARY	75
	CHAPTER 4 RESEARCH METHODOLOGY	77
4.1	INTRODUCTION	77
4.2	PURPOSE AND OBJECTIVES OF THE STUDY	78
4.3	RESEARCH PARADIGM	82
4.4	RESEARCH DESIGN	83
4.5	PILOT TESTING THE INSTRUMENT	84
4.5.1	Selecting of the sample to pilot test the instrument	84
4.5.2	Procedure	85
4.5.3	Recommendations for the main study	85
4.6	THE MAIN STUDY	86
4.6.1	Unit of analysis for the main study	86
4.6.2	Sample for the main study	87
4.6.3	Sampling procedure for the main study	87
4.7	DATA INSTRUMENT	89
4.7.1	Group-administered questionnaire	89
4.7.2	Data collection through closed-ended questions	93
4.7.3	Data collection through open-ended questions	94

4.7.4	Data collection through the laddering techniques	94
4.7.4.1	Elicitation of attributes	95
4.7.4.2	The laddering interviews	96
4.7.4.3	The laddering data analysis procedure	98
4.8	DATA GATHERING PROCEDURE FOR THE MAIN STUDY	100
4.9	DATA ANALYSIS	101
4.9.1	Analysis of data on closed-ended questions	101
4.9.2	Analysis of data on open-ended questions	102
4.9.3	Analysis of data on the laddering exercises	103
4.10	TRUSTWORTHINESS OF THE STUDY	103
4.10.1	Credibility	104
4.10.2	Transferability	105
4.10.3	Dependability	106
4.10.4	Confirmability	106
4.11	ETHICAL CONSIDERATIONS	107
4.12	CONCLUDING SUMMARY	108
CHAPTER 5 FINDINGS AND DISCUSSIONS		109
5.1	INTRODUCTION	109
5.2	RESULTS FROM SECTION A OF THE QUESTIONNAIRE	109
5.2.1	Demographic profile of the participants	110
5.2.1.1	Ethnicity of the participants	110
5.2.1.2	Age of the participants	113
5.2.2	Psychographic profile of the participants	115
5.2.2.1	Patronization of the clothing retailers	115
5.2.2.2	Clothing retailer ranked number one in this study	116
5.2.2.3	Reasons for frequently patronizing Woolworths	118
5.2.2.4	Reasons for frequently patronizing Mr Price	119
5.2.2.5	Reasons for frequently patronizing Edgars	120
5.2.2.6	Reasons for frequently patronizing Truworths	121
5.2.2.7	Reasons for frequently patronizing Foschini	121
5.2.2.8	Reasons for frequently patronizing Donna Claire	122
5.2.2.9	Reasons for frequently patronizing Jet	122
5.2.2.10	Reasons for frequently patronizing Queens Park	123
5.2.2.11	Reasons for frequently patronizing Ackermans	123
5.2.2.12	Reasons for frequently patronizing Miladys	123
5.2.2.13	Reasons for frequently patronizing “Other” clothing retailers	124

5.2.2.14	Frequently patronized clothing retailers ranked numbers 2 and 3 by the Participants	124
5.2.3	Garment fit preferences	125
5.2.3.1	Participants' reasons for the preference of semi-fitting pants	128
5.2.3.2	Participants' reasons for the preference of tight-fitting pants	129
5.2.3.3	Participants' reasons for the preference of loose-fitting pants	129
5.2.3.4	Participants' reasons for the preference of a semi-fitting blouse	130
5.2.3.5	Participants' reasons for the preference of a loose-fitting blouse	131
5.2.3.6	Participants' reasons for the preference of a tight-fitting blouse	131
5.2.3.7	Participants' reasons for the preference of semi-fitting garments in general	132
5.2.3.8	Participants' reasons for the preference of loose-fitting garments in general	133
5.2.3.9	Participants' reasons for the preference of tight-fitting garments in general	133
5.3	RESULTS FROM SECTION B OF THE QUESTIONNAIRE	134
5.3.1	Identification of perceived self-reported body shape	134
5.4	RESULTS FROM SECTION C OF THE QUESTIONNAIRE	137
5.4.1	The hard laddering interview design	138
5.4.2	The hierarchical value maps	139
5.4.3	The hard laddering exercises 1a and 1b on body shapes	141
5.4.3.1	Findings on the hard laddering exercise 1a on body shapes	141
5.4.3.2	Findings on the hard laddering exercise 1b on body shapes	145
5.4.4	Open-ended questions on body shapes	149
5.4.4.1	The effect of body shape on the purchasing decisions of garments	149
5.4.4.2	The effect of body shape on garment fit	151
5.4.4.3	Findings on the solutions to garment fit problems contributed by body shape	154
5.4.5	Hard laddering exercises and open ended questions on garment sizing	156
5.4.5.1	Findings on the hard laddering exercise 2a on garment sizing	157
5.4.5.2	Findings on the hard laddering exercise 2b on garment sizing	161
5.4.6	Open-ended questions on garment sizing	166
5.4.6.1	Findings on the effect of garment sizing problems on purchasing decision	166
5.4.6.2	Findings on the effect of garment sizing problems on garment fit	168
5.4.6.3	Findings on the solutions to garment fit problems contributed by garment sizing	170
5.5	FINDINGS FROM SECTION D OF THE QUESTIONNAIRE	172
5.5.1	Open-ended questions on garment size label communication	172
5.5.1.1	Findings on the general problems with current information communicated on garment size label	173
5.5.1.2	Findings on the effect of garment size label communication on garment fit	175

5.5.1.3	Findings on the emotions resulting from the problems of garment size label communication	179
5.5.1.4	Findings on the effect of garment size label communication on purchasing decision	181
5.5.1.5	Findings on the solutions to the problems of garment fit contributed by garment size label communication	183
5.6	CONCLUDING SUMMARY	184
CHAPTER 6 CONCLUSION OF THE STUDY		186
6.1	INTRODUCTION	186
6.2	DEMOGRAPHIC PROFILE OF THE PARTICIPANTS	188
6.3	CLOTHING RETAILERS' ROLE IN THE PERCEPTIONS OF GARMENT FIT (Research Objective 1)	188
6.3.1	The most frequently patronized clothing retailers by the participants	189
6.3.2	Garment fit preferences	189
6.4	SELF-REPORTED BODY SHAPES (Research Objective 2)	191
6.5	FEMALE CONSUMERS' PERSONAL VALUES AND EMOTIONS THROUGH GARMENT FIT (Research Objective 3)	191
6.5.1	Personal values and emotions related to body shapes (Sub-objective 1)	192
6.5.1.1	Criteria for choosing ready-to-wear garments	192
6.5.1.2	Problems mostly encountered when purchasing ready-to-wear garments	193
6.5.2	Personal values and emotions related to garment sizing (Sub-objective 2)	194
6.5.2.1	Thoughts about garment sizing in South Africa	194
6.5.2.2	Problems experienced with garment sizing in general	195
6.5.3	Emotions related to the problems of garment size label communication (Sub-objective 3)	195
6.6	CONTRIBUTION OF BODY SHAPE, GARMENT SIZING AND GARMENT SIZE LABEL COMMUNICATION TO GARMENT FIT PROBLEMS (Research Objective 4)	196
6.6.1	The effect of body shape(s) on garment fit	196
6.6.2	The effect of garment sizing on garment fit	197
6.6.3	General problems with information communicated on the garment size label	198
6.6.4	The effect of garment size label communication on garment fit	199
6.7	PURCHASING BEHAVIOUR (Research Objective 5)	200
6.8	POSSIBLE SOLUTIONS TO GARMENT FIT PROBLEMS (Research Objective 6)	200
6.9	THE CONTRIBUTION OF THE COGNITIVE APPRAISAL THEORY OF	

EMOTIONS TO THE MAIN PURPOSE OF THIS STUDY	201
6.10 APPLICATION OF THE CONCEPTUAL FRAMEWORK TO THE STUDY	203
6.11 CONTRIBUTION OF THE STUDY TO GARMENT SIZING AND FIT RESEARCH	204
6.12 RECOMMENDATIONS	205
6.13 LIMITATIONS OF THE STUDY	206
6.14 FURTHER STUDIES	207
LIST OF REFERENCES	208

LIST OF TABLES

TABLE 2.1	COMMON FEMALE BODY SHAPES	41
TABLE 3.1	A COMPARATIVE VIEW OF MAJOR APPRAISAL DIMENSIONS AS POSTULATED BY DIFFERENT THEORISTS	62
TABLE 4.1	RESEARCH OBJECTIVE 1 AND THE ASSOCIATED SUB-OBJECTIVES	78
TABLE 4.2	RESEARCH OBJECTIVE 2 AND THE ASSOCIATED RESEARCH QUESTION	79
TABLE 4.3	RESEARCH OBJECTIVE 3 AND THE ASSOCIATED RESEARCH QUESTION	79
TABLE 4.4	RESEARCH OBJECTIVE 4 AND THE ASSOCIATED RESEARCH QUESTION	80
TABLE 4.5	RESEARCH OBJECTIVE 5 AND THE ASSOCIATED RESEARCH QUESTION	81
TABLE 4.6	RESEARCH OBJECTIVE 6 AND THE ASSOCIATED RESEARCH QUESTION	81
TABLE 4.7	THE STRUCTURE OF THE GROUP-ADMINISTERED QUESTIONNAIRE	92
TABLE 5.1	ETHNICITY DISTRIBUTION OF THE PARTICIPANTS	111
TABLE 5.2	SAMPLE DISTRIBUTION OF THE PARTICIPANTS	112
TABLE 5.3	AGE DISTRIBUTION OF THE PARTICIPANTS	113
TABLE 5.4	FREQUENCIES AND PERCENTAGES OF THE CLOTHING RETAILERS RANKED NUMBER ONE BY THE PARTICIPANTS	116
TABLE 5.5	FIT PREFERENCES FOR PANTS, A BLOUSE AND GARMENTS IN GENERAL	126
TABLE 5.6	FREQUENCES AND PERCENTAGES OF PERCIEVED SELF-REPORTED BODY SHAPES OF THE PARTICIPANTS	135

LIST OF FIGURES

FIGURE 1.1	CONCEPTUAL FRAMEWORK OF FEMALE CONSUMERS' PERCEPTIONS OF GARMENT FIT AND THE RESULTING EMOTIONS RELATED TO THEIR PERSONAL VALUES	11
FIGURE 2.1	FABRIC GRAINS	27
FIGURE 2.2	ASHDOWN'S (2007) MODEL ON FACTORS AFFECTING THE SIZING SYSTEM	31
FIGURE 2.3	EXAMPLES OF SIZE PICTOGRAMS FROM DIFFERENT COUNTRIES	51
FIGURE 3.1	STRUCTURE OF THE MEANS-END CHAIN MODEL	71
FIGURE 5.1	GRAPHIC PRESENTATION OF THE ETHNICITY OF THE PARTICIPANTS	111
FIGURE 5.2	GRAPHIC PRESENTATION OF THE SOURCE OF THE PARTICIPANTS	112
FIGURE 5.3	GRAPHIC PRESENTATION OF THE AGE OF THE PARTICIPANTS	114
FIGURE 5.4	GRAPHIC PRESENTATION OF THE MOST FREQUENTLY PATRONIZED CLOTHING RETAILERS RANKED NUMBER ONE	117
FIGURE 5.5	GRAPHIC PRESENTATION OF THE PREFERRED FIT FOR PANTS, A BLOUSE AND GARMENTS IN GENERAL	126
FIGURE 5.6	GRAPHIC PRESENTATION OF PERCEIVED SELF-REPORTED BODY SHAPES OF THE PARTICIPANTS	136
FIGURE 5.7	HIERARCHICAL VALUE MAP OF THE CRITERIA FOR CHOOSING READY-TO-WEAR GARMENTS	142
FIGURE 5.8	HIERARCHICAL VALUE MAP OF THE PROBLEMS ENCOUNTERED WHEN PURCHASING READY-TO-WEAR GARMENTS	146
FIGURE 5.9	HIERARCHICAL VALUE MAP OF THE THOUGHTS ABOUT GARMENT SIZING IN SOUTH AFRICA	158
FIGURE 5.10	HIERARCHICAL VALUE MAP OF THE PROBLEMS EXPERIENCED WITH GARMENT SIZING	162
FIGURE 6.1	APPLICATION OF THE CONCEPTUAL FRAMEWORK TO THE STUDY	203

LIST OF APPENDICES

APPENDIX A	BODY SHAPES PROFILES	226
	<i>Appendix A1: Three Main Somatotypes</i>	226
	<i>Appendix A2: Douty Body-Build Scale</i>	227
	<i>Appendix A3: Body Shape Assessment Scale (BSAS)</i>	228
	<i>Appendix A4: Female Figure Identification Technique (FFIT) for apparel</i>	229
	<i>Appendix A5: Body Shape Variations</i>	230
APPENDIX B	LIST OF HUMAN EMOTIONS	232
APPENDIX C	INSTRUMENT FOR THE STUDY	234
APPENDIX D	INVITATION E-MAILS	258
APPENDIX E	LETTER OF APPRECIATION	261
APPENDIX F	ETHICAL CLEARANCE LETTER	262
APPENDIX G	QUALITATIVE DATA ON MOST FREQUENTLY PATRONIZED CLOTHING RETAILERS	263
APPENDIX H	QUALITATIVE DATA ON PREFERRED FIT FOR PANTS, A BLOUSE AND GARMENTS	267
APPENDIX I	CLOTHING RETAILERS RANKED NUMBER TWO AND THREE BY THE PARTICIPANTS	273
APPENDIX J	QUALITATIVE DATA ON BODY SHAPE, GARMENT SIZING AND GARMENT SIZE LABEL COMMUNICATION	277

CHAPTER 1

THE STUDY IN PERSPECTIVE

This chapter presents an overview of the study, by presenting the background and motivation, the cognitive appraisal theory of emotions through which emotions will be studied, conceptual framework, objectives of the study, methodology, presentation and structure of the study and definition of terms used in the study.

1.1 BACKGROUND AND MOTIVATION

Female consumers perceive garments as being more than just a basic necessity that covers and provides warmth to the body. According to Kim, Forsythe, Gu and Moon (2002:481), female consumers use garments especially as a tool to express their personality, hence associating themselves with a certain social status and to communicating personal values to others. Therefore, for the female consumer, garments have an emotional aspect linked to them (Doshi, 2006:1). The success of clothing to support these functions is dependent on the fit of the garment for that particular individual.

Garment appearance or garment aesthetics is seen as one of the most important aspects of garment fit (Fan, 2004:15). According to Ashdown, Loker and Rucker (2007:1) and Schofield, Ashdown Hethorn, LaBat and Salusso (2006:147), one of the greatest challenges facing the clothing industry today, including South Africa, is to provide quality fitting garments to a broadly defined target population. Das and Alagirusamy (2010:5) mention that quality fit and satisfaction with the garments are influenced by both characteristics of the garment as well as psychological perceptions of the wearer. The difficulty, therefore, for garment manufacturers and retailers to produce quality fitting garments is because garment designers, patternmakers and consumers themselves all have different perceptions about quality fit (Doshi 2006:1). Doshi (2006:1) went further to explain that garment designers are interested in creating a specific aesthetic look in relation to the body, meaning that the garment should be beautiful or pleasing to look at, giving the wearer a clean look. This is done without considering the consumer's ideas of what they regard as a well fitting garment. Patternmakers try to maintain this perfect look over a range of different body shapes over a

limited number of sizes ranges based on international fashion trends. Furthermore, consumers have their personal preferences and perceptions about how garments should fit their bodies, which size gives a better look and whether they are comfortable in the garment (Pisut & Connell, 2007:368). Thus the effectiveness of producing quality fit and satisfaction with garments is highly dependent on the communication between garment manufacturers, designers and consumers.

A well fitting garment contributes to the confidence and comfort of the wearer (Alexander, Connell & Presley, 2005:52). Fit of the garment is one of the most important elements consumers consider when they compile their “appearance” (Yu, 2004:32). Appearance according to Kaiser (1998:5), refers to the whole image of the human body including any modifications such as hairstyling, cosmetics as well as coverings of the body including garments. For the purpose of this study, appearance will simply mean the visual appeal of the garment when the consumer is wearing it. A well fitting garment helps to bring out an attractive and the desired appearance (Moody, Kinderman & Sinha, 2010:162). In addition Rasband and Liechty (2006:3) point out that garments that do not fit well are distracting which leads to negative attention focused on the wearer’s appearance.

The appearance perceptions are most likely to be shaped by the individual’s personal values. According to Kaiser (1998:290), personal values refer to standards or principles that guide an individual’s actions and thoughts that help to define what is important by guiding one’s choices or preferences of how the garment should fit. Hence garment fit and the subsequent appearance serves as a personal expression, communicating some personal values to others that may not easily be said in conversation (Kaiser, 1998:290) such as, self-esteem, confidence or acceptance just to mention a few, that can be achieved through clothing.

According to Nelissen, Dijker and De Vries (2007:902), most current theories on emotions, state that an emotional state is characterized by a motivation to attain or maintain a particular goal or personal value. This may simply imply that if a personal value such as self-esteem is maintained through a garment that fits properly, positive emotions such as joy, glamour or confidence, to name a few, may be elicited. On the other hand if a consumer’s personal values are challenged because of an ill-fitting garment, substantial negative emotions such as embarrassment, anger or frustration and others may be experienced.

Horwaton and Lee (2010:22); Barona-McRoberts (2005:2) and Otieno, Harrow and Lea-Greenwood (2005:307) are of the opinion that when it comes to garment purchases, women especially, find it difficult to find garments that fit well, which makes them the most discontented consumers. This is not surprising according to a study conducted by Kurt Salmon Associates cited in Loker, Ashdown and Schoenfelder (2005) in the United States of

America reported in the Annual Consumer Outlook, that half of the female population in the United States of America are not able to find well fitting garments. The reasons offered to explain this phenomena is that female body shapes and proportions vary greatly and may change dramatically over years as a result of age, changes in nutrition, lifestyle and increase or loss in body weight among other factors (Howarton & Lee, 2010:220); (Bougourd, 2007:108); (Pisut & Connell, 2007:370); (Pechoux & Ghosh, 2002:3). Lee, Istook, Nam and Park (2003:375) also went further to state that body shapes and proportions may also differ due to ethnicity. This problem can include the South African female clothing consumers as well, but there are limited or no studies conducted in South Africa to date to validate this.

1.1.1 Body shapes as a contributing factor to garment fit problems

In terms of clothing, South Africa is a multicultural country comprising of people of different ethnic groupings. Lee *et al.*, (2003:375) reported that people of different races can have different body shapes and body proportions. It is, therefore, expected that body shapes as well as body proportions of the South African female consumers to be different as well. Moreover, a newspaper article by Steenkamp (2001) in the Sunday Times, titled "Girls in uniform made to measure" reported that South African researchers were taking the measurements of South African women soldiers so that they can design uniforms more suitable to their curves. This was welcome news for both black and White women of the South African Defence Force who acknowledged that they were "fed up" with uncomfortable and sloppy looking uniforms which were not suitable for their different body shapes and proportions (Steenkamp, 2001).

Variations in body shapes and sizes are repeatedly mentioned as the reason why clothing manufactures are failing to produce proper fitting garments (Pisut & Connell, 2007:368; Schofield *et al.*, 2006:148; Simmons, Istook & Devarajan, 2004a:1). According to Connell, Ulrich, Knox, Hutton, Bruner and Ashdown (2003:1), most garment manufacturers in the United States of America still base their body measurements on an hourglass or slightly pear shaped figure when manufacturing or designing garments for female consumers. These body shapes have a proportionately smaller waist when compared to the hip/bust measurement ratio. This type of practice does not accommodate the diversity of female body shapes that currently exist in the United States of America and in other countries including South Africa. This clearly indicates that the majority of female consumers who do not have the body shape that meets the standardised ready-to-wear sizing system, may have problems with garment fit (Park, Nam, Choi, Lee & Lee, 2009:374). Ashdown (1998:324) further states that very few sizing systems including the systems used in South Africa accommodate different body shapes.

The lack of current and updated anthropometric data for the population for which the garments are manufactured, is stated as another problem why body shapes prove to be a challenge when producing well fitting garments (Pisut & Connell, 2007:368). Most garment manufacturers may still be using body measurements from studies done in the 1940s (Simmons *et al.*, 2004a:1) when manufacturing ready-to-wear garments today, these body measurements are considered to be outdated. A study conducted by Simmons *et al.* (2004a:7) when applying body shape analysis from 3D body scanning data confirm that the female body shapes have changed from the 1950s when most standards were set in United States of America. Therefore, patterns that were previously developed for the hourglass body shapes are not easily adaptable to fit well on the pear or oval body shape figure types (Pisut & Connell, 2007:368).

In addition, the problem of different body shapes and the lack of realistic body measurements of the population and the problem of garment fit were also highlighted in South Africa through an article in the Business Day national newspaper. The article stated that “South African clothing makers and retailers have no idea of the body shape of South Africans as a detailed survey of the shape and size of the South African consumer has never been done before. As a result the local garment industry in South Africa has been forced to rely on charts devised in the United States of America and United Kingdom to design and manufacture clothing for South African consumers” (Kahn, 2008).

The article further states that “although the foreign sizing charts provided a reasonable guide when retail trends were largely driven by rich White South Africans of European descent, they were not particularly useful for the growing ranks of the black middle class, who have different body proportions” (Kahn, 2008). This may imply that even if the garment sizing systems were standardized, certain groupings of consumers would still experience garment fit problems.

1.1.2 Garment sizing as a contributing factor to garment fit problems

Garment sizing is another factor that may also contribute to the problem of garment fit that female consumers experience today. Although garment sizing is considered to be a secondary factor that influences garment fit (Barona-McRoberts, 2005:2), a leading complaint from the consumers, and this can also be true of the South African female consumers, is that garment sizing is inconsistent and confusing (Lee, 2005:25). In South Africa, the newspapers have been the only voice of the female consumer through which the frustration with garment sizing could be vented. The South African newspaper, the Cape Argus referring to an article written by Johns (2007), titled “It says it’s large, but it’s medium” reported the problem of

inconsistency of garment sizing in South Africa. This article resulted in a flurry of responses that were in support of what was printed. Female consumers voiced their frustrations with the problem of garment fit through text messages sent to the newspaper. Through the reaction to the article, it is apparent that many female consumers experience the problem of garment sizing or the lack thereof in South Africa, but may not have had the opportunity to be heard.

Another newspaper article by Johns (2007) in the Weekend Argus titled “When having a fit can be a good thing” confirmed that Weekend Argus readers had inundated them with text messages about their shopping experience, venting their anger over lack of choice, sizes that do not make sense and clothing that does not fit well. Some of the text messages read; “*I find that pants and trousers are the worst. The waists are too low and don’t cover my bottom and the thighs are too narrow*”. Another text message read; “*I agree with the De Maid (name of a person) Woolworths shirts say 16 – 18 but try to get them to fit a bigger upper arm? No way, most clothing stores cater for the Asian body.*” Just to mention a few. These articles in the Cape Argus and Weekend Argus are testimony of some female consumers’ experiences of the extent of the garment fit problem experienced in South Africa even today.

Moreover, sizing of the garment seems to be a rather difficult task with few guidelines to produce a proper fitting garment. The majority of the garment manufacturers do not follow a standardised sizing system when producing garments, thus leading to varying sizes among different manufacturers and within the same manufacturer (LaBat, 2007:91). This is confusing and frustrating to the female consumers who expect to fit into a certain size, but are unable to because the measurements of the garment are incorrect. Hence it is not surprising that consumers seem to have difficulty making decisions based merely on the garment size label without trying on the garment first (Park *et al.*, 2009:373).

1.1.3 Garment size label communication as a contributing factor to garment fit problems

Garment size label communication is also an important factor when it comes to garment fit. In order for the correct garment to be selected, labels communicating garment size must be thoroughly and clearly explained (Lee, 2005:29; Chun, 2007:222). A garment size label is supposed to contain information that indicates the body measurement of which a particular garment is designed to fit (Kinley, 2010:401). However, most garment size labels of apparel sold in South Africa do not have information on the basic body dimensions. The numerical size codes which are unrelated to body dimensions are confusing to the female consumers looking for a proper fitting garment (Chun-Yoon & Jasper, 1995). Such information does not assist

female consumers to find garments in retail stores that fit properly. More often than not, consumers have to try on several sizes of the same garment style before finding the one that fits properly or is comfortable with the fit thereof.

The average female consumer has very little knowledge of the key body dimensions that are sometimes listed on the garment size labels such as the hip, bust and waist measurements, in terms of evaluating them against the body dimensions (Howarton & Lee, 2010:221). Key body dimensions are intended to help consumers choose the correct garment size. Unless the consumer is knowledgeable on how to take their own body dimensions correctly, the key dimensions will not help them in selecting a proper fitting garment within the different brands of garments available in retail stores.

This is supported by a study by Chun-Yoon and Jasper (1995) aimed at “investigating the relationship between consumers’ preferences for size description and various characteristics”. The findings revealed that consumers prefer a sizing label that includes a pictogram which is a self-explanatory sketch of a human body labelled with key body measurements of an individual that a particular garment may fit. Such a label would quickly communicate to the consumers the body dimensions the garment was designed to fit. Providing more and clear information on the size labels may help reduce the time and the frustrations which consumers often feel when looking for a garment that fits well.

In addition the standards for garment size labels are different, the body proportion (each garment size is meant to fit) varies from manufacturer to manufacturer or sometimes within the same manufacturer who might have variations that are not directly communicated to the consumers (Kinley, 2010:401). The problems arise when the same numerical code is used on the size labels of garments which have different measurements (Workman, 1991) cited in Faust and Carrier (2010:90) leaving consumers confused and frustrated. Hence a standardized labelling system may assist female consumers in easily locating garments of their or similar body measurements as those mentioned on the garment size label, reducing the return rate.

When female consumers encounter garment fit problems either through body shapes, garment sizing or garment size label communication, they may experience varied emotions. According to Desmet, Overbeeke and Tax (2001:32), all human interactions including our material world such as garments involve emotions. There are several theories of emotions that attempt to understand why people experience emotions, of which the cognitive appraisal theory of emotions is one such theory that is explained in the section to follow.

1.2 COGNITIVE APPRAISAL THEORY OF EMOTIONS AND APPRAISAL DIMENSIONS

The cognitive appraisal theory of emotions according to Lazarus (2001:55), is defined as a quick evaluation of a situation with respect to one's wellbeing. The answers to the evaluations are what cause the emotions experienced. Such as, an ill-fitting garment does not produce emotions, but what the consumer may evaluate to be at stake for them may give rise to a particular emotional response. These are personal values an individual seeks to achieve through clothing which may be challenged because of the fit of the garment (Desmet *et al.*, 2001:32). Although people differ with respect to their emotional responses to a situation, Desmet (2003:2) points out that the process that precedes the emotional response is the same in all the emotion causing situations, which is the evaluation process.

One approach in describing and differentiating between and amongst the evaluations is the dimensional processes which refer to the process of answering evaluative questions (Demir, Desmet & Hekkert, 2009:42). In this approach when the female consumer is faced with an ill-fitting garment, she might have to evaluate several aspects relating to the situation. This means that the emotions that are elicited are not described in a single question but by several questions each focusing on the different aspects of the situation (Demir *et al.*, 2009:42). An example is when a female consumer is faced with an ill-fitting garment, she may evaluate the problem by asking herself several different evaluative questions, such as which personal goals or values are being affected as a result of the ill-fitting garment or, who or what caused the problem or what can be done to alleviate the problem (Parkinson, 2001:175). The emotions elicited for each evaluation are dependent on the individual answers to these evaluative questions. As garments can be used to achieve personal values (Kaiser, 1998:146), one of the evaluative questions most likely to be asked when faced with an ill-fitting garment is whether this negative situation is affecting or not affecting the individual's personal values. The evaluative questions which differentiate emotions are named appraisal dimensions (Scherer, 2001:95).

Although the appraisal dimensions proposed by the various theorists differ in terms of the dimension that may be evaluated first and the number of the dimensions evaluated in a given situation (**See Table 3.1 in Chapter 3**), however, many theorists introduced similar appraisal dimensions. The common dimensional terms include: *novelty, valence, goals/needs, agency, and norm/values*. Garments and appearance are closely related to our social environment according to Kaiser (1998:95), and the emotions the researcher is interested in determining in this study are those elicited when personal values are either challenged or maintained through garment fit. For this reason the norms/values appraisal dimension or in other terms referred to

as social standards dimension, is the appropriate dimension to use when evaluating personal values and the resulting emotions as explained in 1.3 below.

1.3 EVALUATING GARMENT FIT PROBLEMS THROUGH THE SOCIAL STANDARDS APPRAISAL DIMENSION

The social standards appraisal dimension, according to Scherer (2001:94), is concerned with how important the situation, such as garment fit, is related to the self and its social surroundings or social standards. This means that when a consumer evaluates the negative experience of ill-fitting garments along the social standards appraisal dimension, the consumer is trying to assess how this negative experience will affect what they aspire to achieve socially through clothing. The emotions that are elicited would typically involve the evaluations of an ill-fitting garment in relation to one's personal values, corresponding with one's social standards Desmet *et al.*, 2001:4).

Ellsworth and Scherer (2003:581) point out that evaluating the social consequences of a situation whether negative or positive is an important step before an individual finalizes their evaluation process and on deciding the appropriate behaviour. This may imply that social standards appraisal dimension can be viewed as distinct from, but additional to other appraisal dimensions (Manstead & Fischer, 2001:222). Therefore, garment fit can be evaluated as challenging personal values or maintaining or surpassing personal values (Demir *et al.*, 2009:43) depending on the perceptions of the drape and fit of the garment. For emotions like anger or frustration to emerge, garment fit may be evaluated as violating a personal value, while on the other hand, emotions like pride or admiration involve evaluating garment fit as supporting or surpassing personal values (Demir *et al.*, 2009:43) through garment fit.

In all consumer encounters, emotions contribute strongly to consumer perceptions, preferences, and our general well-being (Desmet, Hekkert & Hillen, 2002:2). These emotions influence the decisions to purchase or not to purchase a garment (Desmet *et al.*, 2001:1).

1.4 THE INFLUENCE OF EMOTIONS ON CONSUMER PURCHASING DECISION

Consumers are constantly making decisions regarding every aspect of their everyday lives (Schiffman & Kanuk 2010:478). A decision according to Schiffman and Kanuk (2010:478), is a selection of an option between two or more alternative choices. When a female consumer has

a choice between purchasing a certain garment and not purchasing it, the individual finds himself or herself in a position to make a purchase decision (Schiffman & Kanuk, 2010:478).

In order to understand the influence of the different emotions on the purchase decision making process, Raghunathan and Pham (1999:59) point out that it is important to first examine the evaluation structures of the situation. These evaluations will not only determine the type of emotions the consumer will experience in response to the situation, but also the type of information processing the consumer is likely to undergo when experiencing a given emotion. The researchers, Raghunathan and Pham (1999:59) argue that the emotional information helps individuals to solve particular problems cognitively which is part of the decision making process. Information processing according to Schiffman and Kanuk (2010:481), leads to the formation of preferences, and ultimately to purchase intentions. For example, anger can be triggered if a consumer evaluates that an ill-fitting garment is caused by the wrong sizing of the garment. This provides the information to the consumer that someone is to blame for the situation the consumers find themselves in. Consequently an emotion, for instance anger, will motivate an action such as, in this case, not to purchase the ill-fitting garment.

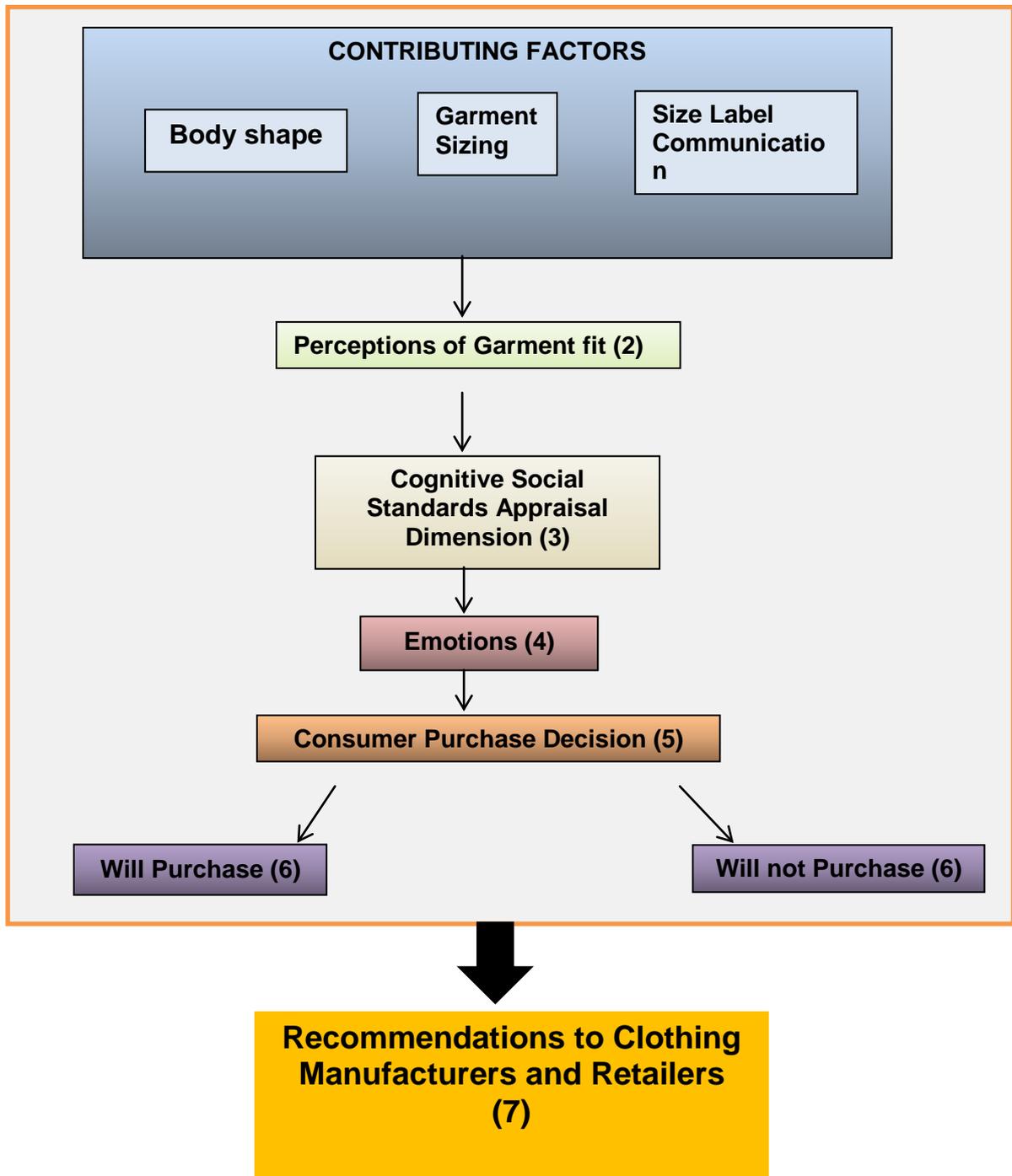
Negative emotions, according to Raghunathan and Pham (1999:57), involve a complex decision making process. This is because the situations producing the negative emotions need considerable attention to detail and a careful analysis of the information. It also includes a comprehensive and critical evaluation of the alternatives, which are considered to improve the decision quality (Luce, Bettman & Payne, 1997:385). For instance a consumer can still buy an ill-fitting garment if the garment requires minor alterations. Thus, negative emotions seem to yield different effects on decision making and its related processes.

On the other hand when a female consumer experiences a well fitting garment, a garment which maintains her personal values through clothing, positive emotions are elicited. That results in a faster decision making process based on heuristics (shortcut decision rules) to facilitate the decision making process (Schiffman & Kanuk, 2010:481). This allows for routine information processing, activated when the situation is maintaining one's personal values. The decision may also be more systematic in the case of personally relevant decisions (Zeelenberg, Nelissen, Breugelmans & Pieters, 2008:18). Positive emotions seem to yield the same effects on decision making and its related processes. These differences in the emotional states when considering garment fit would lead to female consumers approaching the decision to purchase in a flexible way. The consumer generates other alternatives, as well as gaining a broader perspective on the potential threats or opportunities to personal values before the final decision is made (Luce *et al.*, 1997:385).

1.5 CONCEPTUAL FRAMEWORK

Taking into consideration the background of the study discussed in the previous sections, the following conceptual framework (**See Figure 1.1**) is a proposed structure that will guide the perceptual study on garment fit and the effect of personal values on emotions of female consumers in South Africa. The conceptual framework highlights the most important concepts of the study and it also shows how each concept may ultimately be linked or influence each other. Furthermore, the conceptual framework enables that all aspects that the study intends to bring forth are considered and highlighted when drawing up the conclusions and making recommendations at the end of the study. This conceptual framework was developed with research objectives and the literature background of the study in mind. Thus, ultimately it serves as a means to understand female consumers' personal values and emotions which results from the perceptions of garment fit.

FIGURE 1.1 CONCEPTUAL FRAMEWORK OF FEMALE CONSUMERS' PERCEPTIONS OF GARMENT FIT AND THE RESULTING EMOTIONS RELATED TO THEIR PERSONAL VALUES



The flow of the conceptual framework will be explained through the aid of numbers as indicated in Figure 1.1.

The above conceptual framework suggests that there are three main factors **(1)** that contribute to the current garment fit problems which female consumers experience when they purchase ready-to-wear garments. One of the contributing factors is suggested to be the body shapes. Female body shapes and proportions vary greatly, as a result this challenges clothing designers to produce well fitting garments for various body shapes. Garment sizing is suggested to be the other contributing factor to garment fit problems. Most clothing manufacturers in developing countries including South Africa do not follow a standardized sizing system when producing garments. This leads to varying sizes among the manufacturers or within the same manufacturer, leaving consumers frustrated and confused. Size label communication is also suggested to contribute to garment fit problems. Wrong and unrealistic information communicated on the size label can lead to consumers choosing an improper fitting garment.

Regardless of these factors, either one or a combination of these factors can influence the perceptions of garment fit **(2)**. With the perceptions of garment fit, female consumers will cognitively evaluate the situation in relation to different aspects. As the study seeks to explore female consumers' emotions related to their personal values when they experience garment fit problems, the conceptual framework further suggests that the important evaluative dimension relevant to this study is the social standards dimension. Through the cognitive social standards appraisal dimension **(3)**, the female consumer will evaluate how garment fit problems affect her personal values to be achieved through clothing. As such through cognitive appraisal of social standards dimension, the female consumer may reveal emotions **(4)**, which can either be negative if her personal values through garment fit are challenged or they can be positive if the personal values are not affecting. The conceptual framework also suggests that the emotions elicited may influence the purchasing decision **(5)** of an ill-fitting ready-to-wear garment. The consumer may decide either to purchase **(6)** or not to purchase **(6)** the garment that they perceive to have fit problems depending on the answer they come up with in the evaluation process. Furthermore, the conceptual framework suggests that the consumer who experiences garment fit problems contributed by body shape(s), garment sizing and garment size label communication can play a role in providing the clothing manufacturer and retailers with practical solutions to improve garment fit for consumers. All of the concepts (1 – 6) will lead to a better understanding of the consumer's experience of garment fit. This leads to an input to the clothing manufacturers and retailers **(7)**.

1.6 PROBLEM STATEMENT

The discussion thus far clearly indicates that among other basic needs that garments provide to consumers, the satisfaction of ready-to-wear garments is specifically dependent on the evaluation of whether the fitting of the garment fulfils the personal values that the consumer aspires to achieve through clothing (Kim *et al.*, 2002:481). Unfortunately as a result of factors such as body shapes, garment sizing and garment size labels communication among others, female consumers find it difficult to find a proper fitting ready-to-wear garment (Pisut & Connell, 2007:368; Barona-McRoberts, 2005:2; Chun-Yoon & Jasper, 1995). While little research based evidence is available in South Africa on garment sizing and fit problems, this leaves clothing manufactures without a proper scientific basis for designing garments that can fit female consumers with various body shapes, using a standardized garment sizing and labelling systems. Exploring these factors identified in the literature can help in creating a better understanding of garment fit problems among South African female consumers as well as the personal values they specifically need to achieve through garment fit. Exploring these problems will not only help the clothing industry improve on their offerings, but is also an essential step in creating awareness of the female consumers' consumption behaviour regarding the purchasing decisions they make.

When female consumers evaluate the negative experience (ill-fitting) garment against their personal values, emotions can be elicited (Desmet *et al.*, 2001:32). Although some emotions can be predicted in most people given the circumstances (Manstead & Fischer, 2001:224), those emotions do not address the question of the underlying personal values female consumers try to achieve through the clothing they wear. It is also the purpose of the study to establish specifically the emotional impact ill-fitting garments have on the female consumer when they evaluate the occurrence against their personal value system through the social standards appraisal dimension.

The detailed problem statement resulting from an expansive literature review on the key concepts of this study will be explained in Chapters 2 and 3.

1.7 AIM AND OBJECTIVES OF THE STUDY

The aim of this study is to explore female consumers' perceptions of garment fit and the emotions related to personal values through garment fit. To achieve this aim the following six objectives are formulated:

OBJECTIVE 1

To determine the role that clothing retailers play in the perceptions of garment fit in terms of:

- the frequency of patronization of clothing retailers and stocking of merchandize in terms of:
- the preference of garment fit.

OBJECTIVE 2

To identify the perceived self-reported body shapes of the female participants.

OBJECTIVE 3

To explore and determine female consumers' personal values resulting from garment fit and the subsequent emotions.

Sub-objective 1:

To identify the personal values and emotions related to body shapes in terms of:

- the criteria important to female consumers when choosing ready-to-wear garments considering their body shape(s).
- the problems that female consumers encounter when purchasing ready-to-wear garments considering their body shape(s).

Sub-objective 2:

To identify personal values and emotions related to garment sizing in terms of:

- thoughts that come to mind when considering garment sizing in South Africa.
- the problems that female consumers experience with garment sizing in general.

Sub-objective 3:

To identify the emotions elicited because of the problems of garment size label communication.

OBJECTIVE 4

To identify the roles that body shape(s), garment sizing and garment size label communication play in garment fit problems (concerning garment size label communication; by first establishing the problems related to garment size label communication).

OBJECTIVE 5

To explore and describe the effect of body shape(s), garment sizing and garment size label communication on female consumers' purchasing decision of ready-to-wear garments.

OBJECTIVE 6

To provide clothing industries with possible solutions to garment fit problems contributed by body shapes, garment sizing and garment size label communication, from the participants' point of view.

1.8 METHODOLOGY

The inclusion criterion that was followed in this study required female participants who were working and purchased their own ready-to-wear garments. Their ages ranged between 18 – 56+ years and the female consumers were from the Greater Johannesburg Metropolitan area in Gauteng. To accommodate the inclusion criteria, purposeful and convenient sampling was used in this study.

This study used a combination of data gathering methods within the exploratory research design that was adopted. According to Creswell (1994:174), a study that combines methods is characterized by the researcher using more than one method of data collection and analysis. A group administered questionnaire was the instrument for data collection and included both qualitative as well as quantitative data collection methods.

1.8.1 Data gathering instrument

A group administered questionnaire was divided into four sections. In Section A, participants provided demographic information concerning their age and ethnicity. In this section

participants were also requested to provide psychographic information on their most frequently patronized clothing retailers by ranking three preferred retail outlets where they shop for their garments and provide the reason for that the retailer they rank number 1. Participants were also requested to indicate the preferred fit of pants, a blouse and garments in general and provide reasons for their fit preferences. In Section B, participants studied illustrations of female body shapes that included; the hourglass, the inverted triangle, the triangle, the rectangle, the oval and the diamond body shapes, They were then required to identify and self-report their own body shape by placing an **X** in the box next to the body shape they perceive to be closest to their own. Should they not be able to identify their body shape with any of the illustrations provided, participants were requested to sketch their self-perceived body shape in the space provided in the group administered questionnaire. Section C included the laddering exercises, whereby laddering exercises 1a and 1b were related to body shapes while laddering exercises 2a and 2b were related to garment sizing. The ladder exercises were used to determine personal values and emotions attributed to garment fit through body shape and garment sizing. Section C also entailed open-ended questions on body shape and garment sizing. The open-ended questions were used to measure other variables in the study such as purchase decision, determining that body shape and garment sizing contribute to the perceptions of garment fit and the participants' possible solutions to garment fit problems contributed by body shape and garment sizing. Section D of the questionnaire comprised of open-ended questions on garment size labels communication. These questions covered the general problems of size labels, determining that garment size label communication contribute to garment fit problems, the emotions elicited because of the problems of garment size label communication, the purchasing decision as well as possible solution to garment fit problems contributed by garment size label communication.

1.8.2 Data analysis

Demographic, psychographic questions and the participants' perceived self-reported body shapes were analyzed using descriptive analysis. Data were presented in a frequency table and in percentages, and graphs were used to present the frequency distribution. The data obtained from open-ended questions were analyzed using the open-coding system, whereby the raw data were reduced into manageable proportions. The most descriptive words were identified and similar concepts were grouped together to form the themes and categories that best described the main concerns or facts associated with the requested item in question. The discussions were supported by quotations relevant to each category extracted from the comments of the participants.

The analysis of the laddering data was first content-analyzed and coded according to the procedure as suggested by Reynolds and Gutman (1988:18). Content analysis involved a thorough review of the transcripts of the laddering data and appropriately recording the identified elements into a representation of attribute, consequences and values. The identified elements were then categorized into content codes with common meaning as recommended by Reynolds and Gutman (1988:19), which reflected the responses of the participants.

Based on the content codes above, attributes, consequences and personal values were entered into Mecalyst V 9.1 software program, a tool that simplifies the process of means-end analysis. The Mecalyst V 9.1 software facilitated with the provision of data entry and content analysis system for qualitative laddering. Secondly it tabulated an implication matrix, portraying the degree of connection between the various attributes, consequences and values. Lastly it created hierarchical value maps from the implication matrix. Thus the findings from the laddering data were presented in an hierarchical value maps which is a graphical representation of the most frequently mentioned links gathered across all the participants.

1.9 PRESENTATION AND STRUCTURE OF THE DISSERTATION

This dissertation is divided into six chapters. Following is a brief description of each chapter.

Chapter 1 – The study in perspective

Chapter 1 presents an overview of the garment fit problems and the factors such as body shape, garment sizing and communication of size labels among others that contribute to garment fit problems. This will provide an insight into the challenges of garment fit, which will form the foundation of this dissertation. An overview of the cognitive appraisal theory of emotions and appraisal dimensions that offer an explanation of how female consumers' emotions will be studied is given. Furthermore, the proposed conceptual framework to guide this study, problem statement, aim and objectives of the study are addressed. The chapter concludes with a brief explanation of the research methodology, data gathering instruments and data analysis.

Chapter 2 – Assessment of garment fit

Chapter 2 provides a relevant literature study of the factors that contribute to garment fit problems such as body shape, garment sizing and garment size label communication as well as the elements used to evaluate the fit of the garment. Besides this, relevant literature of

classification system of body shapes is also included. The relationship between body shape, garment sizing and garment size label communication and garment fit is also addressed. The summary of the problem is drawn from the discussion presented.

Chapter 3 – Literature on theoretical approaches to the study

Chapter 3 is the relevant literature relating to theoretical approaches that offer an explanation of how emotions will be studied. Concepts like consumer involvement and personal values will be highlighted as background information for the discussion on emotions. The definition of emotions will be provided, followed by a brief discussion on the overview of theories of emotions. Cognitive appraisal theory of emotions which is the theory used in this study to understand emotions elicited by garment fit will also be discussed. A discussion on appraisal dimensions with a focus on social standards appraisal dimension which explains the role of garment fit problems on personal values and emotions will be presented. The means ends chain theory; the approach of determining emotions through personal values is briefly introduced. The summary of the problem is drawn from the discussion presented.

Chapter 4 – Research Methodology

In this chapter, the methodology applied in this study is presented. The objectives of the study are given. Detailed research design showing the plan of the study is outlined. Detailed research methods applied, sampling and data instruments are provided on how the data were collected and analyzed. Trustworthiness of the study and ethical considerations are also discussed. The summary of the chapter is drawn from the discussions presented.

Chapter 5 – Findings, discussions and interpretations

In this chapter the findings of the research are reported, interpreted and discussed according to the questionnaire of the study.

Chapter 6 – Conclusions and recommendations

In the final chapter, conclusions of the study are drawn. Contributions of the study to the garment sizing and fit research are also discussed. The findings of the study will also facilitate

specific recommendations regarding initiatives that ought to be done to enhance garment fit as well as for future studies. Limitations of the study are also presented.

Referencing is done according to the Harvard method adopted by the Department of Consumer Science at the University of South Africa (UNISA). British English is used throughout this dissertation. For further references, appendices are provided.

1.10 DEFINITION OF TERMS

For the purpose of this study, the operational definitions for the specific terms are explained to enable the reader to interpret the terms in the correct context in which they are presented. The definitions are listed below in alphabetical order.

Anthropometry: a comparative study concerned with measurements of proportions, size and weight of the human body. The aim of anthropometric studies is to collect data from populations of varying sizes and body shape and group them into a range of sizes (Bougourd, 2007:119).

Anthropometric data: dimensional measurements of human body parts, which are key to any garment sizing system (Pechoux & Ghosh, 2002:11).

Appraisal dimensions: the process of answering evaluative questions. Differentiation of emotions (Ellsworth, 1991:144).

Appearance: visual appeal of the garment when the consumer is wearing it.

Body shape: the cumulative product of a human's skeletal structure (build) and the quantity and distribution of muscle and fat on the body (Rasband & Liechty, 2006:19)

Body image: the mental picture an individual has of their body at any given moment in time (Kaiser, 1998:98).

Cognitive appraisal theory of emotions: a quick evaluation of the situation with respect to one's wellbeing (Lazarus, 2001:55)

Emotions: a feeling state that involves physiological changes (such as deep breathing, heart beating faster) and outward expression or behaviour (Martin, O'neil, Hubbard, &

Palmer, 2008:226)

Fit perceptions: perceptions are the process by which individuals recognizes, selects, organizes and interprets stimuli based on each person's own needs, values and expectations (Schiffman & Kanuk, 2007:152). In this study, fit perceptions will be viewed within the framework of female consumers' garment fit preferences.

Fit preferences: the way individual prefer garments to lay on their body such as tight, loose or semi-loose fit.

Garment: any tangible or material object for outerwear, in this study garment will refer to skirts, tops or blouses, pants and dresses.

Garment fit: the relationship between the size and contours of the garment to that of the body (Chen, 2007:132).

Garment ease: the difference between the actual measured size of the body and the measured size of the garment as intended by the designer (Rasband & Liechty, 2006:36)

Garment sizing: any series of graduated categories of dimensions whereby manufactured garments are classified (Petrova, 2007:61).

Ideal body shape: the body shape which is well balanced with no area exaggerated.

This is the body shape usually used in patterns and garment designs (Rasband & Liechty, 2006:24).

Ill-fit: garments that do not conform to the body, they can be tight or too loose. They show Wrinkles, the wearer may feel physically and psychologically insecure (Rasband & Liechty, 2006:3).

Key dimensions: body dimensions with strong relationship with other body dimensions, such as bust, hip waist and sometimes length (Petrova, 2007:63).

Personal values: standards or principles that guide an individual's action and thought, they help define what is important to us by guiding our choices or preferences (Kaiser,1998:290).

Pictogram: a self-explanatory sketch of a human body label with key dimensions.

Ready-to-wear: Mass produced clothing in standard sizes.

Size group: similar body measurements (Petrova, 2007:57).

Sizing system: a set of sizes comprised using similar theory and methodology (Petrova, 2007:57)

Standards: a published document developed and established within the consensus principles of a governing standards organization (La Bat, 2007:88)

Style: the distinctive lines and characteristics and characteristics of a garment design (Kaiser, 1998:4).

Target market: a subset of the population, the term is used to denote a target at which a company aims its marketing efforts (Bourgourd, 2007:109). Target market is used interchangeably with target population in this study.

Three-Dimension (3D) Body Scanning: the use of a light source (laser, white light or other type) to capture the image of the body in the three dimensions of *x,y, and z* (width, height and depth) ([TC]², 2012).

Well fitting: garment that conforms to the human body and has adequate ease of movement, has no wrinkles and has been cut and manipulated in such a way that it appears to be part of the wearer.

1.11 Acronyms

CBD - Central Business District

HVM - Hierarchical Value Map

MEC - Means-end-chain

ISO - International Organization for Standardization

UNISA - University of South Africa

The following chapter discusses the concepts relevant to the background of garment fit and the associated problems.

CHAPTER 2

ASSESSMENT OF GARMENT FIT

This chapter describes different concepts relevant to the background of garment fit and the associated problems. The chapter also highlights different female body shapes as garment fit is closely associated with the physical body shapes.

2.1 INTRODUCTION

Garment fit refers to the relationship between the size and contours of the garment to that of the body (Chen, 2007:132). Defining good fit in a garment varies and, therefore, it is not easy to provide a general definition of what a good fit is (Ashdown & O'Connell, 2006:137; Pisut & Connell, 2007:367). According to Yu (2004:32), the definition of a well fitting garment, and thus what good fit represents in ready-to-wear clothing, depends on the current fashion in fit, the existing industrial norm such as styles or function of the garment as well as the fit preferences of individuals. Fit preferences may include levels of comfort, appearance, fashion trends, body shape, age, lifestyle and the cultural norms an individual is accustomed to (Pisut & Connell, 2007:366) that may be considered important to the wearer at that particular moment. Nevertheless a well fitting garment is achieved when the wearer feels comfortable and is able to move freely without any restraint (Laitala, Klepp & Hauge, 2011:23). Equally a good fit is supposed to enhance the appearance of the wearer by making the body look well proportioned, smart and more flattering (Rasband & Liechty, 2006:3).

Ashdown and DeLong (1995:48) went further to point out that female consumers mainly judge garment fit based on both visual and tactile information they are able to obtain from the garment. Visual judgment is based on the appearance of the garment on the body. A well fitting garment should have all the requirements or elements of good fit to enable a garment to look presentable and attractive (Stamper, Sharp & Donnell, 2005:297).

Knowledge of these elements will help both manufacturers and customers to address garment fit, resulting in consumers' satisfaction with their ready-to-wear garments.

Furthermore, both visual and tactile information are used to determine the comfort level which may affect the individual's perception of the garment fit (Das & Alagirusamy, 2010:159). Comfort in garment fit includes several dimensions such as physical comfort; which includes the mechanical properties such as elasticity, flexibility and the weight of the garment. The psychological comfort includes good feelings and well-being experiences when wearing the garment such as femininity or sophistication of the garment and social comfort which includes appropriateness of the garment to the occasion, or satisfaction with the impression made on others (Otieno *et al.*, 2005:299). Tactile comfort according to Das and Alagirusamy (2010:54), refers to the human sensory response to the fabrics the garment is manufactured from. The sensations such as prickly, scratchy, allergic reaction or perception of moisture among others are related to tactile comfort (Wong, Li & Yeung, 2002:108). Thus the decision to purchase or not to purchase the chosen ready-to-wear garment will ultimately be determined by the type of comfort the consumer seeks in a garment.

In addition, garment fit and the subsequent appearance of the wearer are considered to be one of the most important aspects that a female consumer will use to evaluate the appropriateness of the garment in terms of personal values to be achieved through clothing (Kaiser, 1998:301). Hence, garment fit is regarded as the primary complaint among female consumers in relation to ready-to-wear garments and also is used as an important factor in the acceptance or rejection of the garment (Ashdown & O'Connell, 2006:137).

Regardless of the definition of a well fitting garment, Simmons *et al.* (2004a:1) state that garment fit must always start with an understanding of the human body shape and proportions. Female body shapes are expressed in various types and proportions (Rasband & Liechy, 2006:19), which can be studied and be classified using manual measurements, from 3D body scanner as well as through visual observational assessments. It is, therefore, important that issues of variations in female body shapes which may also lead to a negative interpretation of one's own body image as well as garment sizing and size labelling are thoroughly explored in this study as these factors in isolation or combined may affect garment fit. Moreover, Simmons (2002:12) mentioned that the ability to satisfy the needs of the consumers with high quality, well fitting garments is the key to the survival of any clothing industry within its current competitive tone.

According to Desmet *et al.* (2001:32), all human interaction including our material world involves emotions. This implies that personal experiences with the fit of a garment may elicit

either positive or negative emotions. As already mentioned in Chapter 1, naturally when female consumers feel uncomfortable with the fit of the garment, in relation to their personal values, negative emotions such as frustration may be experienced. This frustration is not only consumer based, garment manufacturers and retailers also bear the consequences when consumers face issues with the fitting of the garment. These consequences can be in the form of poor or lost sales, damage to merchandise due to over handling of the garment when trying on and looking for a good fit as well as returned garments resulting from poor fitting garments (DesMarteau, 2000:1).

The chapter therefore begins with a discussion on the elements such as fabric grain, garment ease, line, garment set, and balance present in a garment that the consumer can use to evaluate a good fit in a garment. Thereafter, the factors that contribute to garment fit problems will be considered. These factors include body shapes garment sizing and garment size label communication. Expanding on body shapes, classification systems of female body shapes will also be discussed as an extension to the factors that contribute to the problems of garment fit. The chapter will further discuss the relationship between body shapes and garment fit, followed by a discussion on the relationship between garments sizing and garment fit, as well as the relationship between garment size label communication and garment fit. Lastly, a summary of the problem drawn from the discussions will be presented followed by the concluding remarks regarding the important aspects discussed in the chapter.

2.2 THE ELEMENTS USED TO EVALUATE GARMENT FIT

According to Ashdown, Loker, Schoenfelder and Lyman-Clarke (2004:3), evaluating garment fit can be a complex process. This is because the relationship between the human body and garment is assessed on how well the garment conforms to the elements for a good fit. A well fitting garment, therefore, depends on more than the relationship between the garment dimensions to the body dimension. Ashdown *et al.* (2004:3) further mentions that the garment during wear, that hangs smoothly and evenly on the body, with no wrinkles no pulls or distortion of the fabric has straight seams, pleasing proportions, and adequate ease for movement with the hems parallel to the floor unless otherwise intended, has a good fit. This implies that in addition to the individuals' preferences of fit of a garment and social factors that may influence the fit of the garment. Stamper *et al.* (2005:297) mention that the fabric grain, garment ease, line, set and balance, are some important elements that are present in a garment that can be used to describe well fitting garments.

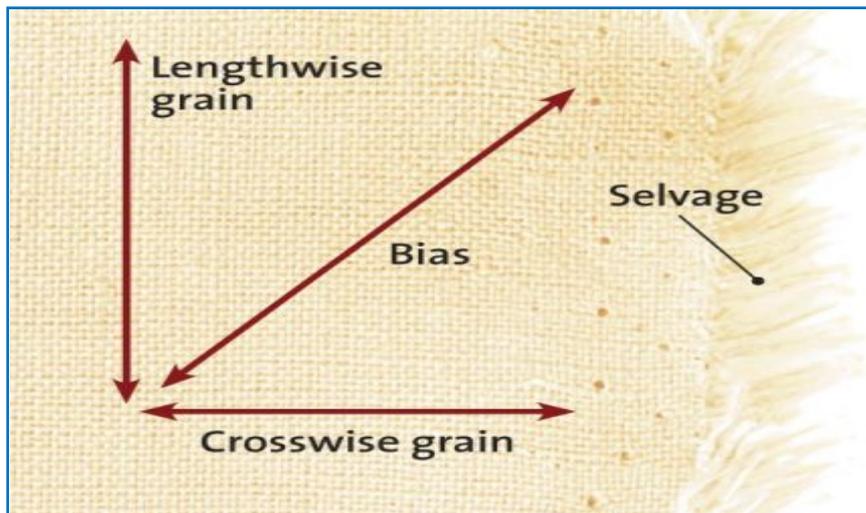
These elements will determine the way the body fits into the garment and more importantly will assist consumers in understanding, analyzing and hopefully solutions to garment fit problems (Stamper *et al.*, 2005:297). An understanding of these elements may, therefore, be used to empower female consumers in making the correct garment selection choices for themselves. In the following section, the elements of fabric grain, garment ease, line, set and balance will be discussed.

2.2.1 Fabric grain

The fabric grain, according to Stamper *et al.* (2005:297), is the first of the five elements that affect garment fit and is the key element in recognizing and understanding garment fit. Basically there are three grains in a fabric, these are; the lengthwise, the crosswise and bias grains (Rasband & Liechty, 2006:54). Rasband and Liechty (2006:54) further explain that the lengthwise grains of the fabric are the threads that run parallel to the finished selvage edge of the fabric and they are perpendicular to the floor. The crosswise grains of the fabric are the threads that lie between, or at right angles to the selvages and they are parallel to the floor, across the chest and hip. Bias grain runs diagonally across the lengthwise and crosswise threads (Rasband & Liechty, 2006:54). **(Figure 2.1)**.

Branson and Nam (2007:265) state that when the lengthwise and crosswise threads lie at right angle to each other the garment hangs evenly on both sides of the body with even seams. Rasband and Liechty (2006:54) further point out that when the grain of the fabric is out of line the garment will usually show ripples at the hemline, pulling or gaping at the seams, and in some instances puckering or twisting may be noticed. As a result the garment will hang “crookedly” and will not fit well. Fabric with a balanced grain will make for a balanced garment that is a signal of a good fit. Therefore a garment that is cut on the correct grain will appear smart and presentable when worn.

FIGURE 2.1 FABRIC GRAINS



Source: Steeves (2008)

2.2.2 Garment ease

Garment ease, according to Petrova (2007:61), is defined as the difference between the body measurement of the person wearing the garment and the garment measurements. The ease is the amount of fabric which is added beyond the body dimension when making garments and is decided by the garment designers. Therefore, the amount of garment ease which is required for comfort, movement and attractive appearance will depend on the following aspects: The garment design or style, the fabric used, the body shapes and proportions of the individuals the garment is intended to fit and the occasion for which the garment will be worn, as well as personal needs and preference of the consumer (Rasband & Liechty, 2006:36). Thus garment ease includes, *wearing ease* and *design ease*.

Wearing ease: is the amount of extra fabric which is allowed for body movement and comfort in a garment (Chen, 2007:132). Wearing ease allows the wearer to breathe easily, bend over or raise the arms without stretching the seams. It also allows sitting, walking and achieving other movements with ease, giving a comfortable feeling which determines a good fit in garments (Daanen & Reffeltrath, 2007:203).

Without enough wearing ease, the garment strains, wrinkles, pulls and binds uncomfortably against the body, emphasizing body contours which may not look attractive (Branson & Nam, 2007:266) signaling a garment fit problem. Hence, the wearing ease should be comfortable to the wearer, not only selected for the sake of fashion. Fashion trends,

consumer preferences as well as body proportions can bring about changes in generally accepted amount of wearing ease, and that leads to design ease.

Design ease: is the amount of fabric needed to make the design or style of the garment (Chen, 2007:132). Design ease is used to create a desired look of the garment such as determining whether the garment will be loose fitting, semi fitting or tight fitting (Branson & Nam, 2007:266) As consumers have different fit preferences (Alexander *et al.*, 2005:59) design ease can be considered as one of the many attributes that assist consumers in determining which garment fits best. Design ease also helps to improve the freedom of movement, comfort and allowing the wearer keep up with the prevailing fashion trends (Stamper *et al.*, 2005:298). For instance if the fashion trends suggest 'lengthy loose fitting tops', then the garment designer may add more design ease when designing these tops. Given that some consumers go for what is in fashion, this may be a comfortable wear for them as opposed to the consumers who prefer semi fit or tight fitting garments.

2.2.3 Line

Stamper *et al.* (2005:298) mention that "line" is composed of structural and decorative seams, darts, hems and fabric folds made by pleats and tucks. These garment lines help define the shape of the silhouette, creating a visual impression by shaping the flat fabric to conform to the body contours of the wearer. Garment lines that are intended to add fullness or simply be decorative should appear smooth and symmetrical (Stamper *et al.*, 2005:299). When the lines are, therefore, in the right place and follow body contour, the total appearance and the fit of the garment will appear appropriate.

2.2.4 Garment set

Stamper *et al.* (2005:299) define garment set as the absence of undesirable wrinkles when the garment is on the body. Rasband and Liechty (2006:63) point out that wrinkles are to be expected when walking, bending and reaching. When standing still, the garment should settle smoothly over the body. The authors further state that wrinkles that are part of the design should not be confused with wrinkles caused by fabric straining, and that the direction of the wrinkle provides an important clue when analyzing the garment fit.

According to Stamper *et al.* (2005:299) and Rasband and Liechty (2006:63), horizontal wrinkles indicate that the garment is too tight above or below the bulge. The bulge refers to

the protruding part or an outward curve of the body (Oxford Dictionary 1998:111). Vertical wrinkles indicate a garment that is too large, these wrinkles are common in jackets or dresses. Diagonal wrinkles indicate that the garment is too small (either too narrow or too short, or both) for the body bulge. Tight wrinkles may form when the fabric is strained because of little wearing ease. Hence the garment set may be affected by other elements such as fabric grain, garment ease, line and balance described below.

2.2.5 Balance

Garment balance refers to the degree to which the garment hangs evenly from the body in every direction (Ashdown *et al.*, 2004:10). Balance in relation to garment fit is achieved when the garment exhibits the qualities of being able to stay away or hug the body in the same way on both sides of a symmetrical designs (Stamper *et al.*, 2005:300). A design is said to be symmetrical when each side is the same (Rasband & Liechty, 2006:13), when the garment is proportional, and the design details agree to one another, with no aspects of the design overpowering the other. A common example of an unbalanced garment is when a jacket or skirt does not extend evenly from the body to the hemline. Areas that are out of balance may be said to be lopsided (Rasband & Liechty, 2006:14). Therefore, poor balance of the garment will cause the garment to shift or sag on the body which may affect the fit of the garment.

On the whole, the grain of the fabric should be considered during the manufacturing of a garment. The garment ease is comfortable and functional to the wearer, with the lines in the right places. The garment looks smooth without wrinkles (unless part of the design), the garment looks proportional and well balanced then a good fit is achieved. This means that all these elements contribute positively to how a garment will finally fit and appear on the female consumer's figure. Therefore, poor garment fit problems arise when there is an incongruent relationship between the garment and the human body (Chen, 2007:132).

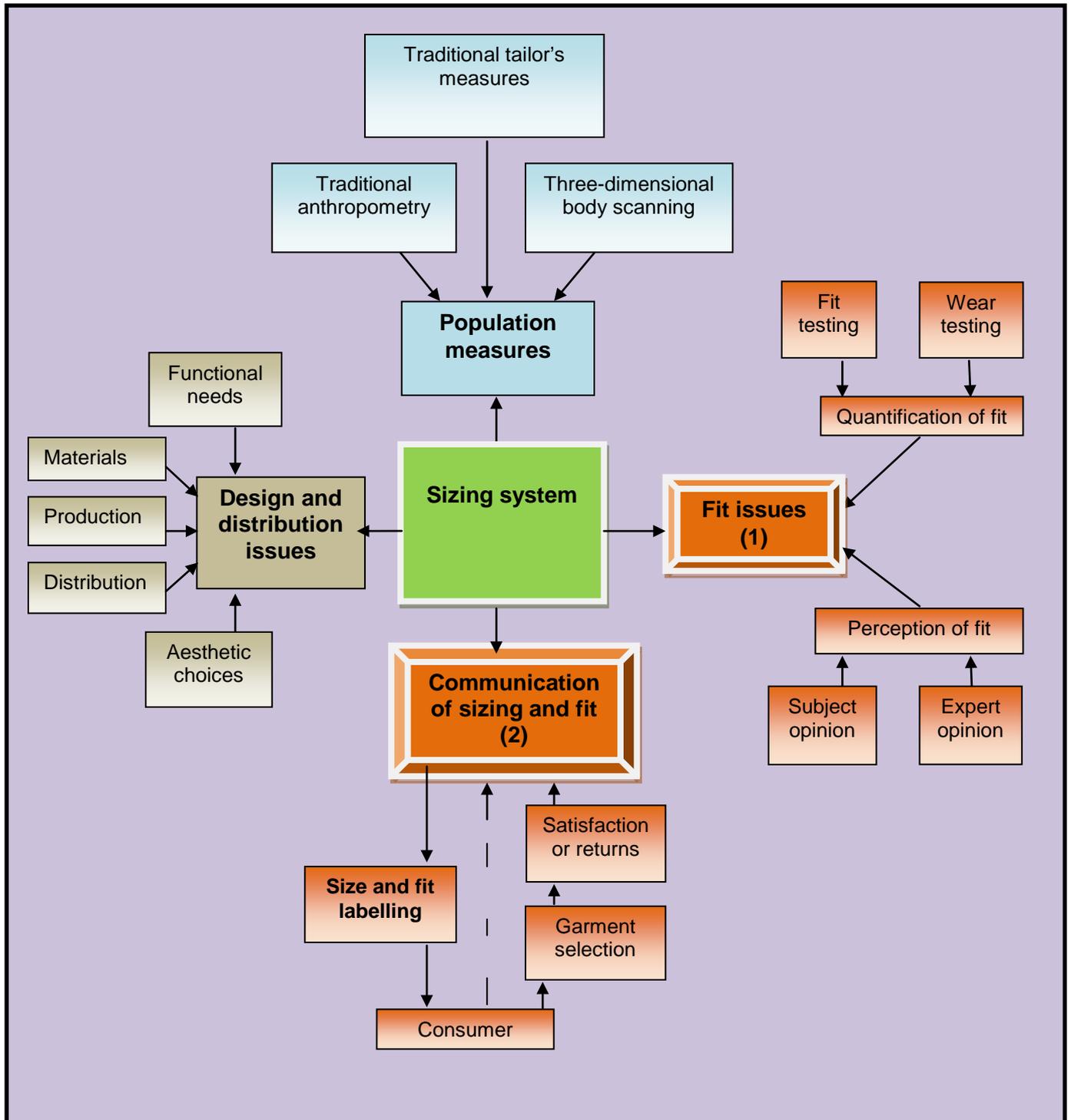
Notwithstanding the different elements of the garments mentioned above that can influence garment fit, researchers Ashdown (1998:324); Alexander *et al.* (2005:56); Loker *et al.* (2005:3); Pisut & Connell (2007:368); Chun-Yoon & Jasper (1995:429); Chen (2007:133); Faust, Carrier & Baptiste (2006:73) and Chun (2007:220) have identified body shapes, garment sizing and garment size label communication as other the factors that may also contribute to garment fit problems. These factors were briefly introduced in Chapter 1 of this dissertation; however, a broader overview of these factors will be discussed in section 2.3 that follows.

2.3 FACTORS THAT CONTRIBUTE TO GARMENT FIT PROBLEMS

This study explores the perceptions of garment fit and the emotional impact this has on female consumers in South Africa. A well fitting garment begins with an effective sizing system in ready-to-wear clothing industries worldwide (Ashdown, 1998:324) including in South Africa. A sizing system is defined as a set of pre-determined body sizes derived by using similar assumptions and methods of development which is based on the body measurements of the target population (Petrova, 2007:57). Sizing system can be regarded as body measurements representing a specific target market consisting of a range of sizes from the smallest to largest with fixed intervals between sizes. Ashdown (1998:325) states that the goal of any sizing system is to choose the size groups (similar body measurements) in such a way that a limited number of sizes will provide garments that fit most individuals in the specific target population.

Ashdown's (2007) model illustrated in **Figure 2.2** proposes that there are several factors that can affect sizing systems in general and consequently affect the fit of the garment. The four main factors that affect the sizing system, starting from the top of Ashdown's model proceeding anticlockwise are; **population measures**, **design and distribution issues**, **communication of sizing and fit** and **fit issues**.

FIGURE 2.2 ASHDOWN'S (2007) MODEL ON FACTORS AFFECTING THE SIZING SYSTEM



Source: Ashdown (2007)

The different factors are discussed in detail below referring to the model in Figure 2.2.

Population measures discuss body measurements. According to Petrova (2007:65), setting up a sizing system generally begins with the collection of body measurements of the population in question. It is important that these measurements be current and accurate since human body measurements can change considerably in time (Daanen & Reffeltrath, 2007:206). If population measurements are outdated and inaccurate the sizing system will not be able to ensure well fitting garments for the consumers.

Design and distribution issues discuss the construction of garments and patterns. During the process of producing garments the design of the garment plays an important role in preference fit of the garment. According to Ashdown, Lyman-Clark, Smith and Loker (2007:350), a garment that fits well but is not styled appropriately for current fashion or for the target market will not be purchased. On the other hand a highly fashionable garment that is constructed poorly and fits poorly may be purchased once, but the consumer is not likely to return to the same brand again. Therefore, garments need to be designed well at the same time they must fit appropriately. Moreover the first interpretation of the design comes from the pattern maker. Patterns must be developed with care so as to preserve the look as well as the size, fit and style of the garment in the system. Pattern errors will result in ill-fitting or badly balanced garment.

Communication of sizing and fit discuss size labelling. Petrova (2007:59) points out that the perfect sizing system cannot be successful if it is not communicated properly to the consumer. If a consumer is not able to identify their size, dissatisfaction will result even if the garment that fits them perfectly is available.

Fit issues discuss the management of quality fit. According to Bougourd (2007:130), the quality fit of a garment is influenced by every stage in its production and consumption processes. Various methods used to test quality fit, therefore, making garment fit a complex issue but a critical feature in the effectiveness of garment appearance.

This study focused on the Fit issues (labelled 1) in Figure 2.1 and are used as the starting point for this study. Fit problems, in this study will discuss body shapes, and garment sizing as some of the factors that may contribute to garment fit problems. Communication of sizing and fit (labelled 2) in Figure 2.1 also cited garment size labels, as one of the many factors that can affect the sizing system, that may also contribute to garment fit issues in ready-to-wear clothing. Fit problems and garment size label communication are the two factors that will be discussed further in this study with reference to Ashdown's model.

2.3.1 Ashdown's model on fit issues

Fit issues identified by (1) in Figure 2.2 are one of the factors according to Ashdown's model that is related to the sizing systems. A garment should be well fitted to bring out the desired relationship between the body and the garment, which is not an easy task (Ashdown & O'Connell, 2006:137). The process of establishing a good fit is a difficult process as the perception of fit should be understood from the consumer as well as the expert's point of view. Ashdown and O'Connell (2006:137) mention that fit is the first aspect the consumer uses to evaluate a garment and that the consumers' perceptions of fit is important when trying to improve the sizing system and hence the fit of a garment. The consumer's perception of fit is defined by the fashion trends, function of the garment and the subjective preferences including comfort, appearance and personal choice in evaluating fit (Pisut & Connell, 2007:368).

An expert's evaluation of fit is conducted by visually assessing a garment on the body based on visual indicators such as seam placement and the location of wrinkles and also the assessment of ease, line, grains, balance and set of the garment (Branson & Nam, 2007:272). This process can also be subjective, according to Ashdown and O'Connell (2006:139), hence methods have been put in place to increase the suitability of humans as testers. The methods include the use of panel judges to reduce individual bias, careful definition of the properties to be judged in the test and training of the panel to increase the reliability of the findings.

Fit testing is another important method in the quantification or measurement of fit. The fit testing process, supposedly to be conducted by all clothing manufacturers is necessary to achieve an effective sizing system and well fitting garments. According to Ashdown and O'Connell (2006:138), the process involves choosing dress forms or fit models that are in agreement with the body shapes and proportions of the target market for which the garments are produced. Garments are then produced and fitted to the body dimensions of the fit model after which the patterns are graded to create a range of sizes (Ashdown & O'Connell, 2006:138). Fit testing is important as it highlights the key problems with the fit or functionality of the garment (Bye & LaBat, 2005:1) and it refines the fit of the garment.

Wear testing is another measure of fit used to assess fully the fit of a garment and to evaluate the garment's performance over a period of time (Nielsen 2012). According to Newburgh and Harris (1945:78), in general, wear testing is more difficult to conduct than fit tests, as wear occurs over time and in uncontrollable circumstances relating to temperature and activity. Furthermore, collecting data from wear tests is also difficult as it relies on

subjective reporting of the results on how the garment performed. However this type of test is also important as it can provide information to assess the success of a garment under actual wearing conditions (Newburgh & Harris, 1945:78). All these aspects of fit are important in the production of the garment. Therefore, if fit issues are not addressed properly the sizing system will be affected and hence garment fit problems are more likely to result.

2.3.2 Ashdown's model on communication of sizing and fit

Communication of sizing and fit identified as (2) in Figure 2.2 suggests that a system that communicates sizing and fit effectively to allow consumers to identify the right garment sizes is an important factor in garment fit. Communication of sizing and fit helps to create an effective sizing system for a population in which consumers can find well fitting garments (Chun, 2007:220). Moreover, according to Chun (2007:221), it is important that manufacturers produce the garments that fit their target market's needs. Furthermore, the key to the success of garment fit, is if communication with the target market is done appropriately. It is, therefore, necessary for the clothing manufacturers to know the most effective way to communicate information about sizing and fit to their target market, as some consumers may need more information whilst others may need less.

Petrova (2007:57) states that the main goal of every clothing manufacturer is to produce garments that fit better and provide the correct sizing label in order to prevent customer returns. When the sizing label is clearly understood by the consumer and at the same time communicates the correct information, it may help the consumer select the right garment size (Chun, 2007:220). On the other hand if a consumer finds it difficult to select the correct garment size because of wrong information communicated on the label, the costs brought about by ineffective communication may include wasted time and transportation expenses when going back to return the selected garment, both of which are extremely important to the modern consumer (Chun, 2007:235). Effective communication of sizing and fit on labels is, therefore, essential for the consumer to select a well fitting garment and for the industry to improve their reputation and sales of producing acceptable fitting garments.

Garment fit is also closely associated with body shape (Simmons *et al.*, 2004a:1). Rasband and Liechty (2006:4) state that a good fit in a garment begins with accurate awareness of the different body shapes by identifying which parts of the anatomy of the body the consumer is fitting. Since the differences in body shapes will often determine the way the garment will hang on the body as well as how comfortable the garment will feel, and how the female

consumer will perceive the fit of the garment (Pisut and Connell, 2007:370), identification and classification of female body shapes are also important aspects to the ready-to-wear clothing manufacturers. Identifying and classifying the most recognized body shapes in the population, clothing manufacturers could be advised on how to create better fitting garments for a greater number of consumers to fit into the different size categories (Vuruskan & Bulgun, 2011:46). Other researchers such as Rasband and Liechty (2006:20) furthermore suggest that determining personal body shape will enable female consumers to select garment styles that conceal figure “flaws” and emphasize the attractive parts of the body. It is, therefore, necessary to understand the systems used to identify and classify the varying female body shape as well.

2.4 CLASSIFICATION SYSTEMS OF BODY SHAPES

Human bodies differ from one another, and it has been suggested that no two bodies are precisely the same (Rasband & Liechty, 2006:19), thus producing garments to fit different female body shapes is a difficult task. According to Chen (2007:8), body shapes can be manually classified using several methods such as the somatotyping technique, graphic somatometry, anthropometer (measuring stand), callipers and shoulder angle measuring devices as well as 3-D body scanning technology accompanied by computer software has also been utilized recently by several researchers. Apart from these methods general observation is also another method of classifying body shapes (Chen, 2007:8). (Profiles of human body shapes are found in **Appendix A**). In the following section a brief overview of somatotyping, graphic somatometry, 3-D body scanning technology and observation methods will be discussed.

2.4.1 Somatotyping technique method

The most significant contribution to body shape classification began in the 1930s by the American psychologist William Sheldon. In 1940, Sheldon, Stevens and Tucker introduced the theory of “somatotype” which was described in their book ‘*The varieties of Human Physique*’. “The patterning of the morphological components as expressed by three numerals is called somatotype” of the individuals Sheldon, Stevens & Tucker (1940) cited in Sheldon, Stevens and Tucker (1970:7).

In their study, the physical aspects of 4,000 photographs of male college students were studied. The process included three photographic poses of the frontal, dorsal and profile or

side views. The researchers concluded that there were three primary body shapes and they categorised them as “endomorph”, “mesomorph” and “ectomorph”. (See Appendix A1) “Endomorph” described the body that is soft and round. It was categorized mainly as a pear shape body (Sheldon *et al.*, 1970:37). In contrast to endomorph, a “mesomorph” was described as having well developed muscles, comprised of heavy bones and a broad chest (Sheldon *et al.*, 1970:39). “Ectomorph” described the body that is linear, frail with delicate bone structure (Sheldon *et al.*, 1970:42). Although Sheldon (1940) cited in Sheldon *et al.* (1970) related these body types to human personality characteristics, his work has been an inspiration in many fields including the field of clothing, as he provided a system of classification for the variations that exist among individual bodies.

2.4.2 Graphic somatometry method

Dr Helen Douty (1968) a clothing specialist was influenced by Sheldon’s somatotyping to develop a method called ‘graphic somatometry’, meaning to measure the human body visually with a graph (Simmons, 2002:44). Somatometry was aimed at improving the fit of custom-made apparel.

The process, according to Simmons (2002:44), involved a light source placed on the left side. A translucent screen with grid was in the centre with the person facing the light and their back towards the screen. The camera was placed on the side opposite the light and the person. Two full body photographs were taken, a back and side view. The black and white photograph became the somatographs (Chen, 2007:133). Somatographs were a means to obtain a visual measurement of the human body on a graph which were used to evaluate postures, body masses, proportions, and body shape.

According to Chen (2007:133), 300 somatographs of Dr Douty’s subjects were evaluated, and the body shapes were classified into five categories of the body-build ranging from thin to heavy (See Appendix A2). Each of the five body builds contained a list of characteristics an individual needed to possess to be placed in a particular group. The body-build scale contained different sizes but not different shapes of the women’s body and also not based on height, but on size and weight. Douty (1968) concluded that the back shape, shoulder shape, buttocks shape, posture and body build were important elements that researchers need to pay attention to while conducting a fitting test on the female body (Chen, 2007:134).

2.4.3 3-D body scanning technique

According to Ross (2010:12), the Textile and Clothing Technology Corporation ([TC]²) developed one of the first body scanners for the apparel industry and was made commercially available in 1998. The body scanner has the ability to capture hundreds of body measurements, body shape, and body volume in a matter of seconds without contact with the body, using different software to extract the data. This is in contrast with the time consuming process of obtaining individual body measurements by hand and also developing somatographs for body analysis. Computer analysis techniques such as the Body Shape Assessment Scale (BSAS) (Connell, Ulrich, Brannon, Alexander & Presley, 2006) and Female Figure Identification Technique (FFIT) (Simmons, 2002) are some of the software which have been developed for use with scan data to classify body shape in the clothing industry.

2.4.3.1 Body Shape Assessment Scale (BSAS)

The computer software called Body Shape Assessment Scale (BSAS) was developed to analyze body shapes by Connell *et al.* (2006). BSAS is used to evaluate the front and side views of bodies and analyze the characteristics of the body as a whole. After assessing body scans derived from a sample of 42 women between the ages of 20 and 55 in combination with the review and revision of existing body scales, the researchers developed nine scales or variants for body shape assessment. The BSAS is equipped with four categories of Body Build, Body Shape, Hip Shape and Shoulder Slope from the frontal view and five categories of Torso Contour, Bust Shape, Buttocks Prominence, Back Curvature and Posture from side view. The Body Shape category yielded four prominent frontal body shapes which include; rectangular, hourglass, pear and inverted triangle body shapes (**See Appendix A3**) for illustrations and descriptions. The four body shapes were based on the following points of assessment: shoulder to shoulder point, the frontal waistline and the widest point between the waist and crotch line as seen from front.

2.4.3.2 The Female Figure Identification Technique for apparel (FFIT)

The objective of Simmons, (2002) research was to develop software that could use data from 3-D body scanner and categorize the body based on measurements, proportions and shape. As a result, the FFIT for apparel software was developed. The software FFIT for apparel was developed for the representation of female body shapes in a mathematical way

(Simmons, 2002:80). Common body shapes from existing information were assessed using body scan data of 222 subjects. Body measurements for shape identification were taken from bust, waist, hips, high hips, stomach and abdomen circumferences. Mathematically combining the ratios and differences of the body measurements, the six measurements were used to categorize each individual's body into different body shapes. The results revealed nine body shapes namely; hourglass, bottom hourglass, top hourglass, spoon, rectangle, diamond, oval, triangle, and inverted triangle. **(See Appendix A4)** for illustrations and description of each body shape.

2.4.4 Observation method

Rasband and Liechty (2006) also identified common body shapes based on human expert observation. The researchers described figure variations as physical features that differ from the ideal body shape. Ideal body shape according to Rasband and Liechty (2006:24), is a shape which is similar in width in the shoulders and hips, with medium bust, small waist, flat to slightly curved abdomen, moderately curved buttock and slim thighs. The ideal body is well balanced with no exaggerated area present.

Rasband and Liechty (2006:19) point out that female body shapes vary in six characteristic ways. These include height, bone size or structure, weight, proportional body areas, contour, including weight distribution or figure type and posture. Height relates directly to bone size and body weight. The terms bone size, structure or bone frame refer to the size of individual's bones measured at the wrist, elbow or ankle. Those points are used as reference places as individuals rarely carry extra weight here. Weight refers to how heavy or light an individual is, whereas proportion is defined as the relationship of each part of the body to another and to the body as a whole. Contour refers to the curves of the body, where an individual curve and how much they curve depend on the bone size and structure, proportional areas, weight, muscle tone, pattern of weight distribution and posture. All these characteristics affect each other.

Furthermore, the authors state that when it comes to body contour, there are several typical forms of weight distribution. These are referred to as body shapes or types as viewed from the front. Body shapes can be identified according to the specific areas on the body where weight tends to accumulate regardless of height (Rasband & Liechty, 2006:24). For contour and body shape, Rasband and Liechty (2006:24) classified female body shapes into eight body shapes namely; ideal, triangular, inverted triangle, rectangular, hourglass, diamond,

tubular and round shapes. **(See Appendix A5)** for illustrations and descriptions of each body shape.

Liddelow (2011), an image consultant, also used observation methods to identify six female body shapes namely; hourglass, inverted triangle, triangle, rectangle, diamond and oval body shapes. Liddelow's (2011) assessment method was to observe one's body shape in front of the full length mirror. A long straight object such as long ruler was also used to establish whether the hip line is narrower, wider or the same width as the bust line.

In summary, the classification system of Sheldon *et al.* (1940) cited in Sheldon *et al.* (1970) identified male body shapes into three categories of endomorph, mesomorph and ectomorph, while Douty (1968) came up with the body build scale which categorized females into five categories of different body sizes. These two classification systems did not identify various female body shapes. However, it was evident that some classification systems such as the Body Shape Assessment Scale (BSAS) by Connell *et al.* (2006), the Female Figure Identification Technique for apparel (FFIT) by Simmons (2002) and the observation method by Rasband and Liechty (2006) and Liddelow (2011), revealed four common female body shapes. The body shapes included; the hourglass, the triangle, the inverted triangle and the rectangle. The oval and the diamond body shapes were also common as they were identified in the classification systems of (FFIT) (Simmons 2002), and the observation methods (Rasband and Liechty (2006); Liddelow (2011) except the (BSAS) identification system. The six common female body shapes were all identified by Liddelow (2011). The other classification systems had either more or fewer female body shapes.

In the next section the illustrations and descriptions of the female body shapes from which female consumers used in this study can identify their self-perceived own body shapes will be discussed.

2.5 BODY SHAPE ILLUSTRATIONS FOR IDENTIFICATION OF SELF-PERCEIVED OWN BODY SHAPE

When descriptions of different female body shapes are being discussed in clothing, the terms "endomorph, mesomorph and ectomorph" are not commonly used (Simmons *et al.*, 2004a:4). Moreover, Sheldon *et al.* (1940) only used male respondents when they did somatotyping to establish these body shape illustrations and descriptions. On the other hand, Douty (1968) used female subjects in her graphic somatometry to establish the body-build scale. The body-build scale indicates different body sizes ranging from thin to heavy

without indicating the body shapes of the females. The only shape on the body-build scale was the hourglass shape (Douty, 1968) cited in Ross (2010:17). Song and Ashdown (2011:2) state that body shapes have increasingly been recognized as a fundamental factor to a good fit. If only the sizes of one body shape such as the hourglass can be regarded when manufacturing garments, other body shapes may still have problems with garment fit.

Connell *et al.* (2006), Simmons (2002), Rasband and Lietchy (2006) and Liddelw (2011) established similar common body shapes except that the numbers of body shapes included were different. For instance the Connell *et al.* (2006) study determined only four prominent body shapes (**Appendix A3**). When using the Connell *et al.* (2006) body shape illustrations some women for instance with a round stomach might not be able to identify their own self-perceived body shapes on just these illustrations. On the other hand, Simmons (2002) identified nine body shapes (**Appendix A4**). The hourglass body shape was split to include bottom hourglass and top hourglass. Simmons (2002) also included the spoon body shape. Simmons' (2002) body shape illustrations may be confusing because of the many options of body shapes, especially to women who might identify themselves as being the hourglass, they might not be able to identify which hourglass they belong to according to this study.

Equally Rasband and Liechty (2006:24) in their classification system of female body shapes identified eight body shapes, which included the ideal and the tubular body shapes. The ideal body shape, according to Rasband and Liechty (2006:24), is a shape which has proportional areas that are harmonious or pleasing to look at in length and width. Very few people can identify themselves with an ideal body shape (Rasband & Liechty, 2006:23) and the tubular body shape is almost similar to a rectangular body shape.

However, the descriptions of Rasband and Liechty (2000:24) for the female body shapes have been thoroughly and clearly described, and body shape illustrations of Liddelw (2011) include the six common female body shapes which were identified using different methods of body shape classification systems apart from somatotying and somatometry. Liddelw's (2011) body shapes are also clearly illustrated, making it possible to identify perceived own body shape. Table 2.3 presents the six common female body shapes according to Liddelw (2011) and descriptions according to Rasband and Liechty (2006).

TABLE 2.1 COMMON FEMALE BODY SHAPES

Body shape	Body shape description
	<p>The hourglass body shape, according to Rasband and Liechty (2006:25), appears to be larger or full rounded in the bust area, but appears proportionally very small in the waist. The hourglass body shape is generally balanced top to bottom</p>
	<p>The inverted triangle body shape has an appearance of being heavy or wider above the waist and smaller or narrower below. The shoulder area is comparatively wider than the hip area and the legs may be proportionally longer (Rasband & Liechty, 2006:24)</p>
	<p>Triangle body shape, according to Rasband and Liechty (2006:24), also known as pear shape, appears to be smaller or narrower above the waist. Hips are proportionally wider and rounded. The shoulders are narrower than the hips and waist is smaller to medium. The triangular body shape appears unbalanced from top to bottom, with more weight carried below the waist.</p>
	<p>The rectangle body shape, according to Rasband and Liechty (2006:25), appears to be almost the same width at the shoulders, waist and hips – nearly straight up. Rectangle body shape is characterized by not having a clear defined waistline. The bust is small to medium, and the figure is balanced top to bottom.</p>
	<p>The oval body shape is also referred to as an apple shape. The oval body shape, according to Rasband and Liechty (2006:25), has an overall appearance of being round at the waistline. The bust, midriff, waist, stomach, hips and upper legs are larger and round, and the waistline is undefined. An individual with an oval body shape may also have rolls of flesh in the midsection in comparison to the rest of the body.</p>
	<p>The diamond body shape is characterized by comparatively having narrow shoulders and hips, with a wide midriff and waist (Rasband & Liechty, 2006:25). They may also have several rolls of flesh in the midsection of the body that protrude away from the body at the waist area, and the waist is undefined. The bottom may be smaller and legs are proportionally thinner.</p>

Compiled by the researcher based on the following sources:

Body shapes illustrations: Liddelow (2011)

Body shapes descriptions: Rasband & Liechty (2006)

Most often female body shapes, according to Vuruskan and Bulgun (2011:47), are described with geometrical figures such as triangle, inverted triangle, rectangle, oval are some of the examples. Letters figures are also used such as **A, V, H, O, X**. Fruits such as pear and apple are also used. These terminologies refer more or less to the same body shapes

mostly from the front view. In the next section, the relation between body shapes and garment fit will be discussed.

2.6 THE RELATIONSHIP BETWEEN BODY SHAPES AND GARMENT FIT

Pisut and Connell (2007:376) indicate that there is a relationship between female consumers' body shapes and their garment fit problems. When similar body measurements (size groups) in the population are defined by more than one dimension, the researchers describe it as body shape as well (Petrova, 2007:57). According to Rasband and Liechty (2006:3), wearing poor fitting garments draws negative attention to the body shape variations and ill-fitting garment. Body shape variation, according to Rasband and Liechty (2006:19), refers to the body shapes that deviate or are different from the ideal body shape. On the other hand, a proper fitting garment can camouflage and draw attention away from body shape variations. The challenge for clothing manufacturers is to provide garments that will fit a variety of female body shapes. According to Loker (2007:256), to ensure a well fitting garment, regardless of the consumers' perception of garment fit, starts with the need for obtaining accurate body measurements for use in the development of garment patterns. That is, if incorrect body measurements are used to develop the garment pattern, a good fit will not be achieved.

However, Ashdown, Loker, Adelson, Carnrite and Lyman-Clarke (2005:1) state that the sizing system which is currently being used in United States of America to produce ready-to-wear garments for a variety of body shapes, lack accurate data on the fit characteristics of garments for a variety of different body shapes. These issues have impacted on clothing manufacturers making informed decision about their sizing systems with regard to the different body shapes in the population. It is, therefore, important that clothing manufacturers know how well the garments they produce fit the different body shapes and also get updated body measurement data of the population, should they want to produce improved fitting garments for a variety of body shapes. This lack of accurate data is also not available in South Africa.

Vuruskan and Bulgun (2011:46) mention that even if two individuals have the same body measurements, the results of the garment fit may be different because their body shapes may be different. Most female consumers do not have the ideal body shape for which most of the clothing manufacturers base their garment measurements on, when producing ready-to-wear garments (Loker *et al.*, 2005:1). An ideal body shape, according to Rasband and Liechty (2006:24), is the shape that is mainly used in the pattern and garment designs. The ideal body shape is similar in width in the shoulders and hips, with a medium bust, small waist, flat to slightly curved abdomen, moderately curved bottom and slim thighs, that is well balanced with

no exaggerated area present (Rasband & Liechty, 2006:19). Several studies have been conducted on the relationship between female body shapes and garment fit. Alexander *et al.* (2005:52) studied the garment fit of females using four different body shapes; pear, hourglass, rectangular and inverted triangle in trying to find the relationship between body shape and garment fit preferences. The researchers observed that the participants who identified their bodies as rectangular, pear and hourglass shapes were more likely to express fit problems at the bust area than those who perceived themselves as the inverted triangular shape. Fit issues at the waist, hip and thighs were more likely to be reported by the pear and hourglass body shapes than the rectangular and inverted body shapes. The findings also revealed respondents who reported fit issues at the bust did not prefer fitted tops. Similarly, respondents who had fit issues at the hip did not prefer fitted jackets and respondents who had fit issues at the waist preferred more fitted pants. This may imply that different female body shapes can experience different types of fitting problems, and fit problems due to body shape may influence garment fit preferences among female consumers.

Schofield *et al.* (2006:158) explored body shape as a contributing factor to garment fit and sizing problems for a specific target market. The study was limited to differentiating two seat shapes. Seat shape, according to Schofield *et al.* (2006:158), refers to the buttocks shape. Participants with flatter seat shapes were given pants labelled A and participants with fuller seat shapes were given to pants labelled B to wear. This study found that two women with identical seat shape and hip circumference may have different degrees of abdominal protrusion, yet another woman still with flat seat shape may have a full high hip circumference and thin thighs. The researchers concluded that the differences in body measurements identified within each size suggested that these relationships affected the garment fit.

Furthermore, female body shapes are continuously changing and can vary greatly with age. As women grow older, age related changes may occur such as change in muscle tone, fat distribution and posture which may affect body shape and consequently garment fit (Schofield *et al.*, 2006:148). However, very few sizing systems including in South Africa accommodate different body shapes that also address ethnicity or immigration from other cultures and body weight (Laitala *et al.*, 2011:22). As stated earlier in Chapter 1 female consumers are becoming larger and more pear-shaped in developed countries such as the United States of America (Lee, 2005:25; Barona McRoberts, 2005:27). The same could be true of South African women. During an interview with Business Day, Reena Pandarum (at the time a researcher from CSIR's Fibres and Textiles division in Port Elizabeth, and currently a lecturer at UNISA also indicated that South African women were becoming more pear-shaped just like their counterparts in other developed countries, which was substantiated through data 500 scan data collected using a 3-D body scanner. The challenge, therefore, is for the clothing manufacturers including those in

South Africa to develop a sizing system that incorporates the different body shapes so as to meet the changing requirements of the population.

However, the 3-D body scanner is a promising new technology that may have the potential to solve the majority of the garment fit problems in South Africa, by ensuring that more consumers fit into the different size ranges. This, however, will not solve all the population fit problems but will establish niche markets for the outlying data sets (personal interview with Pandarum 2013). The body scanner, according to Simmons *et al.* (2004b:2), has the ability to obtain a realistic image of three dimensional data of the human body, providing valuable information to improve garment fit. The body scanner has the ability to identify body shapes and the measurements that are said to be more accurate than those taken with a tape measure, as scans are quicker and more reliable (Simmons *et al.*, 2004b:2). It is hoped that this new technology will better reflect the different body shapes and true body measurements of the female South African population which may help to improve garment fit in general.

In addition, Rasband and Liechty (2006:3) state that the garments that people wear greatly influence the way individuals think, feel and behave. Garments also influence the way other people will react or respond to a particular person. Female consumers often blame their own bodies and sometimes become upset with themselves instead of the garment (Hayden, 2008) when they have concerns about garment fit. Hence a garment that does not fit well may give consumers the impression that there is something wrong with their body (Kinley, 2010:397) resulting in a negative body image (Alexander *et al.*, 2005:54). Kaiser (1998:98) describes body image as the mental picture an individual has of their body at any given moment in time. Body image, however, affects the conscious feelings about themselves and represents an important part of the physical self. Body image is also a concept closely related to body cathexis (Kaiser, 1998:108; Alexander *et al.*, 2005:54; Pisut & Connell, 2007:369) and is considered as related to satisfaction with the self. It is, therefore, necessary to address the relationship between body image and poor fitting garments, as this may have an impact on how an individual will feel emotional and subsequently affect purchase decisions.

2.7 THE RELATIONSHIP BETWEEN BODY IMAGE AND GARMENT FIT

Alexander *et al.* (2005:54) have shown that women in particular are dissatisfied with their bodies. Whereas Pisut and Connell (2007:369) suggest that fashion garments reflect a standard, in other words, society's message of the ideal body. Therefore, if for example women do not see themselves fitting that particular standard, the body image may become distorted when they focus on the shape of their body as being the cause of the problem and not the

garment. Thus when a garment does not fit well, a consumer's attitude and ultimately self-concept will reflect those negative feelings of the self which in turn could cause a negative body image (Alexander *et al.*, 2005:54).

According to Cash (1990) cited in Chattaraman and Rudd (2006:49), body image can lead individuals to manage their physical appearance actively through clothing and that body image may influence the selection of the type of garments individuals prefer to wear. Pisut and Connell (2007:373) in their study explored the relationship between fit preferences between women with certain body shapes and body cathexis, and found that the inverted triangular shaped silhouettes achieved the highest body cathexis score, while pear shaped silhouettes had the lowest body cathexis score. Overall the higher the body cathexis score the higher the fitted preference score. The researchers concluded that those participants who enjoyed more fitted garments were positive about their bodies and that they were more satisfied with their body weight than the other body shapes. Therefore, it can be suggested that poor fitting garments may have a negative impact on an individual's body image.

The following section will look at how garment sizing, another factor identified in Chapter 1 also contributes to the confusion of finding a proper fitting garment.

2.8 THE RELATIONSHIP BETWEEN GARMENT SIZING AND GARMENT FIT

Garment sizing, according to Branson and Nam (2007:264), is developed to create a set of garments that would provide acceptable garment fit for a targeted group of people. The sizing systems used in the ready-to-wear garments are generally based on a selection of dimensions from an anthropometric study of the population for which the sizing system is designed for (Ashdown, 1998:325). Anthropometry is defined as the study of the measurement of human body (Jones & Rioux, 1997:89).

According to Petrova (2007:65), setting up a sizing system generally begins with the collection of anthropometric data about the target population. A sizing system is used to find the right number of size groups (similar body measurements) that will describe as many individuals in each shape and size group as possible with a well fitting garment (Sindicich & Black, 2011:447). However, in creating a sizing system, manufacturers usually face the difficulty of deciding how many size groups to divide the population into. Petrova (2007:57) states that a sizing system that has more size groups means that each group will have a small number of individuals who will be similar to one another in body measurements. This implies that garments made for a particular size group will provide a good fit for all individuals in that

particular garment size group. However, having a large number of sizes may cause dissatisfaction and frustration with the shopping experience, resulting in confusion about the size and the necessity of trying on many garments to find one that fits well. On the other hand, if the population is divided into a limited number of size groups, each group will include a large number of individuals with great variations in body measurements (Petrova, 2007:59). This will make it impossible for the garments produced to fit all the individuals in that group. Either way consumers may experience problems with garment size, which may partly explain why garment sizing is so confusing in South Africa and internationally.

LaBat (2007:88) point out that standard sizing systems are there to ensure consistency and clarity in garment size dimensions. A “standard” is a published document that has been developed and established within the consensus principles of a governing standards organisation (LaBat, 2007:88). However, standard sizing systems are usually voluntary, which means that most clothing manufacturers do not follow them. Most clothing manufacturers depart from the standards when it suits them, resulting in varying standards (Winks, 1997:1; Alexander *et al.*, 2005:56). As a result the leading complaint from female consumers is that the garment sizing is inconsistent (Lee, 2005:27). Thus garment sizing has been a contiguous issue with women’s garments in particular.

A study by Faust *et al.* (2006:80) on variations in Canadian women’s ready-to-wear clothing explored measurement variations between garments of the same given size in order to determine what caused these variations. The results clearly indicated that clothing manufacturers do not adhere to the Canadian standards charts and that they were unwilling to produce garments that met the Canadian standards charts. The researchers concluded that the findings helped explain the difficulties and frustrations that women experience when purchasing garments.

Research has also highlighted several reasons why clothing manufacturers do not follow the standard sizing systems, which result in poor fitting female garments. The primary reason, according to Ashdown and DeLong (1995:48), is that the clothing manufacturers often view their sizing system strategies as a means of market differentiation and, therefore, keep them confidential. Therefore, sizing and fit that result from market differentiation has become a selling tool used by clothing manufacturers to distinguish their brand from the brands of other clothing manufacturers (Pisut & Connell, 2007:368; Otieno, 2008:68). As a result, garment sizes differ from one company to another. Hence garments indicating the same size do not nearly have the same dimensions, and garments with the same dimension may be labelled with different size numbers (Pisut & Connell, 2007:368; Loker *et al.*, 2005:2). Proper sizing of a garment is therefore very important in the fitting of the garment.

It has also been observed that clothing manufacturers mark down their garment sizing by placing a smaller size label on a garment with larger measurements to satisfy the psychological need of consumers who want to feel slim (Alexander *et al.*, 2005:56; Pisut & Connell, 2007:368). This is referred to as “vanity sizing” (Weidner, 2010:11). This practice is used as a marketing tool to enable the clothing manufacturers to benefit from store patronage (Apeageyi, 2008:4). The opposite of this is the claim that clothing manufacturers only produce garments in small sizes and mark the sizes up as a marketing advantage for garments that should only fit thin ‘trendy’ bodies (Laitala *et al.*, 2011:22).

Voluntary sizing has also added to the problem of garment sizing and consequently garment fit (Barona-McRoberts, 2005:21). According to Pisut and Connell (2007:368), voluntary clothing standards were first proposed by the National Bureau of Standards in 1941 in the United States of America and revised in 1971. Since its initial inception in the United States of America, this system has been a failure (Alexander *et al.*, 2005:56). According to LaBat (2007:94), women who volunteered to be measured were white and their ages ranged between 18 – 30 years. Relying on one race and limited age group of the participants, the measurements were obviously not a representation of the population in the United States of America. According to Simmons *et al.* (2004a:1), most of the standard sizing systems available today including the systems used in South Africa are based on old data based on a study from the 1940s. Such data do not reflect the modern woman's body shape and size. Up-to-date anthropometric data for the target market are, therefore, valuable for developing a sizing system to fit various body shapes and sizes in the female population including South Africa females.

In addition, a garment that has reliable garment measurements, based on statistically valid body measurements is supposed to fit well. However, Ashdown (1998:325) points out that most sizing systems are based on one or two body dimensions such as bust, hip and waist measurements, which do not accommodate all specific measurements of large variations of female body shapes and proportions in the population. As a result a large numbers of female consumers do not fit well into the garment sizes currently in United States of America, including South Africa (Strydom & De Klerk, 2006:87).

Furthermore, clothing manufacturers generally do not test their sizing strategies by seeking feedback from the consumers on garment fit satisfaction (Ashdown & DeLong, 1995:48), this leads to ignorance. There is no general body of knowledge correlating satisfaction with garment fit and sizing systems (Ashdown & DeLong, 1995:48). Therefore, the lack of communication among clothing manufacturers, vanity sizing, use of outdated data and lack of information in garment sizing are some of the many reasons why garment sizing may contribute to garment fit problems.

In brief, the creation of a sizing system based on fit characteristics for the actual target populations' anthropometrics data, should lead to better fitting garments (Ashdown *et al.*, 2005:2). The perfect sizing system cannot be successful if it is not communicated properly to the consumers (Kinley, 2010:401). The next section, will address how the information communicated on the garment size label can also contribute to ill-fitting garments.

2.9 THE RELATION BETWEEN GARMENT SIZE LABEL COMMUNICATION AND GARMENT FIT.

In 1910, the clothing industry began using garment size labels to produce and sell ready-to-wear clothing (Xu, Huang, Yu & Chen, 2002:1). According to Chun-Yoon and Jasper (1995:1), the sizes indicated on the size label represents a set of garment sizes in a sizing system that reflects the body measurements and sizes of most individuals in a population. The size label is meant to assist the consumer in selecting the right garment size among several other garments. When the consumer purchases garments either by mail order, online or in store, a size label provides the information about the garment size before the consumer can actually try it on.

Chun (2007:223) states that the correct garment size can only be selected effectively if the size labelling system is easy to understand and at the same time is based on the right methods of development. According to Chun (2007:224), size categories of women's garments have been coded with numbers, alphabetical letters or words, with numerical correlating to bust, hip and height measurements, but do not correspond directly to any body measurements. In countries such as the United States of America, Japan and Korea, including South Africa, the manufacturer's sizing system is not published, except by some mail-order catalogs and Internet shopping sites (Chun, 2007:224).

Since the beginning of ready-to-wear clothing industry, the communication of the size information had changed over time for females' clothing. According to Chun (2007:224), the sizes of females' clothing were first labelled by age or body measurements in the United States of America. Later (1930) various size classifications were introduced based on age and body configurations such as women, misses and junior. Women's sizes were labelled with even numbers from 34 to 52 and these codes represented bust measurements. Misses' sizes were labelled with even numbers from 14 to 20, and junior's sizes were labelled with odd numbers from 13 to 19. The numerical codes for misses and junior originally represented corresponding ages of the consumers (Nystrom, 1928) cited in Chun-Yoon and Jasper (1995:1). However, throughout the development of sizing systems for female's ready-to-wear garment, the

numerical codes corresponding to body measurements and ages of the consumers have continually changed (Chun-Yoon & Jasper, 1995:1). In the 1980s, females' size began to be labelled using numerical size codes similar to the size codes used for misses' sizes (Chun, 2007:224). The authors further mentions that in 1991, size 2 was included in the misses' size category and size 0 has recently been added to the range of sizes by some retailers in the United States of America (Chun, 2007:224). Thus the changes in the labelling systems may imply that the numerical codes do not represent body measurements nor age of the female consumers and some of the original meanings associated with female's garment sizing system have been altered (Chun-Yoon & Jasper, 1995:1).

Loose-fitting garments such as T-shirts or sportswear are internationally labelled with size codes using letters such as S (small), M (medium), L (large), XL (extra-large) among others. Taylor (1990:58) explains that the degree of fit in terms of how tight or loose the garment is intended, the clothing manufacturers may also determine how many sizes are to be offered between the two extremes of the body measurements that is being used. For example in females' wear this may relate to a combined size 8 and 10 as size small, 12 and 14 as size medium and 16 and 18 as size large (Taylor, 1990:58). This option of coding may result in offering only a small number of size categories. This means that loose-fitting garments can fit more individuals when compared to tight-fitting garments, whereas, tight-fitting garments may require the use of numerical codes which include more size categories to fit a few individuals of the same size range.

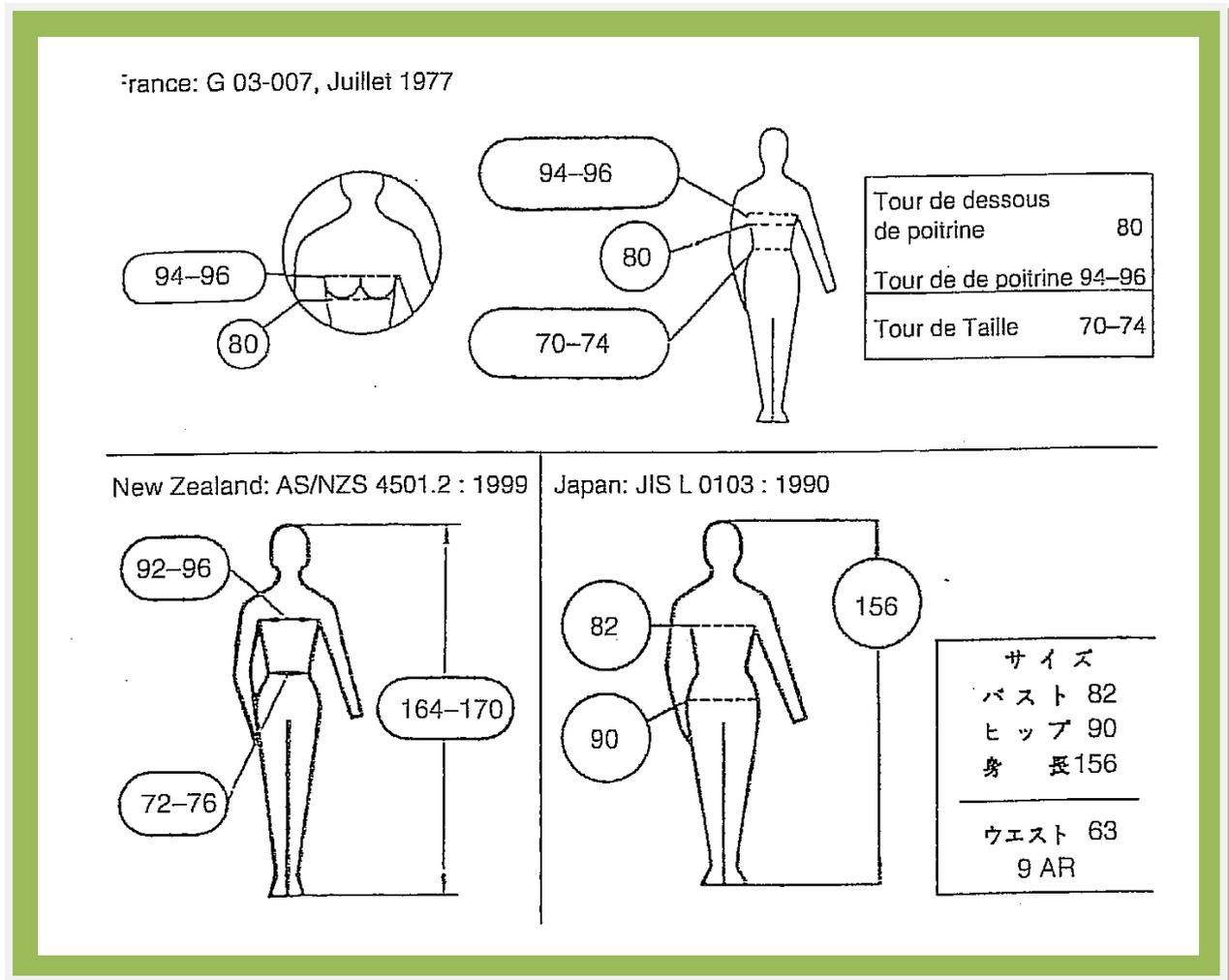
All in all most female's ready-to-wear garment size labels whether numerical or alphabetical letters or words do not inform consumers of the body measurements which are associated with a particular size code and rarely include other information such as the body measurements the size code is based on (Faust *et al.*, 2006:75). Hence numerical, letters or words size codes unrelated to body dimensions do not make sense to the average consumers. This only confuses the female consumers when choosing garments for proper fit (Lee, 2005:29). As a result the female consumer has to try on several garments to determine which garment will fit the best.

Women in general report more garment fit problems than men. According to Chun (2007:233), this may be due at least in part to the fact that the menswear size labelling systems are more likely to include body dimensions on the size label. Current size labels on women's garments internationally and in South Africa lack adequate information to guide consumers in choosing a proper size (Chun, 2007:220). When the key dimensions are listed on the size label, women may find their garments by comparing their body measurements and the key dimensions. Key dimension is the body measurement that has a strong relationship with most other body

dimensions that are important in garment manufacturing (Petrova, 2007:63) such as bust, waist and hip measurements. However, the key dimensions on the size label do not solve the problem related to garment fit, unless consumers know how, and are able, to take their own key body measurements accurately, they will not be able to select the correct garment size (Faust & Carrier, 2010:120). Moreover women's clothing has a wide variety of garment shapes and styles and a much wider range of variation in the proper fit of different styles than men's garments. Manufacturers rarely include the different fit and style characteristic information that may help female consumers with sizing choice. Hence different garment styles may also have different sizing and size label. This in part explains why female consumers may have to wear different size garment for a proper fit.

Additionally finding the right garment size is frustrating for the female consumer, as body measurements differ among manufacturers for a given size label. Manufacturers may change the standard body measurements overtime resulting in inconsistency in size labels not only among manufacturers but also within the same manufacturer. (Chun-Yoon & Jasper 1995:1). Furthermore, Chun (2007:227) points out that with an increase in the international trade of clothing comes the difficulty of communicating the size dimensions of the garments that are being imported or exported. However, The ISO (International Organisation for Standardization 1991) established an anthropometric size labelling system based on communication of the key body dimensions (Chun, 2007:227). The setting up of the ISO in 1946 was a response to the desire by several countries such as Russia, Australia, China and India for international harmonization of standards, and the aim was that each country should attempt to include international standards in their national standards (Aldrich, 2007:46). The ISO suggested that the use of the symbol in conjunction with the key body dimensions in centimeters would quickly communicate to the consumer the body dimensions for which the garment was designed (Chun, 2007:227). In the pictogram developed for the ISO sizing system the important body measurements of the fit are indicated on the sketch of the human body (**See Figure 2.3**). Adding a pictogram to the existing size label for all garments in all countries may greatly help female consumers select proper fitting garments (Chun-Yoon & Jasper, 1995:11) and there is no language barrier with the pictogram. However, the pictogram type of garment size labelling has not yet been adopted by current South African's clothing manufacturers.

FIGURE 2.3 EXAMPLES OF SIZE PICTOGRAMS FROM DIFFERENT COUNTRIES



Source: Chun (2007)

2.10 SUMMARIZING THE PROBLEM

Well fitting garments are said to be critical to enhance the comfort, well-being and confidence of the wearer (Chun, 2007:220). According to Horwaton and Lee (2010:221), fit is one of the first elements that individuals consider when evaluating a ready-to-wear garment. However, dissatisfaction with fit is one of the most frequently stated problems with clothing purchases (Chen, 2007:131; Alexander *et al.*, 2005:53).

Studies (Simmons *et al.*, 2004a:1; Pisut & Connell, 2007:368) have indicated that varying body shapes have contributed to the issues of garment fit among female consumers. Pisut and

Connell (2007:370) are of the opinion that female body shapes and measurements vary and change over time, as a result of nutritional changes, lifestyle and ethnicity amongst others. These differences have an impact on the fit of a garment. In order to provide a good fit, clothing manufacturers must successfully interpret body shapes and measurements. However, lack of data on fit characteristics of garments for different body size and shapes have limited ways of trying to solve the problems of fit (Ashdown *et al.*, 2007:1).

Furthermore, Pisut and Connell (2007:370) in their research on applying a shape analysis technique to 3D body scanning, found that the shapes of female have changed from 1950s when most standards were implemented in the United States of America. Women today are larger and more pear-shaped than in previous decades (Pisut & Connell, 2007:368). Although women's body shapes have changed, clothing industries are still using old measurements based on the hourglass figure (Pisut & Connell, 2007:370), this leaves most female consumers frustrated with garment fit.

South Africa has a well-developed clothing sector, with highly competitive clothing retailers and manufacturers as well as formal and the informal merchants that supply a wide variety of products to a large multicultural society. Despite this vibrancy, South African clothing manufacturers and retailers have surprisingly little idea of the size and shape characteristics of its population (Kahn, 2008). A wide spread survey of anthropometric sizing has never been conducted on the general population in South Africa (Kahn, 2008). Most of the sizing systems currently in use are based on charts devised in the United States of America and United Kingdom and information as best it can from sales and return, (Kahn, 2008). The only sizing chart developed in South Africa is from specialist groups such as the South African Defence Force (Steenkamp, 2001). This may imply that the situation in South Africa regarding dissatisfaction with garment fit is no different from anywhere else in the world.

Apart from body shape and garment sizing as factors associated with fit problems, garment size labels communication is also crucial to the consumers when purchasing clothing. When purchasing clothing either online or in store, the size indicated on the garment label is supposed to communicate and guide the consumer on what to choose (Chun-Yoon & Jasper, 1995:32). However, size labels of female's clothing lack adequate information and they are also inconsistent (Faust & Carrier, 2010:90), which leads to more confusion when it comes to choosing the right size garment. It is, therefore, necessary to look at the importance of the correct and clearly sized label as manufacturers may be in the dark as to what female consumers go through when they encounter garment fit issues contributed by garment size labels. The correctly communicated size label may help female consumer choose the proper fitting garment.

With increasing competition in this consumer-driven market of clothing, understanding and catering to the needs of female consumers is an important step in creating and maintaining profits for the companies in the clothing industry. Prior studies on garment fit issues from a consumer's perspective have mostly been done in the developed countries. Little research has been done in the South African context to garment fit problems of ready-to-wear garments. Hence this study is motivated by South African female consumers with regards to poor fitting garments caused by body shapes, garment sizing and garment size label communication.

2.11 CONCLUDING SUMMARY

Chapter 2 presented the relevant literature on the main concepts of this study regarding ill-fitting ready-to-wear garments. The chapter addressed the most important aspects which should be addressed to enable a good fitting. A well fitting garment was described with the focus on the elements used to evaluate garment fit. The literature study also consists of an overview of factors that contribute to dissatisfaction with garment fit. In this regard aspects such as body shape, garment sizing and garment size label communication were highlighted. Body shapes are identified with a further discussion on body shape classification systems. The chapter also discussed how body shape, garment sizing and garment size label communication are related to garment fit problems. The chapter concluded with a summary of the problems identified in the chapter. In the next chapter, the theoretical approaches to the study in terms of cognitive appraisal theory and means-ends-chain theory will be discussed.

CHAPTER 3

THEORETICAL APPROACHES TO THE STUDY

This chapter explores the theoretical approaches that offer an explanation of how emotions can be studied. The cognitive appraisal theory of emotions and the means-end chain theory will form the basis for examining and explaining emotions caused by the perceptions of garment fit.

3.1 INTRODUCTION

From the previous chapters it became apparent that apart from serving physical needs such as covering the body and providing warmth, the garment has to be comfortable to the wearer in the way it fits and conforms to the body. Garments are also linked to the way individuals evaluate themselves in relation to the social world (society) we interact with (Kaiser, 1998:145). The perceptions of others (real or imagined) are taken into account when considering the fit of the garment. It was also clear that factors such as body shapes, garment sizing and garment size label communication among others may contribute to the garment fit problems experienced by female consumers when they purchase ready-to-wear garments. As such, the perceptions of garment fit may elicit either positive, negative or no emotions depending on the evaluation (appraisal) of the situation (an ill-fitting garment) against the personal values that the consumer need to achieve through clothing (Desmet *et al.*, 2001:32).

The chapter therefore begins by defining the term emotions, followed by a brief discussion on the overview of the theories of emotions. Thereafter, a discussion on the cognitive appraisal theory of emotions will be given. This theory explains that a situation, in this case an ill-fitting garment, does not prompt an emotion or emotions, but what is evaluated to be at stake which may be personal values they want to achieve through clothing.

It is also necessary to consider the appraisal dimensions which explain that a situation can bring about different emotions (emotion differentiation) depending on the evaluation of different dimensions or components of a situation. Female consumers are likely to go through a series of emotion, as they evaluate the perceptions of garment fit through the appraisal dimensions. Each appraisal dimension of the perceptions of garment fit elicits a different emotion. Social standards dimension (one of the appraisal dimensions) in particular is of interest to this study. This appraisal dimension will evaluate whether an ill-fitting garment affects the consumer's personal values.

This chapter will also briefly introduce the mean-ends chain theory as an approach that will offer an explanation of how to determine female consumers' personal values and the resulting emotions through the application of laddering. Lastly, a summary of the problem drawn from the discussions will be presented followed by the concluding remarks regarding the important aspects discussed in the chapter.

3.2 DEFINING EMOTIONS

According to Lazarus (1991:3), emotions play a central role in the significant events that take place in our lives and these serve important functions such as to help individuals achieve their goals (Oatley, Keltner & Jenkins, 2006:28). Most of what we do and how we do is influenced by emotions and the conditions that give rise to emotional reactions. Emotion researchers Lazarus (1991:36) and Oatley *et al.* (2006:28), however, agree that defining emotions is difficult and even more difficult to understand. Plutchik (2001:348) points out that one of the most important reasons why emotions are difficult to define is that more than one emotion may occur at the same time. Hence the difficulty lies in identifying the reasons behind the occurrence of the different emotions.

Ellsworth and Scherer (2003:572) state that people's emotions arise from their perceptions of their circumstances which are immediate, imagined or remembered. Whilst Martin *et al.* (2008:226) define emotions as the sudden exposure to stimuli which gives rise to a state of positive or negative autonomic arousal. This incites the cognitive analysis of the stimuli which then brings about the physiological reaction leading to a feeling which is described as an emotion. The physiological reactions may include the heart beating faster, deep breathing or trembling. From this definition it is clear that emotions involve several component responses to challenges or opportunities that are important to the individual's goals (Oatley *et al.*, 2006:29). However, in simple terms, emotions refer to a feeling state involving physiological changes and an outward expression or behaviour. In this study the perceptions of garment fit are regarded

as a stimulus that female consumers may analyze, and this evaluation may lead to emotions which are expressed. There are several theories of emotions which attempt to understand why people experience emotions. A brief overview of three of the common theories of emotions follows next.

3.3 A BRIEF OVERVIEW OF THE THEORIES OF EMOTIONS

The theories of emotion can be grouped into three main categories which are *physiological theories*, *two-factor theories* and *cognitive theories* (Alkan, 2004:28). Each of these theories is discussed below.

3.3.1 Physiological theories

Researchers Roseman and Smith (2001:3) state that the physiological theories can be traced back to the 1800s. Physiological theories suggest that an event or external stimulus leads to physiological arousal first. Examples cited are peripheral autonomic activity (James, 1894) or patterns of neural activity in the brain (Cannon, 1927) and that bodily response that lead to emotions. Whilst Watson (1919) postulated that stimulating conditions such as events themselves can result into bodily and mental activities which result in emotions. The emotional reaction is dependent upon how the physiological arousal is interpreted. If the event is not noticed or is not given any thought, then there would not be any emotions resulting from that particular event.

3.3.2 Two-factor theories

Schachter and Singer (1962) in Schorr (2001:24) proposed a two-factor theory that is also referred to as the cognition-arousal theory. This theory suggests that the physiological arousal occurs first, and then the individual must identify the reason behind this arousal in order to experience and label it as an emotion. Schorr (2001:24) further states that this theory claims the emotional experience is determined by both cognitive interpretation of the situation and physiological factors contributing to emotions, but more specifically, cognitive and physiological factors are independent.

3.3.3 Cognitive theories

The cognitive theorists argue that thought and other mental activities play an essential role in the formation of emotions (Schorr, 2001:26). In other words the individual must first think about the situation or event before one can experience an emotion. For example anger has been associated with blaming someone else for an unwanted situation, guilt has been associated with blaming oneself and happiness has been associated with believing that one has gotten what one wants (Smith, Hynes, Lazarus & Pope, 1993:916). According to Smith *et al.* (1993:916), research shows that there is a strong relationship between specific cognitions and specific emotions, and some of the evidence is found in the following theorists who have also shown that cognition proceeds emotions (Frijda, Kuipers & Ter Schure, 1989; Reisenzen & Hofmann, 1990; Roseman, Spindel, & Jose, 1990; Smith & Ellsworth, 1985; Smith & Lazarus, 1993; Tesser, 1990 and Weiner, 1985).

Lazarus (1991:127) states that there are two distinguished types of cognitions, namely;

- (i) *knowledge* (beliefs about how things work and how they adapt), and
- (ii) *appraisals* (evaluation) of the significance of the person-environment relationship for personal well-being.

Lazarus (1991:127) proposed that although knowledge contributes to appraisal, only appraisal directly results in emotions. Cognitive activity will be regarded as a necessary precondition of emotion because in order to experience an emotion, consumer must know whether in the form of primitive evaluative perception or a highly differentiated process that their well-being is implicated for better or worse (Lazarus, 1984:125). That in particular focuses on the cognitive and evaluation of a situation. Therefore, the cognitive appraisal theory of emotions provides the theoretical basis on which this study is based. In the next section cognitive appraisal theory of emotions is discussed.

3.4 COGNITIVE APPRAISAL THEORY OF EMOTIONS

Ellsworth (1991:144) and Schorr (2001:21) state that the idea of equating emotions with appraisal was first used by Arnord (1945, 1960). The most influential scientific contribution to the appraisal theory research was Lazarus (Ellsworth & Scherer, 2003:573; Schorr, 2001:22) whose contribution spans almost five decades, from the early 1950s to 2000s (Schorr, 2001:22). According to Oatley *et al.* (2006:168), the cognitive appraisal theory of emotions was first defined by Lazarus, who spent the early part of his career studying 'stress', a condition in which personal challenges exceed the individual's capacities and resources. Lazarus proposed

that the cognitive appraisal approach to emotions contains two basic themes. The first views emotions as a response to evaluative judgments or meaning of how good or bad a situation is. The second states that appraisals or evaluations concern the individual's goals and aspirations and how they interact with the environment. Similarly according to Smith (1989:339), Smith *et al.* (1993:916) and Omdahl (1995:42), cognitive appraisal theory of emotion suggests that emotions are determined by how an individual perceives a particular situation. A person may react with anger, guilt, or joy depending on how they see a given situation. Moreover, positive emotions result from an evaluation of anything or situation which is beneficial, and each negative emotion results from an evaluation of anything or situation which is harmful. The appraisal results in the tendency to approach that which is evaluated as "good" and to avoid that which is regarded as "bad" and what is evaluated as neither good or bad is ignored (Lewis, Sullivan & Michalson, 1982:2). Hence, depending on how one evaluates the situation, different emotions result from different evaluations (Smith, 1989:339).

In addition the other assumption of the cognitive appraisal theory of emotions is that different people may respond with dissimilar emotions to the same situation depending on how each one of them evaluates or appraises the situation (Siemer, Gross & Mauss, 2007:592). Therefore, two individuals with different appraisals or the same individual with different appraisals at different times will feel different emotions (Roseman, Spindle & Jose, 1990:899). This can be evident in a scenario where two women shopping for a blouse with both experiencing garment fit problems; one might become angry if she evaluates the situation to be caused by wrongful information on the size labels. Whilst the other might feel ashamed if she evaluates the situation to be caused by her body shape because she had gained weight around the hips over the Christmas holidays. Therefore, the cognitive appraisal theory of emotions plays a major role in how a person reacts in different situations or in the same situation depending on how they evaluate the situation.

Furthermore Smith *et al.* (1993:916) state that only a limited number of evaluation outcomes result in emotion, which implies that not all cognitive activities are relevant to emotion. The researchers further elaborate that only cognitive activity that relates to evaluating adaptational significance or person-environment relationship will cause emotions. These may include; one's own goal and beliefs, demands, constraints and opportunities present in the environment and how these factors interact with each other.

Schorr (2001:23) went further to point out that Lazarus observed that the cognitions shaping emotions are affected by the interaction between conditions eliciting emotions and coping processes. Appraisal theories claim that appraisals start the emotion process, initiating the physiological reactions and behaviour. The idea of emotions as processes is central to most

appraisal theorists and is one of the ideas that distinguish them from the more structural theories (Ellisworth & Scherer, 2003:574). However, the appraisal process makes it likely that emotions will be appropriate responses to the situation in which they occur (Roseman & Smith, 2001:7), because the situation at that particular moment may be well thought of and assessed. Lazarus further distinguished two major types of processes of appraisal such as the primary and secondary appraisals. The explanation of primary and secondary appraisal is given below.

3.4.1 Primary appraisals

In primary appraisal the person mainly evaluates two aspects of the situation which are goal relevance and goal congruence and incongruence according to Lazarus (2001:55). When appraising goal relevance the individual evaluates how important the situation is to her well-being. If there is no goal at stake then there will not be any resulting emotion. The second aspect of an individual's primary appraisal is the evaluation of goal congruence and incongruence. When appraising goal congruence of the situation, an individual evaluates whether what is happening is consistent or inconsistent with what the person wants. If the person believes that the situation is favourable then a positive emotion is likely to be aroused. If the situation is unfavourable a negative emotion may follow. When a negative emotion is experienced, this goes beyond the primary appraising and the person makes additional mental evaluations called secondary appraisals.

Oatley *et al.* (2006:170) further add that in primary appraisals, a stimulus is processed through two different appraisal systems. A system which provides an immediate, unconscious evaluation of whether the stimulus or situation is good or bad, and the system which is automatic, something like the reflex emotional reaction to the situation is the environment which motivates approach or avoidance responses. The primary appraisal system appears to give rise to our core feelings of positive or negativity to the situation.

3.4.2 Secondary appraisals

The secondary appraisal system provides more deliberate, conscious, thought-like and complex assessment of the situation and gives rise to specific emotions (Oatley *et al.*, 2006:170). Secondary appraisals, according to Lazarus (2001:56), involve people's evaluation of their resources and their options for coping. Essentially the person addresses the situation and decides which suitable reaction to take in order to reduce the negative emotions. One aspect of secondary appraisal is that when the person evaluates who should be held

accountable for the negative situation. Blame may be given for a harmful situation and credit may be given for a beneficial situation. Another aspect of secondary appraisal is a person's coping potential. Basically this evaluation is concerned with what can be done about troubled person-environment relationship to handle an emotional experience and future prospects, and whether any given action may prevent or produce additional harm or benefit (Lazarus, 2001:43).

However, Oatley *et al.* (2006:17) specify that much more was needed to address the complexity of an emotional experience. In particular what was needed was a theory to the specific appraisal processes that elicits emotions such as anger, guilt, gratitude and joy just to mention a few. Thus, an enquiry to this area takes us beyond primary appraisals and secondary appraisals. Siemer *et al.* (2007:592) and Scherer (1999:637) state that appraisal theories assume that the emotions elicited by an event or situation are determined by how the event or situation is interpreted along with a number of appraisal dimensions that result in different emotions. In the following section appraisal dimensions that explain emotions differentiation is discussed.

3.5 APPRAISAL DIMENSIONS

Oatley *et al.* (2006:173) point out that modern research on appraisal has mainly focused on the **discrete approaches** and **dimensional approaches** to the appraisals. Discrete approaches emphasize that unique appraisals give rise to different emotions and dimensional approaches focus on the many components of appraisals that relate to different emotions. One of the prominent approaches to describe and differentiate emotional experiences between appraisals is the dimensional or component approach (Demir *et al.*, 2009:42).

According to Omdahl (1995:44), several types of research have been conducted to examine the proposed relationship between cognitive appraisals and emotions. The appraisal dimensional approach was "discovered" by a number of different researchers, among them were, Frijda (1986); Scherer (1984a, 1984b, 1988); Ortony *et al.* (1988); Rosenman (1984, 1991); Smith and Ellsworth (1985); Lazarus and Smith (1988). The researchers developed the dimensional theories independently, yet they were decidedly similar (Watson & Spence, 2007:490). Ellsworth (1991:144) states that these researchers developed theories which were designed to explain beyond the general statement that cognition is an important component of emotion. Moreover the theorists specified the kinds of cognitive interpretations that lead to different emotion by developing a specific set of appraisals. Despite some differences in approach and methodology, many of them introduced similar dimensions and there is a

remarkable agreement about what a person is supposed to think and want in order to react with different emotions (Lazarus, 2001:55).

The major appraisal dimensions common to different theorists according to Ellsworth and Scherer (2003:573, include; novelty, valence, goals/needs, agency and norms/values. **Table 3.1** presents a comparative view of the major appraisal dimensions as postulated by different theorists. Some theorists include more appraisal dimensions, some lesser and there are also theorists who have categorized the dimensions into super-ordinate and sub-ordinate appraisal dimensions. Scherer (1999:638) further went on to state that the main appraisal dimensions to theories can be categorized into four major classes of; intrinsic characteristics of the situation such as novelty and valence; the significant of the situation for the individual's goals; the ability to cope with the consequences of the situation including the evaluation of urgency and the compatibility of the situation with social norms and standards.

TABLE 3.1 A COMPARATIVE VIEW OF MAJOR APPRAISAL DIMENSIONS AS POSTULATED BY DIFFERENT THEORISTS

Common Dimensions	Scherer (1984)	Frijda (1986)	Roseman (1984)	Smith/ Ellsworth (1985)
Novelty	Novelty suddenness familiarity	Change Familiarity		Attentional activity
Valence	Intrinsic Pleasantness	Valence		Pleasantness
Goals/needs	Goal significance concern relevance outcome probability	Focality Certainty	Appetitive/aversive motives Certainty	Importance Certainty
Agency	cause: agent cause: motive	Intent/Self-other	Agency	Human agency
Norms/values	Compatibility with standards external internal	Value relevant		Legitimacy

Source: Ellsworth and Scherer (2003)

In addition, the appraisal dimensions also help to account for transitions between emotions (Oatley *et al.*, 2006:176). For instance, often in our emotional experience we move from one emotion to another, we shift from being angry to feeling guilty quite rapidly. These transitions can be explained through the dimensional approach to emotions. As mentioned in Chapter 1, dimensions are conceptualized as representing the questions, or issues that are evaluated in appraisals (Smith & Kirby, 2001:123). It should be understood that different combinations of the appraisal dimensions determine which of the emotions will occur in response to an event or

situation. However, Parkinson (2001:176) argues that in a situation where there are many possible appraisal processes, it is more likely that the emotion will depend on at least one of them. Therefore, it can be concluded that in order to experience a particular emotion, the process must lead to the rational meaning connected to the emotion.

In the following section the five common appraisal dimensions indicated in Table 3.2 namely novelty, valence, goals/needs, agency and norms/values are briefly explained.

3.5.1 Novelty dimension

Novelty is the most basic dimension of emotions of a stimulus event to be coded, and can be considered as “gateway” to the emotion system (Ellsworth & Scherer, 2003:576). Frijda (1986) uses the term *change*, to mean the extent to which the situation is the same as or different from the previous situation (Omdahl, 1995:62). Smith and Ellsworth (1985) use the term *attentional activity*, to mean the degree to which a person desires to attend to the situation (Omdahl, 1995:50). Roseman (1984) does not include this dimension. A novel stimulus draws attention and mobilizes processing resources to determine whether further processing and possible adaptive action is possible (Ellsworth & Scherer, 2003:576). Scherer (1984) has indicated two subchecks to the novelty dimension, which indicates that the detection of the stimulus or event varies depending on *suddenness, familiarity or predictability* of the stimulus.

For instance a consumer is shopping for a blouse. After checking the size label she picks a blouse which she believes is in her size. As she tries it on she notices that the blouse which she believed to be her size suddenly feels too tight and uncomfortable. This will draw attention (stimulus) to the consumer that there is a problem with the size or fit. At this point the consumer will determine whether this situation needs further processing or whether this situation needs further attention, depending on how important the situation seems to the consumer.

3.5.2 Valence dimension

While novelty detection alerts an individual to the potentially significant stimuli and motivates the search for appropriate information from the environment and from memory (Ellsworth & Scherer, 2003:577), the sense of valence or intrinsic pleasantness may occur simultaneously with the arousal of attention according to Ellsworth (1991:154), and it determines the fundamental reaction or responses of the stimulus event such as liking or attraction which

encourages approach versus dislike or aversion, which leads to withdrawal or avoidance (Ellsworth & Scherer, 2003:577). In other words this is the cognitive assessment of whether a situation is good or bad (Watson & Spence, 2007:491), the overall evaluation of how positive or negative (desirable/undesirable) a situation is relevant to a personal benchmark or a more general evaluation of pleasantness (Watson & Spence, 2007:496).

For instance the consumer who has been subjected to the garment fit problems will assess whether what has happened to her is good or bad. If she evaluates the situation to be bad, the consumer might want to know what is at stake for not fitting into the blouse she wanted.

3.5.3 Goals or needs dimension

A goal is the appraisal dimension of motivational relevance according to Ellsworth and Scherer (2003:578). This dimension is important because it determines to what extent the stimulus event or situation furthers or endangers one's survival and adaptation to a given environment (Ellsworth & Scherer, 2003:578). This dimension occupies a central position in all subsequent appraisal theories (Ellsworth & Scherer, 2003:578) because, according to Lazarus (1991:133), the implication of the situation or event for the well-being takes central stage involving "primary appraisals".

Scherer (1984) uses the term *goal significance* dimension, to refer to goals/needs dimension. Goal significance assesses whether the event or situation is conducive to or obstructive of the personal goals (Omdahl, 1995:74). Scherer (1984) also includes subordinates or subchecks which are linked to goal significance such as; *concern relevance*, which assesses whether the situation or event produces outcomes which affect needs or goals and *outcome probability*, which assesses the probability of the event occurring. According to Omdahl (1995:47), Roseman (1984) assumed that all emotions have a motivational basis. Hence the first dimension on the list (**see Table 3.1**) is *appetitive/aversive motives*, which addresses whether motives are states to be attained or avoided (Watson & Spence, 2007:493). Frijda (1986) indicates *Focality*, to mean the degree to which the event is viewed as specific that is linked to one's entire life span (Omdahl, 1995:62), for different concerns, presumably before determining its consistency or conduciveness (Ellsworth & Scherer, 2003:578). Smith and Ellsworth (1985) propose the term *importance*, to mean how considerable significant the situation is to attainment of the goal.

In the case of garment fit in this study, depending on how significant or meaningful the garment fit is to the consumer. The consumer will determine the fit problem whether it is relevant to her

goal commitments, needs or beliefs about herself and the world. If the way the blouse fits or does not fit threatens the consumer's goals or beliefs then the consumer might feel stressed. At this point the consumer will seek ways to solve the situation, on the other hand, if garment fit is not relevant for the wellbeing of the consumer, then nothing further will be considered (Lazarus, 2001:43)

3.5.4 Agency dimension

Agency is the most influential dimension to be appraised. Agency refers to the appraisal dimension of whom or what caused the event or situation, or to who or what the event or situation can be attributed (Dube' & Menon, 2000:292). Similarly, the causal agent is who or what had the control over the stimulus event or situation (Watson & Spence, 2007:496). Agency evaluation has been found to be more relevant in situations involving negative emotions than positive emotions (Dube' & Menon, 2000:292) as negative emotions are more likely to generate attempts to explain the failure of the situation that has occurred.

Scherer (1984) refer to the agency dimension as *agent and motive cause*, which evaluates the perceived or attributed cause of the event, the motive intention and goal or needs of the agent (Watson & Spence, 2007:494). Frijda (1986) uses the term, *intent/self-other* which evaluates whether the situation was caused by self or other person (Watson & Spence, 2007:494). Smith and Ellsworth (1985) suggest the term *human agency*, which evaluates whether the situation was controlled by the person or another person (Watson & Spence, 2007:494). In general, when someone else is responsible for a situation or event it is believed that they had control over the situation or event, or otherwise the event or situation is attributed to circumstance (Watson & Spence, 2007:496).

Again the consumer who is experiencing garment fit problem may believe that the clothing manufacturers are making garments to fit only hourglass shaped consumers. As a result she is unable to find garments to fit her body shape, which may result in the likelihood of her becoming angry. On the other hand if she evaluates the problem to be caused by her own body shape, she is likely to feel frustrated or ashamed.

Agency evaluation has been postulated by all the theorists indicated in Table 3.1, and it is the dimension which is often linked to *controllability* or *coping ability*. According to Watson and Spence (2007:498), control is associated with one's perceived ability to deal with or change the situation. The ability to cope with the stimulus event or situation can be seen as the ability to free the emotion system from being controlled by this particular situation in order to establish

the new equilibrium (Ellsworth & Scherer, 2003:580). To demonstrate, while clothing manufacturers' garment sizing is generally controllable, the various female body shapes may usually not be controlled. Hence, if a situation is controllable, the outcome depends on one's own power to exert control to help the situation.

Additionally, Lazarus (2001:58) argues that coping or controllability plays its role at the earliest possible moments of the emotion process, and that the particular emotion of which the control of coping process is a part are essential aspects of adaptation. Lazarus (2001:58) further adds that emotion and adaptation are always conjoined. This means that controllability thoughts originate at the first recognition of one's stimulus of either a problem or good fortune in life (Lazarus, 2001:58).

3.5.5 Norms/values dimension

Ellsworth and Scherer (2003:581) and Scherer (2001:98) are of the opinion that the underlying idea of this appraisal dimension is that it is important for socially living species to take into account the reaction of the other group members. At the same time evaluate the significance of an emotion-producing event (such as ill-fitting garment) in relation to one's personal values. This appraisal dimension, according to Scherer (2001:98), is relevant in evaluating the importance of social norms (shared rules) and values concerning social status, desired outcomes and acceptable and unacceptable behaviours (Ellsworth & Scherer, 2003:581, Scherer, 2001:98). This means that when consumers appraise the situation along the norms/value dimension, they are trying to assess how the situation will affect their life socially. Evaluating the social consequences of a particular action or situation is an important step before finalizing the evaluation process and deciding on the appropriate behaviour (Ellsworth & Scherer, 2003:581).

Scherer (1984) identifies this appraisal dimension as *compatibility standards* which addresses whether the situation is compatible with *external* standards such as social norms, cultural conventions, or the expectations of others. This dimension evaluates to what extent an action is compatible with the perceived norms or the demands of the salient reference group in terms of a desirable and moral code (Scherer, 2001:98). For instance, if the blouse is too tight for the female consumer, she may evaluate if she can fit in the group of her friends or will she be buying something acceptable to her friends. Discrepancy with external standards might lead to the feeling of shame when one's own behaviour is evaluated (Ellsworth & Scherer, 2003:581)

According to Table 3.1, Scherer (1984) indicates that compatibility standards also must adhere to *internal standards* which are part of the self-concept (Omdahl, 1995:74). Internal standards subcheck evaluates the extent to which an action falls short or exceeds internal standards such as one's personal self-ideal or internalized moral code which often is different with cultural or group norms (Scherer, 2001:98). For example the consumer who notices that the blouse she wants to buy is too tight will evaluate whether the way the blouse is portrayed (showing all the curves on her body) is in line with what she normally wears or is considered to be her ideal self or what she has been brought up to wear in her culture (moral code). Discrepancy with the internal standards might lead to feelings of guilt in the case of one's own behaviour (Ellsworth & Scherer, 2003:581). On the other hand, exceeding internal and external standards may produce emotions such as pride.

Frijda (1986) uses the term *value relevance*, to mean the extent to which the event or situation is interpreted as positive or negative based on higher order values or purely based on the stimulus itself (Omdahl, 1995:63). Smith and Ellsworth (1985) suggest the term *legitimacy*, which is the degree to which the situation is regarded to be fair (Omdahl, 1995:51), or deserving (Roseman *et al.*, 1990:903).

It is through garments that the body becomes a form of self-expression of personal values to others (Kaiser, 1998:146) and personal values are linked to self-evaluation probably the most important aspect of social awareness. As such this study will focus on the cognitive norm/value appraisal dimension and its role in determining emotional responses when personal values are challenged through perceptions of garment fit. The term norms/values appraisal dimension is referred to as social standards dimension in this study when discussing this appraisal dimension, regardless of the terminology used by original different theorists.

For further clarity, the social standards dimension is used to encompass the overall interpretation of the emotions of female consumers when they evaluate the concerns and perceptions of garment fit in relation to their personal values. This may include; maintenance or enhancement of social status, belonging or dignity they may want to achieve through garment fit among others. In the next section, the application of the social standards appraisal dimension to understand the role of perceptions of garment fit on personal values and emotions will be discussed.

3.6 USING SOCIAL STANDARDS APPRAISAL DIMENSION TO EXPLAIN THE ROLE OF THE PERCEPTIONS OF GARMENT FIT ON PERSONAL VALUES AND EMOTIONS

Garcia-Prieto and Scherer (2006:198) mention that emotions which result through the social standards appraisal dimension require complex cognitive (mental) processing other than basic emotions elicited through other dimensions. This is owing to the comparison of the situation with personal values. For instance in order to experience fear, an individual needs few cognitive evaluations, they simply assess a situation as threatening to their survival goals (Lazarus, 2001:42). To experience shame, however, an individual who is faced with an ill-fitting garment must have the capacity to form a stable self-representation or self-awareness and consciously reflect personal values. This allows an individual to engage in a complex self-evaluation process which may elicit emotions which will be driven by personal values. Again guilt is another example of emotions elicited by violating personal values. If a female consumer feels guilty due to an ill-fitting garment, a cognitively complex evaluation is required to self-reflect in relation to personal values. As a matter of fact much of the evaluation in this dimension is about comparing a current state with the expectations one hopes to achieve through garment fit.

Similarly, when a female consumer is faced with an ill-fitting garment, apart from other evaluations such as the goal at stake or affected, she may also most likely evaluate how this situation will affect her personal values. Emotions which are elicited by appraisal of the social standards dimension are experienced when personal values are threatened or maintained (Tracy & Robins, 'n.d'), which can occur in public or private as long as the emotional situation (which in this case ill-fitting garment) is relevant to the aspirations and ideals of an individual's personal values. In fact, according to Tracy and Robins ('n.d'), social standards evaluations may not elicit emotions without self-evaluations. For example the negative evaluation of garment fit may not produce shame if an ill-fitting garment is not relevant or important to one's personal values. Thus social standards evaluation processes mediate the relationship between garment fit and emotions elicited because of personal values of the consumer.

Furthermore, appraisals of the social standards dimension are more social in nature (Manstead & Fischer, 2001:231). According to Rajagopal (2010:5), the relationship between garments and social identity is seen by the consumers from the perspective of their personal values which comes from various social interactions as well as from their culture. Since cognitive appraisals are considered to reflect the meaning of a situation for the individual and its implications for their personal well-being (Lazarus, 2001:42), it can therefore be assumed that female consumers also evaluate an ill-fitting garment which is regarded as an emotional situation and

its implications for their personal values. Thus the emotions elicited typically involve the evaluation of an ill-fitting garment along personal values in relation to self.

As already stated in this chapter, Section 3.4, one of the assumptions of the cognitive appraisal approach to emotion is that there are individual differences in the way people respond emotionally to the same situation because they differ in goals or concerns they bring to that situation. An ill-fitting garment may also elicit different emotions depending on subjective meaning to the situation, which may relate rather to personal values (Manstead & Fischer, 2001:224) that can be regarded as personal. For example, an emotional situation such as an ill-fitting garment is most likely to bring negative emotions such as frustration if personal values are not met by one person. To another person an ill-fitting garment may just be a challenge which she may evaluate as something to invest more time in by looking for another garment that can fit properly elsewhere or seeking other ways to make the garment fit properly such as altering the garment.

Personal values can be regarded as the points of reference in the evaluation processes. If for instance body shape is contributing to the issues of garment fit, emotions may be elicited depending on the perceptions of whether the fitting of the garment matches or mismatches the personal values which the female consumer may seek through clothing. Hence an emotional state will not be elicited by garment fit problem as such, but by the evaluation significance of this problem to an individual's personal values (Desmet *et al.*, 2002:3).

Watson and Spence (2007:490) further suggest that the cognitive appraisal dimensions offers a more in-depth way to explain the delicate distinctions of emotions. More importantly they help to predict which emotions should be elicited in a given context as well as how suggested emotions affect behaviour (Watson & Spence, 2007:490). Therefore, the cognitive appraisal theory of emotions, specifically the social standards dimension is justifiably a suitable approach to study the emotions of female consumers, as garments may be a product through which individuals may want to express their personal values to others and themselves.

Examining consumers' personal values provides a richer understanding of what is really important for female consumers with regards to garment fit. In doing so emotions which may result when personal values are challenged may be revealed. This can be achieved by applying the Means-end chain theory. An explanation of the Means-end chain theory is given in Section 3.7.

3.7 MEANS-END CHAIN THEORY

The Means-ends chain theory (MEC), was originally developed by Gutman (1982) for studies in marketing and consumer research. Gutman (1982:60) defines means-ends chain as “a model that seeks to explain how a product or service selection facilitates the achievement of desired end-states”. For example, the Means-end chain theory may uncover the reasons behind why female consumers prefer certain type of garment fit over another (loose-fitting as opposed to tight-fitting). Pawlowski and Thomsen (2011:29) further state that this theory was established to identify the motives and the underlying personal values that consumers associate with products or services including clothing. Thus the theory attempts to connect consumers’ preferences in the choices of products or services to the achievement of their personal goals. Therefore, understanding the importance of personal values female consumers seek to achieve through garment fit and its impact on emotions is essential in this study.

According to Gutman (1982), the Means-end chain theory is based upon two fundamental assumptions that leads to consumer behaviour. The first assumption states that the values, which are defined as the desired end-states, such as personal values, play a major role in guiding choice of products or choice and preference of garments. Secondly, consumers have to process tremendous amount of information regarding potential products that might help them reach their desired end-states. Consumers reduce this amount by categorizing or grouping the information into classes so as to reduce the complexity of choice (Gutman, 1982). Within the framework of cognitive information processing of consumers “means” are object (products) or activities which people engage in. “Ends” are valued states of being such as happiness and freedom, to mention a few.

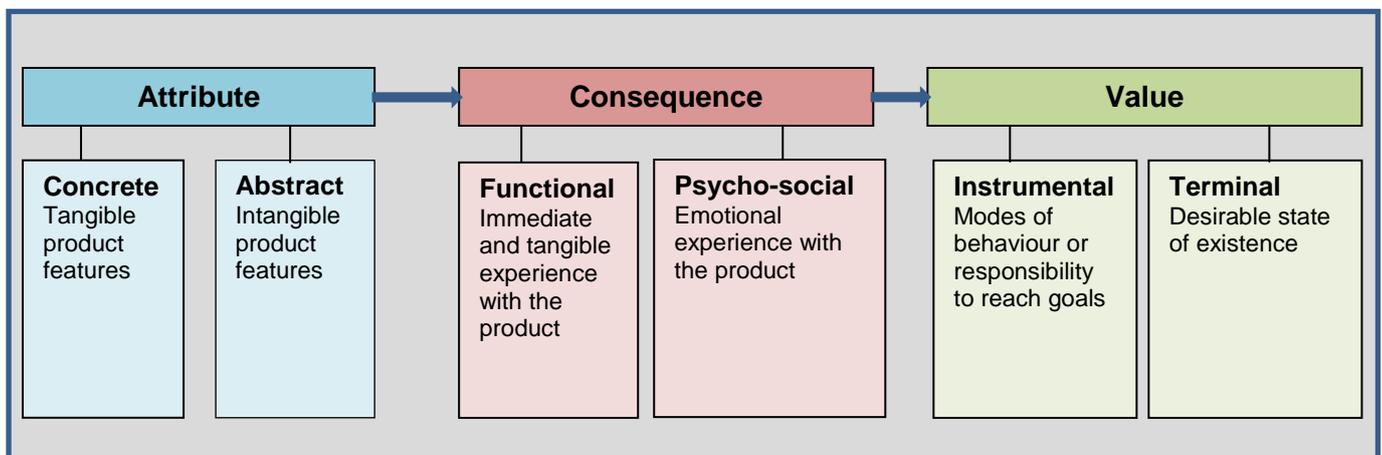
Zanoli and Naspetti (2002:644) further add that the Means-end chain theory suggests that consumers think about product characteristics or attributes in terms of personal consequences. These consequences may be perceived as positive (benefits) or negative (risks). For example if the attribute of garment sizing can be “limited stock” for certain dress size. When there is a limited stock, the consequences can be that the female consumer may choose a wrong dress size just to have that particular dress or buy something different. These consequences have to be in harmony with the personal values of the consumer which is the highest level in the entire process. Should an individual value the latest fashion, she may knowingly purchase the incorrect dress size, just to own that particular dress. These consequences may result in negative emotions such as sadness or frustration at not finding the correct dress size. Thus the model examines the connection between the attributes and the personal values in the context of consumer evaluations such as garment fit. In doing so, the means-end chain theory provides a clear view of the consumption motives and allows access to the ways in which

consumers perceive products and themselves, as well as words or emotions used to express these perceptions (Costa, Dekker & Jongen, 2004:412).

The theory further emphasizes why and how products are important to the consumer's life, and goes beyond the understanding of their functional properties (Veludo-de-Oliveira, Ikeda & Campomar, 2006:629). Knowing that consumers need well fitting garments does not tell much unless researchers are aware of why they want a good fit. It may be to accomplish personal values such as self-esteem, or sexual attraction. This means that it is not the product's attributes that are important, but the problem solution coming from consequences which are in turn important in the realization of consumers' personal value (Gutman, 1982:60).

Figure 3.1 below is an illustration of the Means-ends chain theory. The figure shows that the attributes can be divided into concrete and abstract attributes, consequences into functional and psycho-social consequences and values into instrumental and terminal values. Each of the hierarchical levels are discussed in the following section.

FIGURE 3.1 STRUCTURE OF THE MEANS-END CHAIN MODEL



Adapted from the following sources:

The structure of Mean-end chain model: Herrmann and Huber (2000)

Descriptions of concrete, abstract, functional, psycho-social, instrumental and terminal: Woodall (2013)

3.7.1 Attributes

Attributes can be explained as the characteristics of the products, services, or behaviours that are preferred or sought by consumers or normally described by them (Veludo-de-Oliveira *et al.*, 2006:629). *Concrete attributes* refer to the physical characteristics of a product which are directly perceptible. Examples can include price or colour of the garment. While abstract attributes refer to the relatively intangible characteristics, such as style, or brand of the garment (Veludo-de-Oliveira *et al.*, 2006:629).

3.7.2 Consequences

Consequences are any result (functional or psycho-social) that the product is perceived to deliver to the consumer, which can either be desirable or undesirable (Gutman, 1982:61). According to Peter and Olson (1999:69), functional consequences, also referred to as physiological consequences are what a consumer experiences directly after using the product, for instance wearing tight jeans makes me look slimmer. On the contrary psycho-social consequences are more abstract and are results of functional consequences. Psycho-social consequences refer to the psychological and social outcome of the product. Meaning that the psycho-social consequences of the product use personal outcome such as how the product makes you feel. For example wearing tight jeans makes me feel attractive or stylish. Thus consequences are what the consumer feels after purchasing the product, and this might be positive or negative feeling (Veludo-de-Oliveira *et al.*, 2006:630). The female consumer, therefore, is likely to choose the characteristics of the garment which she believes will most likely bring the most positive consequences or experience to fulfill most of the personal values.

3.7.3 Values

Values are at the most abstract level in the value chain as suggested by Rokeach (1973) (Veludo-de-Oliveira *et al.*, 2006:630). According to Baker, Thompson, Engelken and Huntley (2004:3), values are what motivate people's behaviour to strive to attain desirable goals in life. Values serve as a standard to guide consumers in their selection or evaluation of products such as garments, whereby influencing consumers' behaviour to help in reaching the goals that matter most to that consumer. The female consumer may identify characteristics with the fit of a garment which are in line with her personal values, in order to achieve the desired goals such as social status. On the contrary wearing a blouse which is gaping at the chest may make her feel uncomfortable as this may not be in line with being

presentable, to enable her to achieve her personal value such as preserving her dignity. Thus personal values, according to Durvasula, Lysonski and Madhavi (2011:8), can at times be defined as beliefs and relatively stable cognitions that strongly impact emotions.

Rokeach (1973) suggests that values can be subdivided into *instrumental* and *terminal* values (Veludi-de-Oliveira *et al.*, 2006:630). These values complement each other, specifying a general lifetime goal and identifying acceptable behaviour that can be used to reach personal values (De Souza Leao & Benicio de Mello, 2007:3). Veludi-de-Oliveira *et al.* (2006:630) went further to describe instrumental values as ways of behaving that can lead to terminal values, for example ambitious, or resourcefulness that might be necessary for example in achieving prosperity. In other words what a consumer can do to facilitate the achievement of the desired personal values. Terminal values on the other hand represent the final states of existence. These are goals we seek in life, for example, status or self-achievement.

The following section will discuss how emotions will be identified in the Means-end chain theory.

3.8 IDENTIFICATION OF EMOTIONS THROUGH MEANS-END CHAIN THEORY

In Chapter 1, body shapes, garment sizing and garment size label communication were identified as some of the many factors that contribute to the garment fit problems in females. As already stated, evaluation of the situation, in this case garment fit problem against personal values one seeks through clothing is what causes emotions (Desmet *et al.*, 2002:3), not the fit problems as such. In other words, if the fitting of the garment matches or upholds personal values, positive emotions may be elicited. On the other hand if the fitting of the garment challenges the individual's personal values, negative emotions may be elicited.

Through Means-end chain theory, emotions may be detected through psycho-social consequences as well as through instrumental values from the associated attributes.

Psycho-social consequences are related to social outcome or how the experience makes an individual feel (emotional). For example, a psychosocial consequence such as "uncomfortable" is the emotional experience which an individual may express because of the

attribute such as tightness around the hips. Thus if the female consumer expresses psychosocial consequences to the attribute, the emotional experience can be in relation to the evaluation of social outcome (social standards appraisal dimension).

Instrumental values might reveal the underlying emotions which female consumers may elicit when they fail to reach the uttermost or terminal personal values because of an ill-fitting garment. According to De Souza Leao and Benicio de Mello (2007:3), instrumental values are more moral in nature. That is why for example, when instrumental values are violated they may trigger emotions of guilt in an individual for having committed a mistake, or may lead to emotions of misery when linked to personal inadequacy (De Souza Leao & Benicio de Mello, 2007:3). Thus, through psycho-social consequences and instrumental values, the Mean-ends chain theory will enable to give a deeper view into female consumers' perceptions of garment fit and the associated emotions of which this study is trying to achieve.

3.9 SUMMARIZING THE PROBLEM

According to emotion theorists Lazarus (1991); Scherer (1984,1985); Roseman (1984); Frijda (1986); and Roseman and Smith (2001), the most basic point of reference to the appraisal approach to emotions is that there are individual differences in the way people respond to the same event or stimulus. This can be with respect to goals and concerns they bring with them to such stimulus or situation (Manstead & Fischer, 2001:224). Although it is true that some emotions can be predicted in most people given the intensity of what is taking place (Manstead & Fischer, 2001:224). The majority of the time the situation may not be appraised in terms of objective attributes causing the event or stimulus, but rather of its subjective perceptions and the resulting emotion is determined by this subjective interpretation (Ellsworth & Scherer, 2003:584). However, such concepts are useful in trying to understand emotions, but these concepts do not address the question of the underlying personal values of consumers nor when they are looking for good fit in garment which may accompany the emotional state. Therefore, the issues of garment fit among female consumers may be deeper than superficial complaints.

Manstead and Fischer (2001:222) argue that the social standards dimension can be seen as distinct from but additional to other appraisal dimensions. Social standards dimension is the appraisal of thought, feelings and action of other persons in response to an emotional

situation (Manstead & Fischer, 2001:223). However, most researchers tend to study the way an isolated individual appraises a situation and pay little attention to the possibility that others' reactions to the emotional event are appraised in comparison to the personal values which they have set for themselves. Consideration of personal values in an emotional situation plays a significant role in the intensity, duration and expression of emotion. In other words appraisals are the result of social experience, and the social world is, therefore, an integral part of the appraisal process (Manstead & Fischer, 2001:223). Therefore, this study also hopes to bring to light the emotional experiences female consumers go through at a psychological level when they cannot find a proper fitting garment.

Value research in marketing has received substantial attention from both academics and practitioners (Joubert & Mabunda, 'n.d.':39). A study by Koo, Kim and Lee (2008:156) on personal values as underlying motives of shopping online demonstrated that personal value of self-actualization and social affiliation serve as underlying beliefs or values in determining consumer's shopping-specific motives. Little research has been conducted or reported on in the South African context which has applied the social standards dimension of appraisal to uncover the underlying emotions of female consumer when concerned with garment fit. Furthermore, even fewer studies have reported on the deeper personal values that may contribute to emotions that consumers experience as a result of ill-fitting garments. Hence this study is motivated by female consumers' personal values as a critical factor that can lead to the underlying emotions when they are faced with garment fit problems in Johannesburg, South Africa. The Means-ends chain theory was used as a basis for establishing the research framework of this study. This study will attempt to describe and explore how consumers in Johannesburg, South Africa communicate their personal values through clothing to others. Means-ends chain theory will also provide motivation to evaluate attributes of body shape and garment sizing in garment fit and to establish and which emotions are evoked in the process.

3.10 CONCLUDING SUMMARY

Chapter 3 presented relevant literature on the theoretical approaches which will be used to determine emotional responses of female consumers when they experience garment fit problems when purchasing ready-to-wear garments. Definition of emotions was given as well as a brief overview of the theories of emotions with a focus on cognitive appraisal theory of emotions. Furthermore, an elaboration on the cognitive appraisal theory of emotions was

presented as the approach through which emotions can be studied. The literature on the approaches of the study further discussed the appraisal dimensions, which was described as the appraisal processes used to differentiate emotions which female consumers may go through when they are faced with garment fit problems. The five major appraisal dimensions (novelty, valence, goals/need, agency and social standards) common to different theorists were explained. The social standards dimension was explained to be the dimension through which the evaluation of the situation such as an ill-fitting garment affects personal values. The resulting emotions were described to be through the evaluations of an individual's personal values they aspire to through garment fit. A discussion on the application of social standards appraisal dimension to understand the role of garment fit problems on personal values and emotions was also addressed. The chapter also discussed Means-end-chain theory as the approach through which personal value of female consumers with perceptions of garment fit can be determined and subsequently reveal the emotions. How emotions will be revealed through Means-end chain was also highlighted. The chapter concluded with the summary of the problem identified in the literature of this chapter. In the next chapter the methodology applied to this study of female consumers' perceptions of garment fit and emotions will be presented.

CHAPTER 4

RESEARCH METHODOLOGY

This chapter presents the methodology, design and execution of the study.

4.1 INTRODUCTION

According to Mouton (2002:36), the research methodology which is presented in this chapter refers to the collection of methods and techniques that the researcher will employ to reach their goal of valid knowledge. The research methods in this context refer to the specific technique required at each stage of the research process such as methods and techniques of sampling, data-collection methods and data-analysis methods which were used to conduct this study successfully.

In this instance the research design and subsequent methods will depend on the aims and objectives of the study. As such the purpose and the objectives of the study which indicate the variables that are being studied to answer the research question will firstly be outlined. This will be followed by a discussion concerning the research paradigm, which is the first element to be considered in the design of a study. The term research paradigm refers to the fundamental model of reference through which to organize the observations and reasoning of the research (Babbie, 2010:33). Thereafter the research design considered for this study will be presented. Mouton (2002:107) defines research design also referred to as research strategy as a set of guidelines and instructions the researcher plans to follow in addressing the research problem. The discussion on the reasons why the instrument was piloted is also included followed by a discussion of the sampling plan which describes the unit of analysis and sample selection procedures followed in the study. Data gathering procedures for the study are discussed in detail as well as the structure of the questionnaire that was used to gather data as well as an insight into the data-analysis procedures is given. The discussion will follow on the methods of trustworthiness that were applied in the qualitative context of

the study as well as ethical consideration that were followed. Lastly concluding remarks of the important aspects discussed in the chapter will be presented.

The purpose and objectives of this study were outlined in Chapter 1 Section 1.6. However, since the application and selection of the methodological approaches depends on the purpose and objectives of the study (Babbie & Mouton, 2007:49), it is, therefore, appropriate to include the purpose and objectives of this study in this chapter as a point of reference.

4.2 PURPOSE AND THE OBJECTIVES OF THE STUDY

The purpose of this study is to explore female consumers' emotions relating to their personal values with regard to their perceptions of garment fit.

Keeping in mind the conceptual framework (**Figure 1.1**) presented in Chapter 1 and the purpose of this study, specific research questions were formulated to satisfy the research objectives. Tables 4.1 through Table 4.6 present the research objectives and the associated research questions that framed this study.

TABLE 4.1 RESEARCH OBJECTIVE 1 AND THE ASSOCIATED RESEARCH QUESTIONS

RESEARCH OBJECTIVE 1
<p>To determine the role that clothing retailers play in the perceptions of garment fit in terms of:</p> <ul style="list-style-type: none"> • the frequency of patronization of the clothing retailers <p>and stocking of the merchandize in terms of:</p> <ul style="list-style-type: none"> • the preference of garment fit
<p>Research question 1: Rank the 3 most frequently patronized clothing retailers from the list and provide reasons why you most frequently patronize the retailer you ranked number 1.</p>
<p>Research question 2: When purchasing pants, a blouse and garments in general, what is your preferred fit given fit choices of tight, semi or loose-fitting and provide reasons for your fit preference.</p>

TABLE 4.2 RESEARCH OBJECTIVE 2 AND THE ASSOCIATED RESEARCH QUESTION

RESEARCH OBJECTIVE 2
To identify the perceived self-reported body shapes of female participants
Research question: Please refer to the given illustrations of the body shapes, then place an X in the box next to the body shape which you perceive to be closest to your own body shape. If you cannot identify your perceived body shape with the given shapes, please sketch what you think your body shape is like on the figure at the end of the exercise and write down your characteristic of your personally drawn body shape

TABLE 4.3 RESEARCH OBJECTIVE 3 AND THE ASSOCIATED SUB-OBJECTIVES

RESEARCH OBJECTIVE 3
To explore and determine female consumers' personal values depicted through garment fit and the subsequent emotions
Sub-objective 1: To identify personal values and emotions related to body shape in terms of: <ul style="list-style-type: none"> • the criteria important to female consumers when choosing ready-to-wear garments considering their body shape(s) • the problems that female consumers encounter when purchasing ready-to-wear garments considering their body shape(s)
Sub-objective 2: To identify personal values and emotions related to garment sizing in terms of: <ul style="list-style-type: none"> • thoughts that come to mind when considering garment sizing in South Africa. • the problems that female consumers experience with garment sizing in general.
Sub-objective 3: To identify the emotions elicited as a result of the problems of garment size label communication.

TABLE 4.4 RESEARCH OBJECTIVE 4 AND THE ASSOCIATED RESEARCH QUESTIONS

RESEARCH OBJECTIVE 4
To identify the roles that body shape(s), garment sizing and garment size label communication play in garment fit problems. (concerning garment size label communication; by first establishing the problems related to garment size label communication)
<i>Research question 1:</i> does your body shape affect the choice of clothing you buy?
<i>Research question 2:</i> do you feel limited by what you can wear because of your body shape
<i>Research question 3:</i> how do you think garment sizing affect garment fit?
<i>Research question 4:</i> what are the main problems you have with the current garment size label communication on ready-to-wear garments in South Africa?
<i>Research question 5:</i> when purchasing ready-to wear garments, do you trust the information on the garment size label to guide you in your choice?
<i>Research question 6:</i> does the garment size label provide you with valuable information?
<i>Research question 7:</i> do you think garment size label communication contribute to garment fit problems you are currently facing? If so how?

TABLE 4.5 RESEARCH OBJECTIVE 5 AND THE ASSOCIATED RESEARCH QUESTIONS

RESEARCH OBJECTIVE 5
To explore and describe the effect of body shape(s), garment sizing and garment size label communication on female consumers' purchasing decision of ready-to-wear garments
<i>Research question 1:</i> when you experience garment fit problems because of your body shape, how does it affect your decision to purchase ready-to-wear garments?
<i>Research question 2:</i> how does garment sizing influence your decision to purchase ready-to-wear garments?
<i>Research question 3:</i> how much does the garment size label communication problems influence your purchasing decision of ready-to wear garments?

TABLE 4.6 RESEARCH OBJECTIVE 6 AND THE ASSOCIATED RESEARCH QUESTIONS

RESEARCH OBJECTIVE 6
To provide clothing industries with possible solution to garment fit problems contributed by body shapes, garment sizing and garment size label communication, from the participants' point of view.
<i>Research question 1:</i> what do you think should be done to help solve the problems of garment fit contributed by body shape?
<i>Research question 2:</i> what do you think clothing manufacturers should do to reduce garment fit problems contributed by garment sizing?
<i>Research question 3:</i> what do you think has to be done to improve garment fit problems contributed by garment size label communication in South Africa?

Considering the formulated research objectives and the associated research questions above, the following section discusses the research paradigm within which this study is organised.

4.3 RESEARCH PARADIGM

One of the first elements to be considered in the design of a study is the research paradigm. The term research paradigm refers to the fundamental model of reference through which to organize the observations and reasoning of the research (Babbie, 2010:33). To answer the objectives of this study, data collection and analysis adopted both qualitative and quantitative techniques.

According to Creswell (1994:177), combined qualitative and quantitative paradigms can be divided into three designs namely **two-phase design**, **dominant-less dominant design** and **mixed-methodology design** approach.

In this study, the **dominant-less dominant design** approach was used. This is the approach in which the researcher presents the study within a single, dominant paradigm with a small component of the overall study drawn from the alternative paradigm. In this instance the dominant paradigm is the qualitative approach in which the study argues from an inductive approach to research. According to Delport and De Vos (2007:47); Mouton (2002:77), inductive reasoning is when individuals use specific occurrences to draw the conclusions about the entire population from which the sample came. In this instance, the ultimate reasoning that the evaluations of the perceptions of garment fit in relation to personal values may elicit emotions, and that body shapes, garment as well as communication of size labels could be some of the many factors that can contribute to garment fit problems will only make sense because of what the female consumers will say and describe (Babbie & Mouton, 2005:273).

In this regard sampling, data collection and data analysis techniques relate to the dominant paradigm (qualitative) with a small segment of data collection and data analysis relating to the less-dominant paradigm (quantitative). Thus this qualitative study is supplemented by some quantitative closed-ended questions in the questionnaire which the researcher hopes will respond to different research questions as well as elaborate and enhance the results of this study.

According to Creswell (1994:174), in a combined method study such as this, the researcher uses more than one method of data collection and analysis. Methods may be drawn “within methods” for instance using different types of quantitative data collection techniques such as a survey and an experiment. Alternatively it might involve mixing “between methods” drawing on

both qualitative and quantitative data-collection procedures such as a survey and focus groups. In this instance, a “between methods” combination was used. A questionnaire as an instrument for data collection included both qualitative procedures and quantitative techniques for data collection. Data analysis also involved qualitative and quantitative techniques.

It was appropriate to combine methods of data collection for this study, based on the assumptions that it allowed the researcher to be more confident in the results and the findings (De Vos, 2007:362) of the study. In this instance, rather than relying on single measure of emotions related to personal values when a female consumers are faced with an ill-fitting garment (hard laddering exercises). It was also necessary for the researcher to determine the participants’ most frequently patronized clothing retailers and their reasoning, the preferred fit of the garments and their reasoning, their perceived body shapes, how the factors of body shape, garment sizing and communication of size labels contribute to the perceptions of garment fit as well as to explore their purchase decisions when they experience garment fit problems (closed and open-ended questions). Each of these sectors contribute to the different concepts of the study with each method used for its strength to collect particular information. Hence if all these sectors point to the relationship between perceptions of garment fit and emotions, then the researcher may be confident that such a relationship exist.

Furthermore, Mouton (2002:39) is of the opinion that combining quantitative and qualitative methods is not only possible but is in fact desirable as it is one of the best ways to improve quality of the research. In this instance, by combining the use of dominant qualitative and less-dominant quantitative techniques in collecting and analyzing data for different objectives of the study, the researcher hopes that this study will help to understand in-depth descriptions (Babbie & Mouton, 2005:270) of the perceptions of garment fit and consequently the resulting emotions female consumers experience when faced with ill-fitting garments in South Africa.

In the next section, the research design which will guide this study is presented.

4.4 RESEARCH DESIGN

The effect of perceptions of garment fit and the resulting emotions related to personal values is the area of research which has received little attention. In order to gain an insight and understanding of this problem, the purpose of this study is to explore the phenomena. Therefore, this study followed an exploratory research design. Bless and Higson-Smith (2000:41) suggest that an exploratory research design is the type of study where the area of

research study lack basic information in that little detail about the study exist. Thus the main aim of exploratory studies is to establish the facts, gather new data and to determine whether there are interesting patterns in the data (Mouton, 2002:103).

Furthermore, Babbie and Mouton (2005:80) are of the opinion that the exploratory research approach is also appropriate for the more persistent phenomena. In this regard, different researchers such as Horwaton and Lee (2010:22); Barona-McRoberts (2005:2) and Otieno *et al.* (2005:307) have stipulated that when it comes to clothing purchases, women specifically find it difficult to locate garments that fit well, which make them the most unhappy consumers. This may be regarded as a persistent situation which needs further investigation. Exploratory studies are typically done to satisfy the researcher's curiosity and for better understanding of the phenomena (Babbie & Mouton, 2007:80). Hence applying an exploratory research design will be appropriate to yield new insights into the topic of garment fit problems and to best understand the feelings of female consumers when faced with perceived ill-fitting garments.

4.5 PILOT TESTING THE DATA CAPTURING INSTRUMENT

The instrument for this study was a group administered questionnaire. According to Babbie and Mouton (2007:245), no matter how carefully the data collection instrument such as a group administered questionnaire was designed, there is always a possibility of errors. Piloting or testing of the instrument with a few people is necessary for the fact that it assists in eliminating ambiguous questions, ones that participants cannot understand as well as generating useful feedback on the structure and flow of the instrument (Wilkinson & Birmingham, 2003:19). Pilot testing the instrument was initiated in this study to ensure clarity, and estimate the time required to complete the questionnaire (Henn, Weinstein & Foard, 2009:157) as well as to ensure that the instrument was capturing the most effective data relevant to the study of perceptions of garment fit and the resulting emotions.

4.5.1 Selection of sample to pilot test the instrument

A convenient sample of participants was recruited from the Department of Life and Consumer Sciences at the University of South Africa (UNISA) – Florida Campus in Roodeport, Johannesburg. Female lecturers were contacted through e-mails encouraging them to participate in the voluntary pilot study. In accordance with Strydom (2007:209), this sample was selected so as to contribute to the meaningful insights for the adjustment of the

instruments before proceeding with the main investigation. The e-mail for invitation indicated the date, time and venue where the pilot study was to take place. A total of eight participants took part in pilot testing the instrument. The instrument was pilot tested in Room 205 Block B, at Unisa – Florida Campus, on 6th April, 2011.

The instrument developed to address the objectives of the study was used. A group administered questionnaire was handed to each of the participants which had a covering letter thanking them for taking part in the study as well as reminding them that their identity was anonymous. The group administered questionnaire contained exercise 1a, demographic questions, exercise 1b, illustrations of female body shapes of Liddelow (2011) of which the participants were to identify their own perceived body shape by placing an [X] in the box next to the illustration of the body shape. Exercises 1c and 1d, were the ladder exercises on important aspects of female body and problems encountered when buying ready-to-wear garments because of their body shape. Exercises 2a and 2b were also the ladder exercises on aspects of garment sizing in South Africa and problems of garment sizing. Exercise 3 contained questions on the problems of communication of garment size labels in South Africa. A list of human emotions from Self Improvement Mentor.com website (2011) (**see Appendix B**) was given to the participant so as to identify their emotions when prompted to describe their feelings in the questionnaire. This list of positive and negative human emotions was intended to remind participants of the emotions they experienced if they had difficulty in finding appropriate emotional description.

4.5.2 Procedure

An introduction was given explaining what was expected of the participants and they were encouraged to ask questions they had as they responded to the instruments. The researcher went through each exercise with the participants until each exercise was completed by each one of them. After which the researcher could introduce the next exercise. This was to ensure that all participants were able to respond to all questions as well as to clarify what was required of them in each exercise.

4.5.3 Recommendations for the main study

Pilot testing the instrument helped to make minor adjustments to the instruments for better clarity, minimize confusion and to formulate questions into simpler form. Modifications were made on the part where participants were to identify their perceived body shape among the

given female body shapes. It was discovered that some participants were unable to choose their own perceived body shape. Therefore, it was suggested to include a human figure on which they can sketch their own perceived body shape and write down its characteristics.

Furthermore, there was also a change in wording to some of the questions. For example the question “what are the three aspects you look for when choosing ready-to-wear clothing?” in the ladder exercise 1c was changed to “what are the three criteria you look for when choosing ready to wear clothing”. In this instance it was discovered that the word “aspects” was not clear as in addressing what female consumers go for or avoid when purchasing ready-to-wear garments considering their body shape.

It was also suggested to divide the group administered questionnaire into sections in order to indicate the end of the questions that belonged to the same data gathering instrument. For example Section A included demographic questions, Section B included identification of perceived own body shapes, Section C included the ladder exercises on body shape, open-ended question on body shape, ladder exercises garment sizing, open-ended questions on garment sizing and Section D included open-ended questions on communication of size labels. Furthermore, it was discovered that while participants answered laddering exercises 1a and 1b on body shapes, participants went back to look at the illustration of the body shape they had perceived to be closest to their own. It was, therefore, also recommended that the participants tear off their perceived body shape illustration and use it as reference while doing these laddering exercises. Providing participants with the list of human emotions which was used to identify their emotion proved to be helpful, so it was decided to include it in the main study. All recommendations were considered and addressed in revising the instrument for the main study. The final instrument used in the main study is presented in **Appendix C**. The main study is discussed in the following section.

4.6 THE MAIN STUDY

Unit of analysis, sample and sampling procedure, data instrument, and data analysis for the main study will be discussed next.

4.6.1 Unit of analysis for the main study

The unit of analysis of the study on perceptions of garment fit and the effect of personal value on emotions was working female consumers in Gauteng, specifically The Greater

Johannesburg Metropolitan area, The Greater Johannesburg Metropolitan area is the name of the areas surrounding the city of Johannesburg in South Africa. The inclusion criteria which directed purposeful sampling included that participants had to be female, as the aim of this study is to explore female consumers' perceptions of garment fit and the resulting emotions. It is assumed that working women are interested in how they look based on their personal values and their perceptions of appropriateness in the eyes of others and they also have buying power (Piamphongsant & Mandhachitara, 2008:440) which was the reason to include female working participants. The other criterion was that participants buy their own clothes, meaning they are in a position to decide which garment looks good on them. Lastly, participants should be those who buy ready-to-wear garments. In general, most women have experienced fit problems with ready-to-wear garments regardless of their body shape (Pisut & Connell, 2007:375), hence this study also investigates the perceptions of garment fit related to ready-to-wear garments.

4.6.2 Sample for the main study

The sample of participants in this study was drawn through a non-probability sampling strategy. In this strategy the odds of selecting a particular individual are not known (Bless & Higson-Smith, 2000:86). The type of methods which were used in this strategy was purposive or judgmental sampling and convenient sampling. According to Babbie and Mouton (2007:166), purposive sampling is based entirely on the judgment of the researcher regarding the predetermined characteristics or inclusion criteria of the sample which will be suitable for the purpose of the study. Once the predetermined characteristics were determined, convenience sampling was also used to recruit more participants. Convenience sample is the sample which is readily available to be used (Henn *et al.*, 2009:157), but should adhere to the inclusion criteria.

4.6.3 Sampling procedure for the main study

Two institutions of learning were approached to take part in the study, namely the University of South Africa (UNISA) – Florida Campus and King David High School – Victory Park campus. Female staff at UNISA – Florida Campus and female staff at King David High School represent the majority of consumers who shop for their ready-to-wear garments at similar clothing retailers such as Woolworths, Edgars, Foschini, Miladys, Mr Price, Ackermans, Truworths and Queens Park among many others, which are located in different shopping malls and Central Business Districts (CBDs) in South Africa.

Female staff at UNISA – Florida Campus was approached via e-mail addresses gained from the staff directory. The e-mails were sent from the computer in the office of the supervisor of this study. The e-mail was an invitation to take part in the study strictly on voluntary basis. It included the dates when the study were to take place, the venue, and the time. There were two versions of the e-mails. The first version of invitation was extended to participants who had previously participated in a study conducted by the supervisor and co-supervisor at UNISA – Florida Campus and the second version was sent to those who did not participate in that study (**See Appendix D**). Participants were requested to choose the date most suitable for them to attend the group sessions. The e-mail also informed prospective participants that they will remain anonymous in the study and that there are no right or wrong answers. Those who had decided to take part in the study returned the e-mail indicating the date they were going to participate in the study. A reminder was sent to the sample population two weeks later, and one final reminder was sent prior to the close of the study to those who had not yet responded to the initial request. A total of 600 e-mails were sent, with only 39 participants responding to the invitation from UNISA – Florida Campus.

Female teachers at King David High School – Victory Park Campus, were verbally approached to take part in the study. The Deputy Headmistress was approached about the study to take place. This school is located within the north western suburbs in Johannesburg. It is a private Jewish day school. King David High School – Victory Park was chosen because it was convenient for the researcher to gain access to the participants as she works with them. Twenty three participants from King David High School – Victory Park took part in the study. Thus a total sample of 62 participants was used for this study. According to Henn *et al.* (2009:158), there is no optimum sample size, often the sample size depends on the resources available to the researcher and the level of precision required in the study (Henn *et al.*, 2009:158). Since this study is to explore garment fit problems, many female consumers can relate to this phenomenon. Therefore, the method followed to determine the total number of participants was sufficiency (Greeff, 2007:294). The researcher decided that the sample reflected the consumers that make up the population and those who did not participate in the study could connect with what the participants were saying about garment fit problems.

4.7 DATA INSTRUMENT

A group-administered questionnaire was developed for this study (**See Appendix C**). The questionnaire was divided into four sections (Section A, B, C, and D). Section A and B had closed-ended questions. Section C had laddering exercise and open-ended questions and Section D had open-ended questions.

The four sectioned questionnaire assisted in assessing the objectives of the study outlined earlier. Thus the instruments enabled the researcher to achieve an understanding of female consumers' perceptions of garment fit as well as to explore the resulting emotions related to personal values.

4.7.1 Group-administered questionnaire

Wilkinson and Birmingham (2003:7) define a questionnaire as written list of questions which are answered by many people in order to provide information for a study. Although the term questionnaire suggests a collection of questions, typically a questionnaire will probably include other instruments as well, especially if the researcher is interested in getting reliable data on some aspects (Delport, 2007:166). This study used a group-administered questionnaire.

According to Delport (2007:169), a group-administered questionnaire is when participants present in a group, each completes the questionnaire on their own without discussion with other group members and returns it to the researcher on completion. The researcher is present with them the whole time to give certain instructions as well as to clear up uncertainties. Furthermore, if necessary the researcher can conduct a discussion with the members of the group and after the discussion, each member completes their own questionnaire (Delport, 2007:169). This was the most suitable method for this study, as the researcher needed to clarify each section before the participants could complete the questionnaire, especially where the laddering exercise was concerned, as this was an unfamiliar exercise to complete.

The structure of the group administered questionnaire used for this study was as follows:

Section A of the group administered questionnaire included demographic and psychographic questions which were used to obtain a better understanding of the profile of the participants. According to Schiffman and Kanuk (2010:76), a psychographic profile can be thought of as a composite of consumers' measured activities, interests and opinions,

whereas demographic information which was a closed-ended question included age range and ethnicity of the participants. Psychographic questions included:

- Ranking the three most frequently patronized clothing retailers and providing reasons why they most frequently patronized the retailer they ranked number 1.
- Indicating the preferred fit for pants, blouses and garments in general, of which were given fit choices of tight-fitting, semi-fitting or loose-fitting and to provide reasons for their fit preference.

The instrument used to gather data for ranking the three most frequently patronized clothing retailers and the fit preferences of pants, a blouse and garments in general was closed-ended questions whilst the reasons for their choices were open-ended questions. Lastly participants were requested to provide their e-mail address or phone number. This information was strictly to be used when the need to contact them for an incentive of appreciation for their participation in the study.

Section B of the group administered questionnaire also included a psychographic question in which six female body shapes were presented to the participants. Liddelow's (2011) female body shape illustrations were stimuli to measure perceived self-reported body shape. Perceived own body shape is the body shape one identifies with to be closely related to their shape from the given illustrations and descriptions without having any classification system done on them. Participants identified their perceived body shape from the given illustrations of female body shapes by putting an **X** in the box next to the illustration of body shape closest to their own. If they did not find the body shape they considered close to their own body shape they were requested to sketch what they perceived their body shape looks like and write down its characteristics on the seventh human figure illustration. After identifying their perceived body shape, they then removed that illustration and placed it in front of them so as to refer to it when they did the laddering exercises on body shape in the following section. This was to avoid turning back the pages now and again looking for their perceived own body shape.

Section C of the group administered questionnaire had hard ladder exercises which is the instrument used to measure personal values and emotions of female consumers in this study. The hard laddering technique will be elaborated on in more detail in paragraph 4.7.4 below. In terms of the hard laddering, exercises 1a and 1b were to measure emotions and personal values relating to body shapes and exercises 2a and 2b were to measure emotions and personal values relating to garment sizing. Of the three attributes or characteristics on each exercise, participants were asked to ladder only one attribute. This was to concentrate only on the attribute that was most important to the participant as the quality of the answers

may be inaccurate and repeated if the exercises were too lengthy (Bless & Higson-Smith, 1995:116).

Section C also included open-ended questions on body shape and garment sizing after exercise 1b (the laddering exercises on body shape) and exercise 2b (laddering exercise on garment sizing) had been completed. Open-ended questions were specifically included to measure other variables in the study such as the effect of body shape and garment sizing on the female consumers' purchasing decision, to determine that body shape and garment sizing contribute to perceptions of garment fit and the solutions to garment fit problems contributed by body shape and garment sizing from the consumers' perspectives.

Section D of the group administered questionnaire had carefully formulated open-ended questions on garment size label communication. These questions paid attention to determining that garment size label communication is one of the many factors that contribute to perceptions of garment fit, the emotions resulting from the problems of garment size label communication, the effect of garment size label communication on purchasing decision and possible solutions to garment fit problems contributed by garment size label communication.

The summary of the structure of the group administered questionnaire is outlined in **Table 4.7**. The table indicates the aspects measured in each section, and the question number as indicated in the questionnaire.

TABLE 4.7 THE STRUCTURE OF THE GROUP-ADMINISTERED QUESTIONNAIRE

SECTION	ASPECT MEASURED	QUESTION NUMBER
A	DEMOGRAPHICS and PSYCHOGRAPHIC	
	Age	1
	Ethnicity	2
	Ranking three most frequented stores	3
	Reason for shopping at shop ranked number 1	3.1
	Preferred fit for pants or skirts	4
	Reason for the preferred fit in question 4	4.1
	Preferred fit for tops – blouses or shirts	5
	Reason for the preferred fit in question 5	5.1
	Preferred fit for garments in general	6
	Reason for question 6	6.1
	Email address or phone number	7
B	Identifying perceived own body shapes	
C	Hard laddering exercises on body shape	
	Important criteria considered when choosing ready-to-wear garments	Exercise 1a
	Main problems encounter when buying ready-to-wear garments	Exercise 1b
	Open-ended questions on body shape	
	Garment fit problems caused by body shape and the effect on purchase decision	1
	The effect of body shape on garment fit	2
	The limitations of what to wear because of body shape	3
	Solutions to the problems of garment fit caused by body shape	4
	Hard laddering exercises on garment sizing	
	Important thoughts considered on garment sizing in ready-to-wear garments	Exercise 2a

	Main problems experienced with garment sizing	Exercise 2b
	Open-ended questions on garment sizing	
	Garment sizing and the effect on purchase decision	1
	The effect of garment sizing on garment fit	2
	Solution to the problems of garment fit caused by garment sizing	3
D	Open-ended questions on garment size label communication	
	Problems with garment size label communication	1
	Trust in the size label	2
	Information on the garment size label	3
	Contribution of garment size label communication to garment fit problems	4
	The feelings when experience garment fit problems because of information on the garment size label (emotions)	5
	How to improve the situation	6
	Influence on purchase decision	7

The choice and purpose of each of the data-collection methods applied in this study will be described next.

4.7.2 Data collection through closed-ended questions

Researchers often use different questions and approaches to questioning so as to enable them access the information that is required in a study (Wilkinson & Birmingham, 2003:10). The important questioning techniques among many others include closed-ended and open-ended questions. Closed-ended questions, according to Delpont (2007:174), refer to the type of questions to which the respondent is offered the opportunity of selecting (according to instructions) one or more response choices from a number of possible answers. In this instance, since the response options were relatively well known concerning demographic

questions 1 and 2, psychographic 3, 4, 5 and 6 as well as perceived self-reported body shapes (**See Table 4.7**), closed-ended questions were appropriate for this part of the study. The other advantage of closed-ended questions is that respondents understand the meaning of the questions better and they can be answered quicker (Neuman, 2000:240).

4.7.3 Data collection through open-ended questions

Open-ended, also referred to as free response questions, give the respondents the opportunity to answer the questions in their own words (Singleton & Straits, 2010:313). The response can be in written form or said verbally to the interviewer. In this instance they were in written form, meaning the responses to open-ended questions are in no way predetermined (Wilkinson & Birmingham, 2003:11). Open-ended questions allow the respondents to answer in detail and clarify responses as well as permit self-expression (Delpont, 2007:174). In this study, open-ended questions were used for questions 1, 2, 3 and 4 on body shape, questions 1, 2 and 3 on garment sizing and questions 1, 2, 3, 4, 5, 6 and 7 on garment size labels communication (**See Table 4.7**).

Using open-ended questions in some parts of this study was valuable to help the researcher discover the effect of perceptions of garment fit on purchase decision and to enable the researcher to understand better how the factors of body shape, garment sizing and garment size labels communication contribute to perceptions of garment fit and the emotions female consumers experience as a result of the problems of garment size labels communication. Open-ended questions also helped to find out information from the participants of what can be done by South African clothing manufacturers to reduce garment fit problems.

4.7.4 Data collection through laddering technique

In this study, emotions are regarded as originating from consumers' evaluation of perceptions of garment fit in relation to achievement of personal values, according to the Means-end chain theory discussed in Chapter 3, Section 3.7. Means-end chains information which is contained in the consumers' memories (Zanoli & Naspetti, 2002:644) is most commonly revealed with the help of a laddering technique. Laddering refers to an in-depth, one-on-one interview technique used to gain an understanding of how consumers view or translate the attributes of products to obtain higher orders in life, following Means-end-chain theory (Reynolds & Gutman, 1988:12). Reynolds and Gutman (1988:12) further add that laddering involves a tailored interviewing format which uses primarily a series of directed

probes to uncover the underlying reasons why an attribute or consequence is important to an individual (Reynolds & Gutman, 1988:12). Specifically in this case, laddering is a method which is used for understanding the female consumers' underlying personal values for garment fit choices and the resulting emotions by eliciting the attribute-consequences-value associations that they have with respect to the perceptions of garment fit.

The laddering procedure is a sequential process that consists of three fundamental steps (Reynolds & Gutman, 1988:12.) These steps include; **elicitation of attributes**, **data collection through the actual laddering interview** and **analysis of results**. The laddering steps are described next.

4.7.4.1 Elicitation of attributes

Laddering probes begin with distinctions made by the individual participant concerning the product (Reynolds & Gutman, 1988:14). That is to prompt participants identify or generate relevant attributes associated with the product or service, in this case with regards to body shape and garment sizing (Costa *et al.*, 2004:405). According to Costa *et al.* (2004:405), the elicitation procedure is rather important for the outcome of the ladder study, since it determines the relevance of the means-end chains revealed by the participants. Different techniques can be used to elicit which attributes are necessary on which to base the laddering interviews. For example **Triadic sorting**, **Preference-consumption**, **Differences by occasion**, **Free sorting**, **Free elicitation/direct elicitation technique**, and **Attribute selection/prespecified list** (Reynolds & Gutman, 1988:14; Ben-Larsen *et al.*, 1997 cited in Jensen, 2005:16).

According to Bech-Larsen (1997) cited in Pawlowski and Thomsen (2011:37), the method to elicit the attributes should be based on the purpose of the study. Costa *et al.* (2004:405) further mention that if the aim of the study is to gain an insight into the situation, then free/direct elicitation technique is the appropriate method that can be used. In this case, the aim is to obtain an insight into how female consumers feel about the problem of garment fit caused by their own body shapes and garment sizing. Perceptions of garment fit can only be described by consumers themselves and ensure that no key elements were overlooked. For this reason, the free elicitation/direct elicitation technique was used in this study. In this technique, the participant is asked which attributes she considers the most central regarding the product in question. Then the participants have to come up with the most self-relevant attributes. The answer to the question will then make out the attributes. Thus elicitation task included a question presented to the participants, upon which each participant had to come

up with three attributes. Of the three attributes, only the first attribute was used for laddering questioning. Four different questions were presented of which two were related to body shape and the remaining two to garment sizing. See exercises 1a, 1b, 2a and 2b (**Appendix C**). Below are the four questions which were used as devices to elicit attributes. The first two are in relation to body shape and the last two to garment sizing.

- *Please write down the three most important criteria you always consider when choosing any of the ready-to-wear clothing items in store.*
- *Considering your body shape, what are the three main problems you mostly encounter when buying your ready-to-wear clothing?*
- *What are the three main important thoughts that come to mind when considering garment sizing in ready-to-wear clothing in South Africa?*
- *What are the three main problems you have experienced in South Africa with garment sizing in general?*

4.7.4.2 The laddering interviews

According to Grunert and Grunert (1995) cited in Costa *et al.* (2004:407), there are two different types of approaches that can be used to the laddering interview. These are; **hard laddering** and **soft laddering**. **Hard laddering** is an approach that does not involve face to face, personal interviews, but instead is based on a structured, self-administered questionnaire that participants are asked to complete on either a computer or with pencil and paper (Grunert & Grunert, 1995) cited in Costa *et al.* (2004:407). In other words, this approach implies a strong control of the interviewer over the participant in order to keep the answers short and extremely focused on the topic (Miele & Parisi, 2000:16). On the other hand, **soft laddering** approach is the traditional method of interview in which the natural and unrestricted flow of speech is encouraged during the interviews (Costa *et al.*, 2004:407). The main risk, according to Miele and Parisi (2000:16), is to lose focus on the topic and create too many ladders.

Hard laddering was the preferred method to uncover female consumers' personal values and the resulting emotions caused by perceptions of garment fit problems. Costa *et al.* (2004:407) point out that hard laddering has been found to produce the attribute – consequences – values linkages similar to those produced in personal interviews.

Additionally, hard laddering can overcome some disadvantages of soft laddering, by minimising the influence of an interviewer, therefore, increasing the objectivity of the results (Zanoli & Naspetti 2002:647). Besides hard laddering reduces time and cost necessary to conduct and analyse the ladders (Costa *et al.*, 2004:407).

Once the attributes or characteristics (positive or negative) have been identified, the second step, which is the laddering interview, participants are prompted to reflect on the attributes with a probing questions such as “why do you prefer?” or “why is it important to you?”, which may lead to a consequence, which is further probed by asking “why is it important to you?” until the level of personal values is reached. As such, laddering interview depends essentially on the participant’s answers to keep going, having a basic question, “why is it important?” (Veludo-de-Oliveira *et al.*, 2006:631). Thus the procedure allows the consumer to reveal reasons naturally that would not be possible to bring back to light from memory (Zinoli & Naspetti, 2002:645)

Below is an example of a laddering interview taken from the questionnaire set (**Appendix C**) Section C, exercise 1b. The laddering interview begins with the question requiring participants to reveal attributes that are important and then a series of questions are asked to find deeper meaning and emotions involved.

Example of the hard laddering exercise on body shape

When **considering your body shape**, what are the **three (3) main problems** you mostly encounter when buying ready-to-wear clothing? Write a different problem in each of the boxes below. Please be as specific as possible. If you do not have one word to describe what your idea is you can give a brief explanation.

1	Problem 1
2	Problem 2
3	Problem 3

Now I would like to explore why you have indicated **problem 1** by providing a reason. Think carefully about **problem 1** you wrote down. Can you now please explain why **problem 1** is **problematic** for you by writing your reason in the block below?

1	Reason for problem 1
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Now please explain **why the reason above** is important to you by writing your answer in the block below. If you have a particular feeling you would like to express when you experience problem 1 you may write that down as well. In other words how does it make you feel when you face problem 1 (Consider the list of terms provided).

1	Importance of the reason above
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4.7.4.3 The laddering data analysis procedure

Besides elicitation of attributes and the interviewing technique, full laddering procedure also entails specific procedure for data analysis. According to Reynolds and Gutman (1988:18), the analysis of the laddering data begins with a summary of the major elements (attributes, consequences and values) by content-analysis procedure. The first phase of analysis relies on qualitative method. The entire set of ladders is recorded on a separate paper and appropriately labelled showing either A, C or V. The next phase of analysis is when a set summary codes is developed that reflects all the elements (A-C-V) elicited. At this point the focus is on the relationship between the elements and not the elements themselves. For instance in this case, "tight fitting" is a summary of several more detailed elements (such as tight at the hips, arms too tight, to mention a few).

Furthermore, numbers are then assigned to the codes, and these numbers represent each element in a ladder which will be used to produce the implication matrix, which represents the number of times each element leads to another, that is, on a ladder which element precedes another (Reynolds & Gutman, 1988:20). Saaka, Sidon and Blake ('n.d.') further

explain that it is a square with a size reflecting the number of elements one is trying to map. The rows in the matrix represent an individual respondent's ladder and columns represent the elements in each ladder. Thus the implication is defined as a square matrix that displays the number of times each element leads to every other element in the same row. The implication matrix is then used to draw up a hierarchical value map (HVM) which are graphical representations of the most frequently mentioned links gathered across all subjects (Roininen, Arvola & Lahteenmaki, 2006:22). Thus the HVM is a map that summarises the major Means-end-chain across all participants. It displays the attributes, consequences and the values mentioned by most participants and the corresponding links between them.

According to Saaka *et al.* ('n.d'), a common approach in constructing an HVM is to set a cut-off, which is a minimum number of times a direct or indirect link between two codes has to be represented before one considers an item. This is to determine which connections should be included in the HVM. For example, if a cut-off of 3 is chosen, it means that the HVM only portrays links that are mentioned at least three times by the participants. Jensen (2005:24) point out that a high cut-off level will ensure that many participants have mentioned the relations indicated in the HVM, that can provide a good opportunity to generalize the results. However, much of information will be lost in the value map. On the other hand, a low cut-off will provide as much data as possible from the interviews, yielding a more substantial map, however, the possibility of generalization will be poor. There are several methods for selection of the appropriate cut-off levels. Reynolds and Gutman (1988:20) recommend trying multiple cut-off levels and then evaluating the level that appears to be at the time the most informative as well as the most stable relations to interpret the results.

With regards to the derived HVM, it should, furthermore, be emphasized that there are two types of relations or links that may be represented in the HVM, these are direct or indirect relations. According to Reynolds and Gutman (1988:20), direct links refer to relations in which one element leads to another without any intervening element. The elements flow in a sequential order within a ladder. For example, A – B – C – D – E. However, within any given ladder there are many more indirect relations, such as A–C, A–D, A–E, B–D and so forth. It is, therefore, important to determine what paths are dominant in a map among the elements.

Means-end chain analysis which is perceived to be a complex, time consuming method can become simpler with a windows based software named Mecanalyst (Skymax-DG) . Mecanalyst was developed in 2002 by Italian professors named Zanoli and Naspetti and is commercialized by Skymax-DG. According to Skymax-DG, this software performs

significant operations, making the greatest part of data processing and HVM easier and more detailed at the same time. In this study, the HVM has been constructed through this software program. Mecanalyst facilitated the processing of data from the phase of summary coding, thus summary codes were made directly into the program and the implication matrix was automatically generated. Thus the software forms individual chains and then analyses the number of links across the sample (Roininen *et al.*, 2006:22). Laddering data analysis procedure for this study is explained in section 4.9.3.

Additionally, it is necessary to mention that the Mecanalyst software assumes non-redundancy of the participants' cognitive structures (Bjerre & Overby, 2012:69). Costa *et al.* (2004:409) point out that the principle of non-redundancy implies that direct links which are established by participants between two none-consecutive codes are shown only if the participants did not provide other ladders in which these are connected by an intermediary code. An example of non-redundancy is that if there at the individual level is a chain going from A (attribute) – C (consequence) – V (value) and a shorter chain that goes directly from A – V. This short chain with a link from A – V will not be represented in the illustrated map because such a link would be categorised as redundant. Instead it would be illustrated as if both chains would be long, such as A – C – V. Due to this assumption some links may be lost in the assembly of the maps and it also influences the final noncomplex appearance of the maps (Costa *et al.*, 2004:409).

4.8 DATA GATHERING PROCEDURE FOR THE MAIN STUDY

The study was firstly conducted at the University of South Africa (UNISA) – Florida Campus, according to the scheduled timetable indicating date and time in the invitation letter (**Appendix D1 and D2**). Since the participants at UNISA – Florida Campus were recruited through e-mail, returning of the e-mails was monitored and the chosen dates by the participants dates were recorded. To ensure that participants who committed to participating in the study did not forget, a reminder was sent a day prior to the day they chose to take part in the study. On the scheduled day of the appointment, the researcher arrived twenty minutes earlier at the venue to ensure the venue was ready for the study.

Each participant was given a folder containing a thank you letter for attendance (**Appendix E**), the questionnaire (**Appendix C**), and a list of emotions (**Appendix B**). An introduction was given explaining what was expected of the participants and they were encouraged to ask any questions they had as they responded to the instruments. The procedure was that the researcher went through each section in the questionnaire with the participants. If the

participants had any difficulties regarding any part of the section, the researcher gave relevant explanations to clarify the part. The next section could only begin after each participant had completed the section they were completing. Then the researcher could introduce the following section. This was to ensure that all participants were able to respond to all questions as well as to clarify what was required of them in each exercise.

Participants were told to complete their own questions individually. The folders were immediately collected at the end of each session. The study at UNISA – Florida Campus took place in the month of May, 2011.

Participants at King David High School – Victory Park who had agreed to take part in the study were verbally told to present themselves in the staff-room at break time. The researcher initially arranged with the participants a day which was suitable for them. The procedure was the same as Florida's with an exception that if the participant was unable to finish completing the questionnaire, they could hand it to the researcher the next day or when they completed it. This was due to the fact that sometimes breaks could be short, or they could not come on time because of unforeseen circumstances. The study at King David High School – Victory Park took place in the month of June, 2011.

As previously stated, only 62 questionnaires and questions on body shape and garment sizing for discussions were used for data analysis in this study.

4.9 DATA ANALYSIS

According to Mouton (2002:161), data analysis involves two steps. First is to reduce the volume of collected or available data. Second is to identify patterns and themes in the data. Similarly analysis also means the categorizing, ordering and summarizing of data to obtain answers to the research question (Kruger, De Vos, Fouche & Venter, 2007:218).

After all the questionnaires were received from the participants, data analysis was done as follows:

4.9.1 Analysis of data on closed- ended questions

Demographic questions and psychographic information were analyzed using descriptive analysis. The descriptive analysis allowed the researcher to summarize each variable in the data, by showing a proportionate breakdown of the categories for each variable (Henn *et al.*,

2009:223). In this instance data were presented in a frequency distribution and percentages. According to Punch (2011:111), frequency distribution is a useful way to summarize and understand data. The individual scores in the distribution are tabulated according to how many participants gave each response or fell into each category. Graphs were used to present frequency distribution for nominal scaling of demographic and psychographic characteristics of the participants. Graphic presentations are pictorial devices which are used to present data (Kruger *et al.*, 2007:227). Statistical data analysis was performed manually with a calculator whereas a computer package was used to develop the graphs.

4.9.2 Analysis of data on open-ended questions

The hand written data obtained from the open-ended questions sections were first reproduced by typing the completed questions. This step, according to Boulton and Hammersley (1996:286), is referred to as 'preparation' stage of analysis. According De Vos (2007:337), reproducing data offers opportunity to get immersed in and become familiar with the data in the transition between data collection and analysis. This experience helped the researcher to generate early insights of data as well as to get data into shape for analysis (De Vos, 2007:337).

After the data 'preparation' stage, the next step was coding. Coding, according to De Vos (2007:340), represents the operations by which data are broken down, conceptualized and put back together in new ways. In this instance open coding procedure as suggested by Flick (1999:180) was followed. The first task was to cut the raw text to manageable proportion so as to be less overwhelmed by it (Auerbach & Silverstein, 2003:37) this stage involved defining the relevant data that was related to the concerns of this research project (Flick, 1999:193). Expressions were classified by their units of meaning such as single words, short sequences of words in order to attach concepts to them, that is finding the most descriptive wording for the topics and turning them into categories (Creswell, 1994:155). Secondly, the procedure was to categorize the concepts by grouping them around phenomena discovered in the data which were particularly relevant to the research question. The resulting categories were again linked to concepts which were now more abstract than the first ones. At this point the contents now represented the contents of a category which helped in remembering the reference of the category (Flick, 1999:183). The final analysis was conducted before the results were interpreted (Flick, 1999:193).

4.9.3 Analysis of data on the hard laddering exercises

The hard laddering data were first content-analysed and coded according to the procedure as suggested by Reynolds and Gutman (1988:18). Content analysis involved a thorough review of the transcripts of the laddering data and appropriately recording on a separate paper the identified elements into a representation of attribute, consequences and values. The identified attributes were then categorised into content codes with common meaning as recommended by Reynolds and Gutman (1988:19), which reflected what was said by the participants.

Based on the content codes above, each participants' relations between attributes, consequences and values were typed into the Mecalyst V 9.1 software program. Three-level Means-end-chain was used for this software, where the researcher placed content codes into attributes, consequences and values. Mecalyst V 9.1 facilitated with provision of data entry and content analysis system for qualitative laddering. Secondly it tabulated an implication matrix, portraying the degree of connection between the various attributes, consequences and values. Lastly it created a HVM from the implication matrix.

All chains generated for the HVM map cannot be represented, as it would be too complex and too difficult to interpret. Therefore, before printing out the HVM, the relevant cut-off levels had to be determined. For example, if a cut off of 2 is chosen it means that all links or associations mentioned by at least two participants would be represented in the HVM. Choosing the cut off was relevant as all the necessary information was represented and the relations were more stable (Reynolds & Gutman, 1988:20).

Section 4.3 in this chapter reported that a combination of qualitative and quantitative research methods as opposed to combined paradigm was utilized to collect and analyze data of female consumers' perceptions of garment fit and the resulting emotions. However, this study utilized a qualitative research approach from the paradigm perspective. It is, therefore, appropriate that the soundness or quality of this study be discussed according to qualitative strategies of establishing trustworthiness.

4.10 TRUSTWORTHINESS OF THE STUDY

Trustworthiness was established based on the framework by Lincoln and Guba (1985). The four trustworthiness strategies includes; *Credibility, Transferability, Dependability, and Confirmability.*

4.10.1 Credibility

This strategy is equivalent to internal validity, a key strategy addressed by quantitative researchers in which they seek to ensure that their study measures what is actually intended (Shenton, 2004:64). According to De Vos (2007:353), the qualitative researcher's equivalent concept, *credibility*, refers to the degree in which the findings and methods used to generate findings can be trusted, that is to carry out the study in such a way that the probability of the findings will be found to be credible is enhanced (Lincoln & Guba, 1985:296). To establish credibility for this study, the researcher spent enough time with the participants, clearly explaining each step in the questionnaire and making sure they understood what was required of them. Participants were encouraged to ask any questions concerning any section of the questionnaire. This process validated a better understanding and the credibility of interpretations made. Lincoln and Guba (1985:301) termed this *prolonged engagement*.

Triangulation is another strategy which was applied in this study to enhance the quality of the research, particularly credibility. Padgett (1998:32) cited in De Vos (2007:361) describes triangulation technique in qualitative research as the joining of multiple perspectives that can provide greater confidence that what is being investigated is accurately captured. Denzin (1978) cited in Lincoln and Guba (1985:305) suggests four different modes of triangulation namely; the use of multiple and different sources (data triangulation), investigators (investigator triangulation), theories (theory triangulation) and methods (methodological triangulation). In this study, triangulation was exhibited during data collection and data analysis (data triangulation), such as closed-ended questions, laddering exercises and open-ended questions were used. Each method type collected different data for a different concept, the strength of each collection technique helped to strengthen the results of this study on female consumers' perceptions of garment fit and the resulting emotions related to personal values. During data analysis, the emerged HVM from the laddering data together with the categories and concepts which emerged from open-ended questions provided confidence in the findings of female consumers' perceptions of garment fit problems.

Credibility was also enhanced by *tactics to help honesty in the informants* when contributing data (Shenton, 2004:66). Participants who were approached were given opportunities to refuse to take part in the study if they felt so and it was also made clear that they had the right to withdraw at any point without giving any explanation to the researcher. Participants were also informed that their identity remained confidential. This was to ensure that data collection sessions involve only those who were genuinely willing to take part in the study and offer data freely (Shenton, 2004:67).

Lastly, *interviewing technique* also supported credibility for this study. The researcher and Supervisor spent time reframing or expanding the questions, making the questionnaire credible. The instrument was pilot tested, discussed, rechecked and corrected until it was suitable to be used in the main study. This was to ensure confidence and familiarity with the research instrument as well as to make sure the concepts measured in the objectives were within the content of the study.

4.10.2 Transferability

Transferability strategy is equivalent to external validity, (the other strategy addressed by quantitative researchers) as proposed by Lincoln and Guba (1985:296). External validity is concerned with showing the degree in which the conclusions of the study can be applied to other situations (Shenton, 2004:69). In qualitative research, the findings are usually specific to a small number of particular environment or individuals (Shenton, 2004:69). Therefore, transferability is concerned in demonstrating that the findings of the study can be generalized or applied to a wider population (Shenton, 2004:69).

According to Krefting (1991:220), a key factor in the transferability of the data, is the *representativeness of the informants*. In this study purposive sampling method was used to recruit teachers. That is, the sample contained the most characteristics representative of the population (Strydom, 2007:202). Besides sample selection, Lincoln and Guba (1985) suggest it is the responsibility of the researcher to ensure enough data to enable transferability. In this study, the researcher provided sufficient literature background concerning the problems of garment fit contributed by body shape, garment sizing and communication of size label. This will enable the reader to have a proper understanding of the garment fit problems, thereby enabling them to compare the instances of the phenomenon under exploration in the study with those that they have seen in their situations (Shenton, 2004:70). Furthermore, in-depth description of the participants and their demographic and psychographic information, the data collection methods employed and results, allowed the reader to assess how transferable the findings were (Krefting, 1991:220).

4.10.3 Dependability

Dependability is the alternative quantitative view of reliability, which is based on the assumption of replicability or repeatability (Shenton, 2004:71). Essentially dependability strategy relates to the consistency of the findings (Lincoln & Guba, 1985:290). To address dependability, the researcher clearly out-lined the processes such as the exact methods of data gathering, analysis and interpretations within the study. Such *in-depth description* of methods which are unique provides information to allow repeatable findings or equivalent by a different researcher (Shenton, 2004:71). According to Krefting (1991:221), dependability can also be enhanced through *triangulation*. The researcher made sure that the weakness of one method of data collection is compensated by the use of alternative data collecting methods to obtain a clear picture of the perceptions of garment fit.

4.10.4 Confirmability

Confirmability captures the concern of objectivity. It is the extent to which the findings of a study are shaped by the participants and not the researcher's bias, motivation or interest (Lincoln & Guba, 1985:290). According Lincoln and Guba (1985:319), critical to confirmability is accessibility to "audit trail" which is a transparent description of the research steps taken from the start to procedures and reporting of the findings. A research "audit trail" is comprised of six categories of reporting information (Halpern, 1983) cited in (Lincoln & Guba, 1985:319).

- (a) *Raw data* – including all raw data (transcripts) and field notes.
- (b) *Data reduction and analysis products* – including summaries such as condensed notes.
- (c) *Data reconstruction and synthesis products* – including clustering of categories into concepts, findings and conclusions and final report.
- (d) *Process notes* – including methodological notes, trustworthiness notes and "audit trail" notes.
- (e) *Materials relating to intentions and dispositions* – including research proposal, and personal notes.

- (f) *Instrument development information* – including pilot questionnaire, questionnaire design (laddering interviews, open and closed ended questions).

An “audit trail” which included the above six categories has been kept safe. The raw data (original transcripts) were filed and kept as hard copies, whereas the rest were compiled in electronic form and stored on CD-ROM by the researcher. This “audit trail” allows an external auditor attempting to follow through the course of this research step-by-step and to understand how and why decisions were made. The role of triangulation was again useful to promote confirmability. In this context data triangulation was useful to reduce the effect of the researcher’s bias (Shenton, 2004:72).

4.11 ETHICAL CONSIDERATIONS

According to Singleton and Straits (2010:47), ethics is a subject concerned with standards of right or wrong and how to act in moral and responsible ways and research ethics involves the application of ethical principles to the scientific research. According to Miller and Brewer (2003:95), Social research, such as this is a dynamic process that often involves an intrusion into people’s lives and, therefore, largely depends on the establishment of a successful relationship between the researcher and the participants. Ethical consideration is essential at all stages of the research process, from the design of the study, including how participants are recruited, to how they are treated through the course of these procedures and finally to the consequences of their participation (Miller & Brewer, 2003:95). In this study ethical considerations which were taken in the course of this study were that the researcher made sure that participants took part in this study voluntarily; no one was forced to participate if they were unwilling to do so and the purpose of the study was explained to them. Participants were assured that the information they gave remained confidential and anonymous and that under no circumstance will they be held accountable for their contribution. Participants were informed that there were no wrong and right answers. All this information was put on the first page of the questionnaire and before the start of each session, the researcher repeated the information to the participants. Furthermore, the researcher carefully conducted the research, remained objective throughout the research and reported the findings honestly.

Additionally, a thorough research proposal with anticipated ethical considerations involved, was approved by the College Ethics Committee of the College of Agricultural and Environmental Sciences at UNISA (**See Appendix F**).

4.12 CONCLUDING SUMMARY

Chapter 4 began with an overview discussion on research methodology and research design. The difference between research methodology and research design is that methodology refers to all the methods and techniques the researcher will use in study to achieve their goal, while research design involves the planning of how the chosen methods will be applied in the research. Then the chapter proceeded to describe the purpose and the objectives of this study. These are the basis and starting point for planning and implementation of the methodologies used in this study. Different method types (qualitative and quantitative) of data collection and analysis applied in this study were clearly discussed. The chapter also revealed that the design of this study was exploratory which used a questionnaire set to collect data. The questionnaire set consisted of a combination of qualitative and quantitative data methods of collecting data. There is always a possibility of making mistakes when developing the instrument for collecting data. Thus this chapter also addressed the procedure of how the instrument was pilot tested as well as the recommendations for the main study.

The chapter went further to discuss in detail the procedures for the main study such as the unit of analysis, sample, and sampling procedure. The group administered questionnaire which was used to collect data consisted of four sections, namely Section A, B, C and D. The methods of data collection in each section were described in detail. Analysis of data was also clearly described. Furthermore, there are a number of issues that a researcher must consider to convince the reader and academics that the findings from their study are worth paying attention to. Lincoln and Guba (1985:290) state that trustworthiness of a research is important in evaluating its worth. Four criteria for establishing trustworthiness of credibility, transferability, dependability and confirmability in this study have also been discussed. Lastly ethical consideration has also been addressed to ensure the production of ethically sound research. In the next chapter findings and discussions of this study on female consumers' perceptions of garment fit and emotions resulting from personal values will be presented.

Chapter 5

Findings, Results and Discussions

This chapter presents and discusses the findings and results of this study. Personal reflections of the findings and results are also included.

5.1 INTRODUCTION

The previous chapter discussed the research design and methodology used in this study. In this chapter the findings and results of the data collected from 62 women that took part in the study are analyzed and explained. The findings and results of this research are presented in sections A, B, C and D of the chapter. These sections correspond to the group administered questionnaire (**Appendix C**) used to capture the participants' responses in this study. Section A, the results of the demographic profile that includes the ethnicity and age distribution as well as the psychographic profile of the participants regarding their most frequently patronized clothing retailers and their garment fit preferences are presented. The psychographic profile of the participants is further explained in section B of the chapter which presents the results on the participants' perceived self-reported body shapes. Section C presents the results of the laddering exercises and findings from the open-ended questions on body shape and garment sizing, whilst data collected from the open-ended questions on the garment size label communication is explained in Section D.

5.2 RESULTS FROM SECTION A OF THE QUESTIONNAIRE

In Section A, the demographic profile concerning the ethnicity and age of the participants as well as data on the psychographic profile of the participants concerning frequently patronized clothing retailers and garment fit preferences were analyzed using a quantitative method of descriptive analysis. This analysis resulted in frequencies and percentages of the frequently patronized clothing retailers and garment fit preferences of the participants. Tables and

graphs are included to aid the interpretation of the results derived from the descriptive analysis.

In addition to the psychographic profile of the most frequently patronized clothing retailer and garment fit preferences, participants were further requested to provide reasons as to why they mostly patronized the clothing retailer they ranked number 1, and to provide a reason for their preferred garment fit option. Content analysis, a qualitative method was used to analyze the reasons provided by the participants for both these questions. Since the responses were gathered through the implementation of an open-ended questioning format, findings are presented and supported by quotations from the participants.

Summaries for the reasons given by the participants for frequent patronization of certain clothing retailers and garment fit preferences are illustrated in Tables in **Appendix G** and **H** respectively. The tables show the reduced data that has been coded into categories formulated through different concepts derived from the exacted words of the participants.

5.2.1 Demographic profile of the participants

The 62 female participants in this study were selected from Gauteng, specifically the Johannesburg Metropolitan area. Of these 63% (n=39) were from the University of South Africa (UNISA) – the Florida Campus and 37% (n=23) were from the King David High School –Victory Park. However, it is important to note that in parts of the data presented in this section, the reported sample size varies. This is dependent on how complete the questions were answered in the group administered questionnaire.

5.2.1.1 Ethnicity of the participants

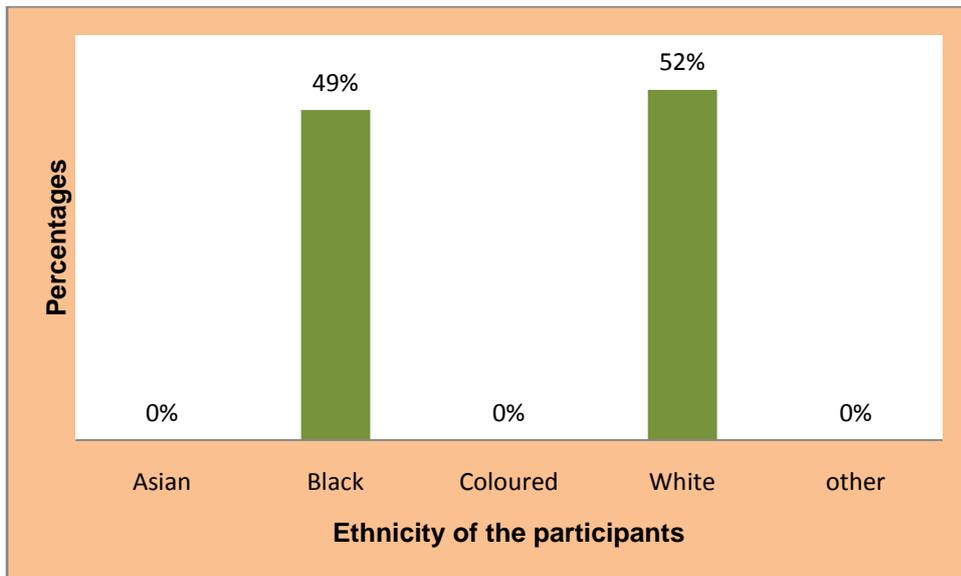
Table 5.1 presents frequencies and percentages of the ethnicity of the participants in this study. The results show that out of the total number of questionnaires (N=62) that were completed the sample of the participants mostly consisted of White (n=32; 52%) and black (n=30; 49%) female participants.

TABLE 5.1 ETHNICITY DISTRIBUTION OF THE PARTICIPANTS

Ethnicity	Frequency (n = 62)	Percentage (%)
Asian	-	-
Black	30	49
Coloured	-	-
White	32	52
Other	-	-

A graphical representation of data concerning the ethnicity of the participants is offered in figure 5.1

FIGURE 5.1 GRAPHIC PRESENTATION OF THE ETHNICITY OF THE PARTICIPANTS



As stated previously in Chapter 4, of the 62 participants who took part in this study, 63% (n=39) of the sample were from Florida Campus of the University of South Africa UNISA and 37% (n=23) were from the King David High School in Victory Park. Table 5.2 shows the number of participants represented from these two institutions of learning.

TABLE 5.2 SAMPLE DISTRIBUTION OF THE PARTICIPANTS

Source of the sample	Frequency (n = 62)	Percentage (%)
UNISA - Florida campus	39	63
King David - Victory Park	23	37

The data concerning the source of the sample is also graphically indicated in Figure 5.2

FIGURE 5.2 GRAPHIC PRESENTATION OF THE SOURCE OF THE SAMPLE

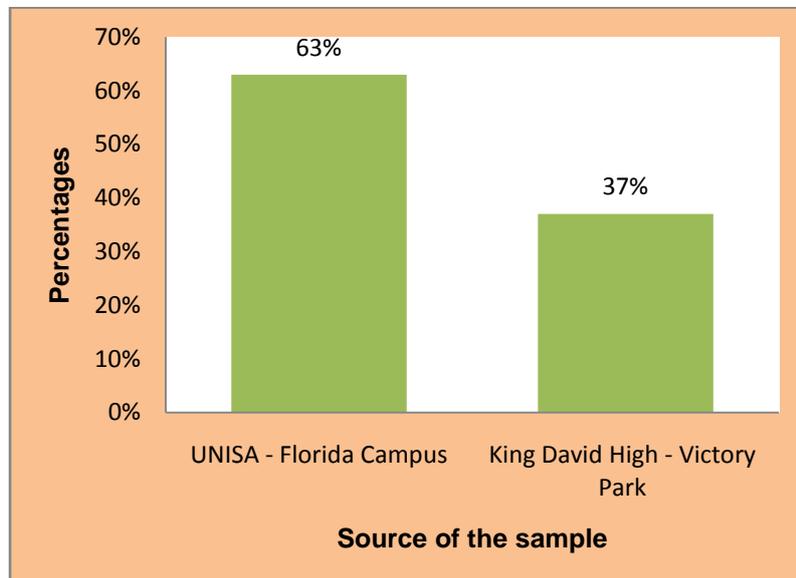


Figure 5.1 clearly indicates that a larger sample of the participants (63%) was sourced from UNISA – Florida Campus while a smaller sample (37%) was from King-David High School – Victory Park. Although Asian and coloured females are also employed at UNISA, the report presented by Subotzy (2008) to the staff assembly on “Identifying over and under representation regarding race, gender and disability at UNISA’s occupational structure”, it was revealed that in 2007 the majority of the females employed at UNISA were White, followed by black employees, with Asians and coloureds in the minority. Again employees at King David High School were only black and White.

According to Statistic’s South Africa (Stats SA) Census 2011 results, released in October 2012, there are 51.8 million people living in South Africa, of whom 79.2% is black, 8.9%

coloured, 2.5% Indian and 8.9% White. However, the analysis of the data does not differentiate between the different ethnic groupings as it was not the purpose of the study. Additionally this study used a purposeful and convenient sample meaning that participants who were available at the time of data gathering could participate in the study. As many opinions as possible were welcomed irrespective of the ethnicity of the employees of the different institutions when data gathering took place.

5.2.1.2 Age of Participants

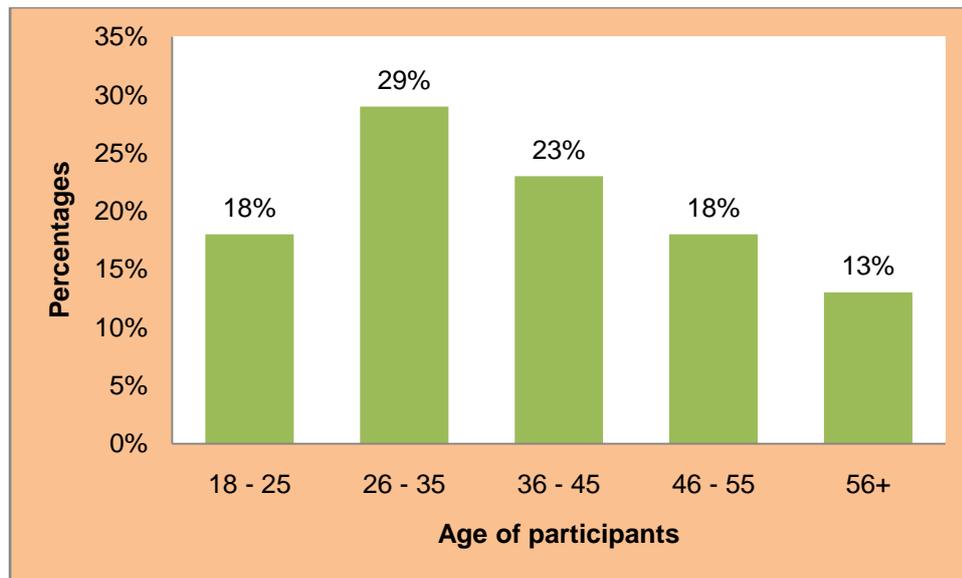
The demographic section of the questionnaire also aimed to determine the age of the participants. Table 5.3 presents the frequencies and percentages of the age of the participants. The results indicated that 52% (n=42) of the participants who took part in the study were between 26 – 45 years of age. The remaining participants, within the 18 – 25 and 46 – 55 age groups were both represented as 36% of the sample (n=22), while a limited number of participants were 56 years and older (13%; n=8) of the sample.

TABLE 5.3 AGE DISTRIBUTION OF THE PARTICIPANTS

Age (in years)	Frequency (n = 62)	Percentage (%)
18 - 25	11	18
26 - 35	18	29
36 - 45	14	23
46 - 55	11	18
56+	8	13

A graphic representation of the data concerning the age of the participants is offered in Figure 5.3.

FIGURE 5.3 GRAPHIC PRESENTATION OF THE AGE OF THE PARTICIPANTS



According to the South African generational demarcation (Hole, Zhong & Schwartz, 2010:88), the largest sample (between 26 – 45 age group) in this study can broadly be associated with generation X (born between 1970 and 1989). Generational groupings such as these refer to an identifiable group of individuals who shared significant life events at critical developmental stages, they share certain thoughts, values and behaviour because of their common traits (Tolbize, 2008:1). According to Tolbize (2008:3), these participants (generation X) are mostly working to fund their life styles, they are independent and favour work-life balance and flexibility. Working at higher education institutions as in this study, high schools included, offers a productive workforce that easily balances work and personal life (Williams, 2012).

Moreover, the age group 18 – 25 can be associated with the generation Y (born between 1990 – 2000) who seek a relaxed, informal workplace. However, this age group is not well represented in the workforce (Puybaraud, 2010:7), as they are still working towards obtaining particular qualifications. The age group 46 – 56+ can be associated with the baby boomer generation (1943 -1970), who are commonly known to be hard working and loyal to their careers (Hole *et al.*, 2010:86). This generation is in the mid to latter part of their career of which some may have already retired.

The discussion that follows is a presentation and analyses of the psychographic profile of the participants which were included in section A of the questionnaire.

5.2.2 Psychographic profile of the participants

According to Schiffman and Kanuk (2010:76), psychographic information measures consumers' activities, interests and opinions. Moreover, psychographic and demographic profiles highly complement each other and are commonly used to describe consumers in market research (Schiffman & Kanuk, 2010:84). In this study, the inclusion of psychographic information following the demographic questions in section A of the questionnaire allowed the researcher to obtain a clear profile of the participants involving their lifestyles and personal values through the clothing they purchase and wear and the retailer they purchase from. This is discussed further in the laddering exercises on page 142 of this dissertation.

The following section presents psychographic information on the participants' patronization of clothing retailers.

5.2.2.1 Patronization of clothing retailers

The choices of clothing retailers are numerous in South Africa. The differentiating feature between one clothing retailer from another is the unique store attributes that the retailer offers to the clothing consumers. According to Visser, Du Preez and Van Noordwyk (2006:49), female consumers have different needs when purchasing garments, as a result they use the store attributes as an evaluating criteria in their decision making process concerning clothing retail patronage. Through the identification of the frequently patronized clothing retailers, a better understanding of the South African female consumers' shopping preference of clothing retailers could be obtained for this study. This question addresses part of research **Objective 1** of this study.

Participants were presented with a list of the most popular clothing retailers easily found at any prime shopping centres and in the Central Business Districts (CBDs) in Johannesburg (The list of the popular clothing retailers presented to the participants in this study is indicated in Table 5.4). Participants were requested to rank the three frequently patronized clothing retailers by placing a (1) next to the most frequently patronized clothing retailer, a (2) next to the second most frequently patronized clothing retailer and a (3) next to the third most frequently patronized clothing retailer. Should the participants' frequently patronized clothing retailer not be included on the list, they were required to then name the store under the option "other" provided on the questionnaire and rank the store they added.

5.2.2.2 Clothing retailers ranked number one in this study

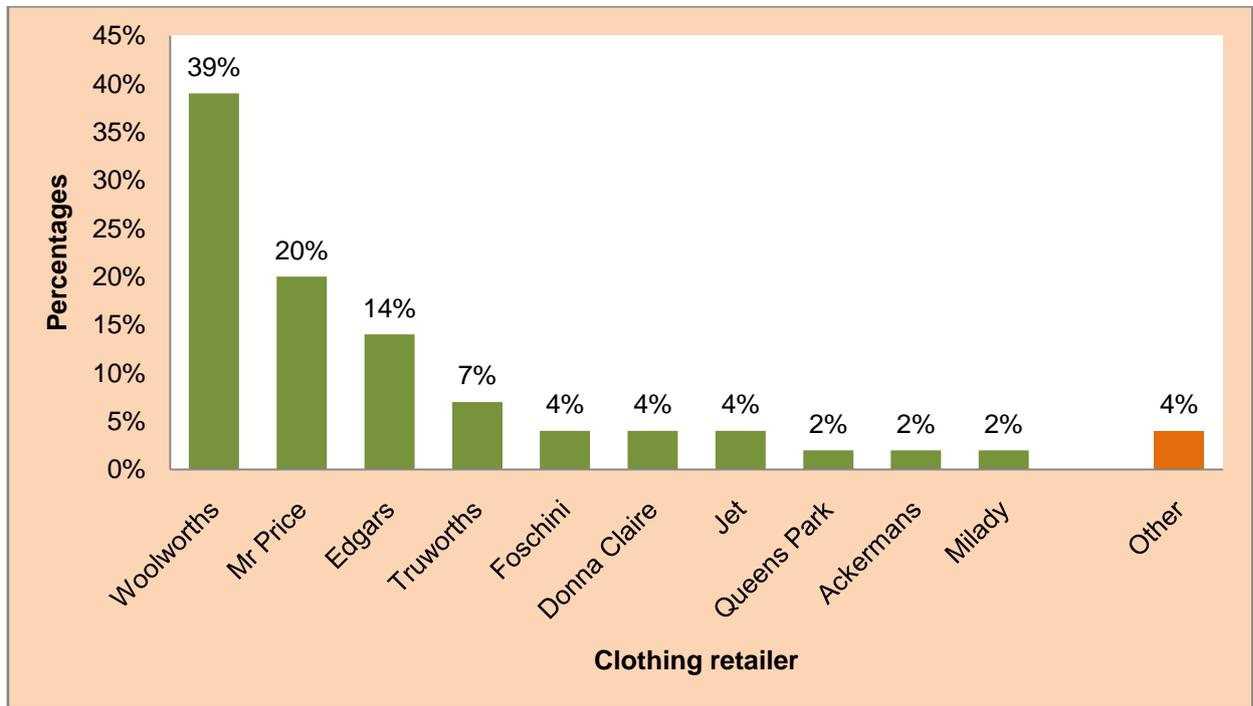
A total of 56 of the 62 participants ranked the most frequently patronized clothing retailers. Six participants did not complete the exercise, therefore, that data were not available to determine their store patronization in this study. The majority of the participants (39%; n=22) mentioned Woolworths as their most frequently patronized clothing retailer. Mr Price (20%; n=11) was ranked second, followed by Edgars (14%; n=8). Truworths was mentioned by 7% of the participants (n=4) while other shops by 4% of the participants (n=2). The clothing retailers which had fewer mentions (4%) included Foschini, Donna Claire, Jet and “other”. While the least patronized clothing retailers (2%; n=1) included Queens Park, Ackermans and Miladys. Participants who had ranked number 1 against “other” without naming the clothing retailer were also analyzed and placed in its own category at the end of the table. Table 5.3 presents clothing retailers ranked number one by the participants.

TABLE 5.4 FREQUENCIES AND PERCENTAGES OF CLOTHING RETAILERS RANKED NUMBER ONE BY THE PARTICIPANTS

Name of the retailer	Frequency (n =56)	Percentage (%)
Woolworths	22	39
Mr Price	11	20
Edgars	8	14
Truworths	4	7
Foschini	2	4
Donna Claire	2	4
Jet	2	4
Queens Park	1	2
Ackermans	1	2
Miladys	1	2
“Other”	2	4

The data concerning clothing retailer ranked number (1) by the participants are also indicated graphically in Figure 5.4.

FIGURE 5.4 GRAPHIC PRESENTATION OF THE MOST FREQUENTLY PATRONIZED CLOTHING RETAILERS RANKED NUMBER ONE



Frequency (n = 56)

The results obtained from the descriptive analysis indicate Mr Price and Edgars are the other two most frequently patronized clothing retailers by 34% of the participants aside from Woolworths. Chen-Yu, Hong and Seock (2010:131) stated that the decision to patronize a store usually starts with consumer's images of stores based on their perceptions of the characteristics or the attributes of the store that the consumer consider important. This is supported by another study conducted by Shim and Kotsiopoulos (1992) as cited in Moye (1998) who stated that the store attributes are the most important criteria to consumers in deciding where to shop. Thus the results in this study may indicate that the three most patronized clothing retailers (Woolworths, Mr Price and Edgars) may have all the store attributes that address the garment needs of the female consumers.

Listed and explained in the next section are the reasons provided by the participants for the patronization of the clothing retailers that they ranked number (1).

5.2.2.3 Reasons for frequently patronizing Woolworths

The reasons given by the participants in this study for patronizing Woolworths are *quality of garments, availability of sizes, variety of merchandise, affordability of prices, styles of garments, customer services, in-store presentation* and the *store location*. Of these, a significant number of participants claimed that the *quality of garments* is the main reason they shop at Woolworths. Some of the comments of the participants relating to *quality* included; “*because of quality clothes*” and “*you are sure to get quality clothes.*” This finding is supported by existing research that good quality of garments apart from fit, is the most important aspect in clothing a consumer looks for (Park & Sullivan, 2009:196; Thomas & Peters, 2009:1033). Additionally, the quality of merchandise was also rated highly in the study conducted by Visser *et al.* (2006:56) on the importance of apparel store image attributes.

On the other hand, *availability of sizes* was regarded as an important attribute by a reasonable number of the participants because of the variety of sizes to choose from at Woolworths that address their requirements. It can be concluded that these females were attracted to shops where they were able to find garment sizes that were proportionally balanced with their bodies, which is an indication of a good fitting garment. Relating to the *availability of sizes* participants commented that “*they have bigger size clothes*” and “*I find long pants which fit me.*”

Some participants who had considered the *variety of merchandise* was the reason to frequently patronize Woolworths seemed to value a good range of merchandise as indicated by comments such as “*a good range of clothes*”. The researcher assumes the range of products in the Woolworths stores patronized by the participants in this study accommodate the needs of the females participants in this study. Furthermore, concerning the *affordability of prices* fewer participants reasoned that they frequently patronize Woolworths because “*you get good value for money*” and those who frequently patronized Woolworths because of *styles* of the garments explained that “*they have lots of good styles*”.

Customer services were considered the reason to frequently patronize Woolworths by few participants through comments such as “*they have good customer services.*” Whereas even fewer participants expressed the importance of *in-store presentation* and the ease of finding garments for purchasing. Comments relating to *in-store presentation* included “*presentation is good and organised*” and “*you easily find what you are looking for.*” This finding is supported by studies conducted by Johnson-Hillery, Kang and Tuan (1997:134). Although the study focused on elderly consumers, the researchers reported that layout accessibility

was one of the important factors in a store environment. With regard to the attribute *store location*, female consumers in this study reasoned that Woolworths is conveniently located for them to frequently patronize the retailer with such comment as “*Woolworths is conveniently located.*”

The findings show that the store attributes mentioned by female consumers in this study clearly distinguish Woolworths from the other clothing retailers. Not surprising, the findings seem similar to what Woolworths promises to offer its customers. According to Woolworths (2012), “Woolworths’ core philosophy is underpinned by quality, offering consistently wide ranges of high quality, fashionable, well made and well-priced clothing for the whole family. Furthermore, Woolworths also claims to work hard to build long-term relationships with its customers, listening to what they say and consistently providing the right products and services to meet their needs (Woolworths, 2012). It is interesting to note that the main reasons that attract most of the participants to shop at Woolworths are exactly what the retailer advocates to be offering its customers, making Woolworths the most patronized clothing retailer by female consumers in this study.

5.2.2.4 Reasons for frequently patronizing Mr Price

The descriptive analysis in the previous question indicated that Mr Price was the second frequently patronized clothing retailer for the participants in this study. In response to the question concerning patronization, the results of the content analysis revealed that the first and foremost reason for the participants to frequently patronize Mr Price was because of the *affordability of prices*. The participants in this study also mentioned the *quality of garments*, *availability of sizes*, *fashionable styles* and the *store location* of the retailer as the main reasons for patronizing Mr Price.

The majority of the participants who had mentioned *affordability of prices* to be the reason for frequently patronizing Mr Price in terms of comments such as “*prices are reasonable*” and “*I can afford their prices for cash*”. The Mr Price group claim to be one of the fastest growing retailers in South Africa and it is known to offer casual, fun, relaxed and affordable fashion for everyone (Mr Price, 2012). One of the reasons that may attribute to the importance of lower prices for these female consumers could be that although South Africa’s economy is seen to be developing rapidly and the living standards of people are rising, there is still a large majority of consumers whose living standards are relatively low (Van Aardt, 2008:2).

Concerning the attribute *quality of garments* as the reason for frequently patronizing Mr Price, some participants expressed that “*they have quality clothes*” and a few who frequently patronize Mr Price because of the *availability of sizes* gave comments such as “*I fit into their sizes*”. Whereas again few participants who had regarded *fashionable styles* to be the reason to frequently patronize Mr Price commented “*I like their fashionable styles*”. Mr Price offers latest international trends at exceptional prices (Mr Price, 2012). With regard to the attribute *store location*, female consumers in this study reasoned that Mr Price is conveniently located at shopping malls with comments such as “*available at shopping malls*”.

5.2.2.5 Reasons for frequently patronizing Edgars

The results of the descriptive analysis on patronization of the clothing retailer indicated that Edgars was the third frequently patronized clothing retailer by the participants in this study. In response to the question concerning reasons for patronization, the results of the content analysis indicated that *availability of various sizes*, *variety of merchandize*, *quality garments* and attribute of *store location* of the retailer were the reasons participants in this study frequently patronized Edgars.

Of these, a significant number of participants who ranked Edgars as their most frequently patronized clothing retailer claimed *availability of various sizes* to be the main reason they preferred to shop for clothing at Edgars. Comments of the participants relating to *availability of various sizes* included “*I am small, they have petite sizes which I don't need to alter*” and “*they have a tall range*”. This finding is not surprising, because according to Edgars (2013), Edgars offers petite as well as the tall range collection of garments to cater for consumers who may not fit into the average sizes. Moreover Edgars also stocks house brands such as Penny C, catering for fuller figured women and Merien Hall, who has also introduced a petite collection apart from the usual range (Edgars, 2013). This means female consumers are able to find garments that fit in the size they require because of various options offered by Edgars.

On the other hand, *variety of merchandize* including a variety of brands were also considered the reason by a few participants to frequently patronize Edgars. According to the participants “*Edgars has a variety of clothing brands which makes shopping easier*”. Edgars offers a dominant assortment of trendy fashionable national and international products as well as in-house brands such as Free 2bu and Kelso to mention a few, and is also the leading distributor of top global brands (Edgars, 2012). This means consumers are able to find different brands under one roof which makes shopping easier.

Very few participants who had expressed *quality of garments* was the reason they frequently patronized Edgars commented “*they have quality clothing*” whereas a comment relating to the convenience of the *store location* was “*it is easy to find the shop*”.

5.2.2.6 Reasons for frequently patronizing Truworths

The results of descriptive analysis on patronization of clothing retailers indicated that Truworths was the fourth frequently patronized clothing retailer by the participants in this study. In response to the question concerning reasons for patronization, the content analysis indicated *quality* and *styles of garments* were the reasons female consumers in this study frequently patronized Truworths clothing retailers.

Half of the participants who expressed that they frequently patronized Truworths because of the *quality of the garments* gave comments such as “*they have quality*” and “*the material is of quality*”. According to Truworths (2012), the retailer advocates to cater for the youthful, quality conscious South African customers. It is, therefore, understandable that those who frequently patronize Truworths do so for *quality of garments*.

The other half of the participants who had considered *styles* of the garments to be the reason for frequently patronizing Truworths regarded comfortability of the styles to be important. This view was expressed though comments such as “*because of comfortable styles*”. Or according to one participant “*I like their styles.*” The results may imply that *quality of garments* and appealing *garment styles* are the key reasons why Truworths is a desirable place for some participants to shop for their garments.

5.2.2.7 Reasons for frequently patronizing Foschini

The results of the descriptive analysis on patronization of clothing retailers indicated that Foschini was frequently patronized by two participants in this study. In response to the question concerning reasons for patronization, the results of the content analysis on reasons indicated two reasons namely, *styles* and *quality of the garments*.

One participant who expressed *styles of garments* as the reason to frequently patronize Foschini commented “*I like their styles*”. According to Foschini (2012), the retailer believes in innovative and creativity. As a result they have a dynamic in-house design team specializing in fashion design. It is, therefore, not surprising that this clothing retailer offers good *styles* which made some female consumers frequently patronize Foschini. *Quality of*

garments was considered the reason to frequently patronize Foschini by another participant in this study through a comment of “*they have quality goods*”.

5.2.2.8 Reasons for frequently patronizing Donna Claire

The results of the descriptive analysis on patronization of clothing retailers indicated that Donna Claire was frequently patronized by two participants in this study. In response to the question concerning reasons for frequently patronizing Donna Claire clothing retailer, the content analysis revealed *availability of sizes* and *comfortable styles* as reasons these two participants shop for their clothing at Donna Claire.

One participant who mentioned *availability of sizes* as the reason for frequently patronizing Donna Claire expressed the view that Donna Claire offers larger sizes “*I find the bigger sizes*”. On the other hand the importance of the attribute *comfortable styles* as the reason the other participant in this study frequently patronizes Donna Claire was evident through the comment “*their clothes are comfortable*”. Donna Claire is a clothing retailer in South Africa that focuses on a niche market offering stylish fashion for larger sized women (Donna Claire, 2012). One can assume that the participants who frequently patronize Donna Claire are larger women who find Donna Claire providing the size they need to fit their body shapes as well as comfortable styles.

5.2.2.9 Reasons for frequently patronizing Jet

The results of the descriptive analysis on patronization of clothing retailers indicated that Jet was frequently patronized by two participants in this study. The content analysis on reasons for frequently patronizing Jet clothing retailer revealed two reasons namely *affordability of prices* and *availability of sizes*.

Affordability of prices was regarded by the one of the participants in this study as the main reason she frequently patronize Jet. Comments of the participants relating to *affordability of prices* included “*their prices are affordable*”. Jet is a discount store aimed at serving the middle and lower in-come market (Edcon, 2012). Discount store refers to stores which offer items at a lower price than many other retail stores and concentrate mainly on national brands (Moye, 1998:5). Since Jet carries mainly national brands, it is interesting to note that most females in this study are not necessarily attracted to the Jet clothing retailer that promotes lower prices. The reasons to such attitudes require further investigation.

Furthermore, *availability of sizes* was considered the other reason given by the other participant for frequently patronizing Jet through comment “*I find my size*”.

5.2.2.10 Reasons for frequently patronizing Queens Park

The results of the descriptive analysis on patronization of clothing retailers indicated that Queens Park was frequently patronized by only one participant in this study. The results of the content analysis revealed *smart clothing* was the reason this female consumer preferred shopping for clothing at Queens Park. This is in line with what Queens Park advocates. Queens Park claims to offer timeless elegance and is defined by fine fabrics and classic tailoring (Queens Park, 2012). Comment relating to *smart clothing* was “*they have smart and good looking clothes.*”

5.2.2.11 Reasons for frequently patronizing Ackermans

The results of descriptive analysis on patronization of clothing retailers indicated that Ackermans was frequently patronized by only one participant in this study. The results of the content analysis revealed *reasonable prices* was the reason this participant shops for clothing at Ackermans. Ackermans stores are known to be South Africa's value chain retailer and stockists of affordable, stylish and fashionable clothing for the whole family (Ackermans, 2012). Although this retailer sells clothing for the whole family, it seems many people associate it with children's wear, most probably because of its logo, “Ackerman Baby and Company”. Comment relating to reasonable prices was for example “*the prices are reasonable*”.

5.2.2.12 Reasons for frequently patronizing Miladys

The results of the descriptive analysis on patronization of clothing retailers indicated that Miladys was frequently patronized by also only one participant in this study. The results of the content analysis on reasons for frequently patronizing Miladys clothing retailer revealed that this participant was attracted by the *styles of the garments* which fit her body shape. The following comment was shared by the participant: “*their styles fit my body*”. The finding is understandable, according to Miladys (2012), the retailer is known to offer latest fashion with the most flattering style and fit. Moreover Miladys also claims to offer in-house Rene'

Taylor range especially for fuller figure women. This may imply that women of various body shapes can find their comfortable garments sizes and styles.

5.2.2.13 Reasons for frequently patronizing “Other”

The results of the descriptive analysis on patronization of clothing retailers indicated that “other” was frequently patronized by only two participants in this study. Participants revealed they frequently patronize “other” clothing retailers apart from the ones provided. The results of the content analysis on reasons for frequently patronizing “other” clothing retailers revealed *unusual styles* of the garments and *affordability of the prices* were the reasons these women prefer to shop for their clothing at the “other” clothing retailers.

One participant who mentioned *unusual style* as the reason for most frequently patronizing “other” clothing retailers expressed their view through comment “*I look for unusual styles*”. On the other hand, the other participant who had considered *affordability of the prices* of the clothing was important for frequently patronizing “other” clothing retailers gave the following comment “*their prices are cheaper*”. Female consumers in this study confided that they frequently patronize foreign clothing retailers such as Chinese clothing retailers which sell unique and cheaper clothing, unfamiliar to the South African Market.

The results of the reasons for the reasons regarding the most frequently patronized clothing retailer ranked number (1) by the participants, reflect the fact that female consumers in this study seek out specific attributes from clothing retailers such as, *quality garments, comfortable and fashionable styles, availability of sizes, variety of merchandize, affordable prices, good customer services, presentation of garments in store as well as store location*. It is important that clothing retailers to identify the important attributes demanded by their target market and provide such products and services in order to attract more customers.

5.2.2.14 Frequently patronized clothing retailers ranked number two and three by the participants

Additional analyses were conducted to determine the clothing retailers ranked number (2) and number (3) by the participants. In this part of the question, participants were not requested to provide reasons for ranking the clothing retailers number (2) and (3). Interestingly, results derived from the descriptive analysis indicated Woolworths, Edgars and Mr Price were consistently top three for the second frequently patronized clothing retailers, however, Mr Price

lost its position to Edgars when competing with Woolworths for the number one position. With regards to shops ranked number (3) by the participants, it is interesting to see that the three retailers (Woolworths, Edgars and Mr Price) which had dominated the top positions for clothing retailers ranked number (1) and number (2) only Mr Price still featured in the third position. Descriptive analyses and graphic presentation of frequently patronized clothing retailers ranked number (2) and (3) are illustrated in **Appendix I**

Female consumers base their decision to frequently patronize the clothing retailer by evaluating the attributes that the store offers and align the attributes with their personal values they may want to achieve through clothing (Demir *et al.*, 2009:43). Moreover, the specific personal values which female consumers seek through clothing also influences garment fit preference (Kinley, 2010:407). In the next section, participants' psychographic information on garment fit preferences is presented.

5.2.3 Garment fit preferences

The role of personal values in determining garment fit preferences may suggest that female consumers often evaluate and select the fit based on the personal values they may want to project to others. Determining garment fit preferences may give insight into the value system of the participants in revealing what they need to project to others or achieve for themselves through the fitting of the garment. This question addresses part of research **Objective 1** of this study.

Garment fit preferences were measured by instructing the participants to indicate the preferred fit for pants (an American term for trousers), a blouse and garments in general. The options through which fit preference were determined included the terms *tight-fitting*, *semi-fitting* and *loose-fitting*. Each of these terms refers to the general amount of wearing and design eases (the amount of fabric added above and beyond the body measurement at various body locations) that is allowed in a garment (Rasband & Lietchy, 2006:36).

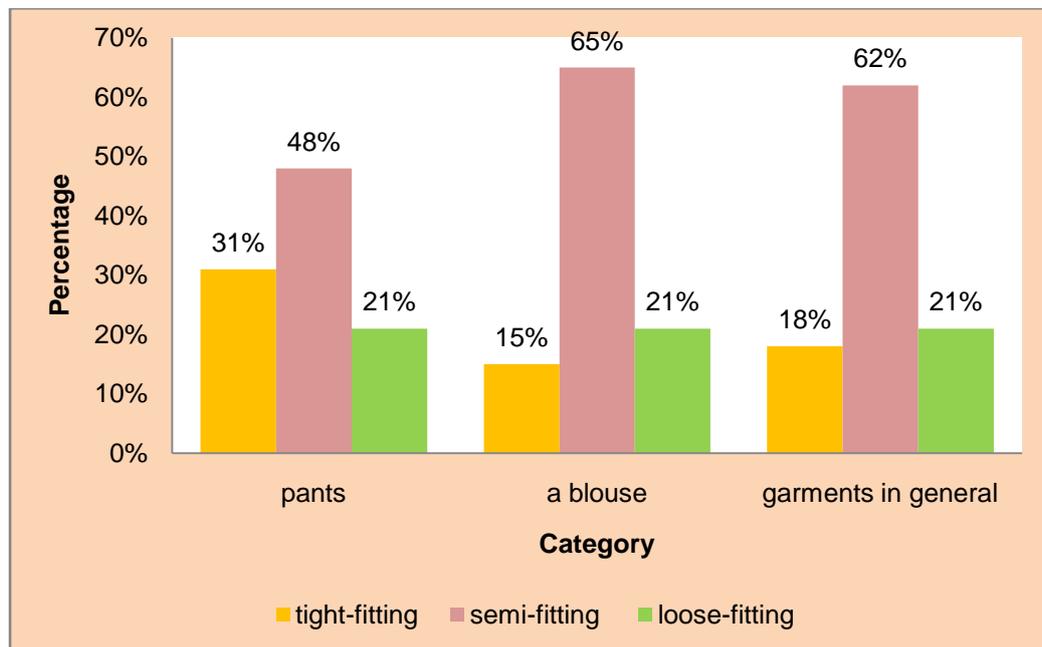
Table 5.5 presents the frequencies and percentages of the fit preferences of the participants. The results from the 62 participants who participated in this study indicated that across the three categories measured (pants, a blouse and garments in general) an overwhelming majority of the participants selected *semi-fitting* as the most preferred fit for a blouse (65%; n=40) for garments in general (62%; n=38) and for pants (48%; n=30).

TABLE 5.5 FIT PREFERENCES FOR PANTS, A BLOUSE AND GARMENTS IN GENERAL

Fit preference	Tight-fitting	Semi-fitting	Loose-fitting
	Garment category		
Pants	(n=19; 31%)	(n=30; 48%)	(n=13; 21%)
A blouse	(n=9; 15%)	(n=40; 65%)	(n=13; 21%)
Garments in general	(n=11; 18%)	(n=38; 62%)	(n=13; 21%)

A graphical presentation of fit preferences for pants, a blouse and garments in general is illustrated in Figure 5.5

FIGURE 5.5 GRAPHIC PRESENTATION OF PREFERRED FIT FOR PANTS, A BLOUSE AND GARMENT IN GENERAL



The findings of this study which are particularly of the sample of South African female consumers are almost similar to the findings from a study conducted by Newcomb and Istook (2011:406) who found that the majority of young Mexican-American women in the United States of America also preferred semi-fitting casual pants, blouses or tops, and

dresses. In another American based study conducted by Pisut and Connell (2007:376), the researchers examined preferences for fit for various garments such as; jackets, skirts, blouses, pants and jeans. Semi-fitting was also the preferred fit for all garments in that study. Through the results of this study and the findings of these two American studies, it can be suggested that most female consumers generally prefer semi-fitting garments (the silhouette which shows the shape of the figure, without tightly hugging or showing the contours of the figure).

The descriptive analysis further indicated that although semi-fitting fit preference was the significant choice for the categories studied, a substantial portion of the participants were divided in their preference for either tight-fitting (the silhouette which is close fitting, and follows the shape of the figure) or loose-fitting garments (the roomy silhouette which does not show any body shape). This indicates variability within the market that may be due to some other factors which need further investigation. Interestingly enough, the loose-fitting preferences was selected by 21% (n=13) of the participants across all the categories. Connell, Brannon, Ulrich, Presley, Grasso, Judson and Gray (2001:73) in their study on "Understanding fitting preferences of female consumers" reported that respondents who chose one type of fit preference for one garment tended to select the same fit preference for the other garments. Therefore, the finding may suggest that the participants in this study, who preferred loose-fitting in a particular category, selected the same fit for the remaining garment categories. Furthermore, the preference for tight-fitting pants was higher (31%) than the preference for tight-fitting blouses (15%) and garments in general (18%), which were fairly evenly split. The preference of tight-fitting pants by the female consumers in this study could be the result of current fashion trends in South Africa which is observed to be emphasizing more of the slender fit in pants and Jeans offered in clothing retail outlets.

In a study conducted by Chattaraman and Rudd (2006:47) to uncover any linkages between physical and social psychological attributes of the body and aesthetic attribute preferences in clothing among female undergraduate students, the researchers reported that fit preferences were influenced by body size referring to the physical body characteristics such as the body weight or body shape variations tend to impact on the participants' garment fit preferences. Tight-fitting garments could be preferred by participants who have narrow waists and smaller body sizes, possibly for the garments to conform to their shape and size and to flatter their smaller bodies, while participants who have larger sizes or with less defined waists would prefer loose garments, possibly to compensate for perceived figure flaws (Chattaraman & Rudd, 2006).

In the following section reasons provided by the participants for their fit preferences across the three categories (pants, a blouse and garments in general) are presented. The reasons for the tight, semi and loose-fitting fit preferences of pants are presented first, starting with a discussion of the most frequently selected semi-fitting option.

5.2.3.1 Participants' reasons for the preference of semi-fitting pants

As previously discussed in Section 5.2 the reasons provided by the participants were content analyzed, whereby the raw data were reduced into manageable proportions. The most descriptive words were identified and similar concepts were grouped to form the categories that best described the main concerns or facts associated with the item in question. The discussions are supported by quotations relevant to each category derived from the textual data of the participants.

In this study, the most preferred fit for pants was the semi-fitting option (48%; n=30). In response to the question concerning the reasons for this fit preference, the results of the content analysis of the participants who preferred semi-fitting pants revealed *body shape concerns*, to *accommodate body shape*, *comfortability*, *presentability*, *age appropriateness* and the *enhancement of body shape* as the categories that emerged to best describe this fit preferences.

Of the above mentioned categories, most participants indicated that they preferred semi-fitting pants because of *body shape concerns*. These participants seemed to be concerned about their perceived body shape and the fitting of the pants across some body parts. Comments relating to *body shape concern* included “*because of my waist, I don't want clinging clothes*”. On the other hand, the category to *accommodate body shape* was considered the reason by some participants in this study. According to these participants, this fit made “*allowance for bulgy stomach*” and “*it accommodates the round figure*”. Moreover, regarding the category *comfortability* for the preference of semi-fitting pants, a few participants explained “*it is comfortable all working hours*” and “*I want to be comfortable when I walk*”, while the category *presentability*, although mentioned by fewer participants whose views indicated personal value of modesty influenced their preference of semi-fitting pants. Comments of the participants relating to the category *presentability* included “*I want to be presentable and not expose my body shape*” and “*I don't want to show off traces of underwear*”. Furthermore, concerning the category *age appropriateness*, only one participant gave this reason for the preference of semi-fitting pants. According to the participant wearing semi-fitting pants “*is age appropriate*”. Again one of the participants who

had indicated the category *enhancement of body shape* as the reason for the preference of semi-fitted pants commented “*It helps to give your body a bit of shape than loose clothing*”.

5.2.3.2 Participants’ reasons for the preference of tight-fitting pants

The second preferred fit for pants by the participants in this study was tight-fitting (31%; n=19). The results of the content analysis of the participants who preferred tight-fitting pants revealed four main categories that explained the reason for this preference. Most participants in this study indicated that the *slimming effect* that tight fitting pants provide was the main reason for the preference of tight-fitting pants. The other categories that came to light included the fact that tight-fitting pants *compliment the body shape*, give a *smart look* and allow for *comfortability*. Most participants who had opted the *slimming effect* tight fitting pants allow revealed that through tight-fitting pants, they seemed to look slimmer as illustrated through these comments “*tight-fitting pants makes me look slimmer*” and “*I look thinner*”.

The category *compliments body shape* was the reason for the preference of tight-fitting pants by few of the participants who seemed to be interested in showing off their body shapes. This was evident through comments such as “*it goes with my body structure*” and “*it shows off my body, hips and waist*”. Furthermore, in view of the category *smart look*, very few female consumers indicated that they preferred tight-fitting pants because “*it looks smart*” and “*it looks neat*”. With regard to the category *comfortability* for the tight-fitting preference, only one participant explained that she wears tight-fitting pants because “*it feels most comfortable*”.

5.2.3.3 Participants’ reasons for the preference of loose-fitting pants

The loose-fitting fit option was the least preferred among the participants, only 21% (n=13) of the participants chose this fit option for pants. *Body shape concerns*, *corrects faults*, *appropriateness*, *comfortability* and *freedom* were identified as the categories of reasons from the content analysis of the statements provided by the participants who preferred loose-fitting pants. Of these categories, *body shape concerns* were mentioned by a significant number of the participants as the reason for the preference of loose-fitting pants. These participants explained that they preferred loose-fitting pants for the reason that they do not want to emphasize parts of the body. This was evident through comments such as “*I don’t want to show my big thighs, buttock and hips*” and “*I have large legs*”. On the other hand the

category *corrects faults* was identified by some participants as the reason for the preference of loose-fitting pants through comments such as “*when I wear loose-fitting pants, it corrects body shape faults*”. It appears loose-fitting pants were important to these female consumers for the reason that it would assist to compensate figure flaws. The category *appropriateness* was considered by very few participants who seemed concerned about revealing their changing body shapes because of their age as commented by this participant “*I am older I need to hide*”. Furthermore, another participant regarded loose-fitting pants to be *appropriate* because of their weight through comments such as “*it suits me best because of my weight*”. Regarding the category of *comfortability*, one participant explained that loose-fitting pants “*are more comfortable*”, while the category *freedom* was also expressed by only one participant who commented “*my body moves freely*”, while referring to the preference of the loose-fitting pants, an indication of freedom in movement.

Following this discussion are the reasons for the preferences of tight, semi and loose-fitting blouses, starting with a discussion of the most selected semi-fitting option for a blouse.

5.2.3.4 Participants’ reasons for the preference of a semi-fitting blouse

The most preferred fit for a blouse (semi-fitting option) was selected by 65% (n=40) of the participants. In response to the question concerning the reasons for the participants’ preferred fit for a blouse, the results of the content analysis of the participants who preferred semi-fitting blouses revealed *comfortability, suitability, presentability, smart look* and *body shape concerns* as the categories of reasons for the semi-fitting preferences.

The category *comfortability* was regarded by the majority of the participants as the reason for their preference of semi-fitting blouse. These participants expressed their view of a semi-fitting blouse in terms of the fact that it is comfortable. This was evident through comments such as “*it makes me feel comfortable*” and that “*it gives enough room to breathe*”, an indication of comfort in the semi-fitting blouse according to these participants. The category *suitability* was regarded the reason by some participants for preferring the semi-fitting blouse because according to these participants this fit suits their body shapes as expressed in this quote “*it is suitable for my body shape*”. Another participant explained the *suitability* of a semi-fitting blouse was the fact that it is possible to “*...add extra tops or vest underneath in winter*”. Furthermore, concerning the category *presentability*, a few participants commented that a semi-fitting blouse “*looks presentable*” while another participant expressed the view that a semi-fitting blouse does not reveal the contours of the body shape. According to the participants “*it looks good, no showing*”. The category *smart look* was mentioned by very

few participants who shared that they preferred a semi-fitting blouse because “*it gives a tailored look*” and “*it looks smart*”. Again very few participants indicated the preference of semi-fitting blouse because of *body shape concerns*. These participants seemed to be concerned by their size “*because of my size*” and perceived body shapes “*I can’t wear tight-fit because I have a round figure*”.

5.2.3.5 Participants’ reasons for the preference of loose-fitting blouse

The second preferred fit for a blouse by the participants in this study was loose-fitting (21%; n=13). The results of the content analysis showed that participants who preferred a loose-fitting blouse revealed *comfortability*, *modesty* and *cover up* as the categories of reasons for this fit preference. Of these categories, most participants claimed *comfortability* was the main reason they preferred loose-fitting garments. These participants seemed to value comfort when they are wearing a blouse. This was evident through comments such as “*I like feeling comfortable*”, and “*I prefer loose-fitting blouses to be flexible not tied up*”. Furthermore, with regard to the category *modesty*, it appears some participants’ preference of a loose-fitting blouse was influenced by not wanting to reveal certain body parts. According to these participants “*I don’t want to expose breasts and stomach*”. Participants also shared that by wearing a loose-fitting blouse “*it is tidy it doesn’t show bulges*”. Few participants expressed the category *cover up*, these participants indicated that a loose-fitting blouse hides some perceived figure flaws. This was evident through comments such as “*you hide some bulges*” and “*I need to cover big body*”.

5.2.3.6 Participants’ reasons for the preference of tight-fitting a blouse

The least preferred fit for a blouse by the participants in this study was the tight-fitting option (15%; n=9). Content analysis of the data indicated that most participants who preferred a tight-fitting blouse mentioned that it *compliments body shape* as the reason they preferred this fit option. Participants also indicated that a tight-fitting blouse has a *slimming effect*, makes the wearer look *presentable* and provide a *comfortable* experience. These are some of the other categories of reasons the participants preferred a tight-fitting blouse.

Concerning the most mentioned category, *compliments body shape*, it appears these participants preferred this fit option for a blouse because it shows off their body shape beautifully. This was expressed through comments such as “*it lines my body nicely*” and “*it shapes my body well*”. On the other hand, the category *slimming effect* was mentioned by

very few participants. Comments relating to slimming effects of tight-fitting blouses included “*it makes me look slimmer*” and “*it makes me look smaller*”. Regarding the category *presentability* as the reason for the preference of a tight-fitting blouse one participant commented “*it looks presentable*”, while the category *comfortability* was indicated by only one participant “*I feel comfortable in a tight-fitting blouse*”.

The reasons for the preferences of tight, semi and loose tight-fitting garments in general are presented below, starting with a discussion of the most selected semi-fitting option.

5.2.3.7 Participants’ reasons for the preference of semi-fitting garments in general

The majority of the participants (62%; n=38) in this study indicated the preference of semi-fitting garments in general. In response to the question concerning the reasons for the participants’ preferred fit for garments in general, the content analysis of data of the participants who preferred semi-fitting garments in general indicated *comfortability* was the most mentioned reason for this fit option, followed by *confidence*, *accommodate body shape*, *modesty* and *good appearance* as the reasons for the preference of semi-fitting option.

Most participants who revealed the category *comfortability* as the reason for the preference of semi-fitting garments in general expressed the view that semi-fitting garments in general are comfortable “*I feel comfortable*” and the movements in semi-fitting garments are unrestricted “*it gives room for movement*”. The second mentioned category *confidence*, was built upon the explanation of some participants such as “*it gives me confidence*” while referring to the preference of semi-fitting garments in general. Furthermore, few participants regarded the third identified category *accommodates body shape* as the reason for the preference of semi-fitting garments in general because according to them this type of fit provides “*allowance for bulgy stomach*”. The category *accommodate body shape* was also expressed by another participant on aspects such as weight gain “*I will still fit even if I gain weight*”. Regarding the fourth revealed category of *modesty*, again a few participants explained that they prefer this fit option because it does not show the body shape. As illustrated in statement by these participants “*I don’t want to show my body*”, while another emphasized “*I don’t like clinging clothes*”. Furthermore, in view of the fifth category *good appearance*, very few participants indicated that semi-fitting garments in general “*gives a tailored look*” while another participant expressed the view that semi-fitting garments in general “*look professional*” while referring to the category *good appearance*.

5.2.3.8 Participants' reasons for the preference of loose-fitting garments in general

The second preferred fit for garments in general by the participants in this study was the loose-fitting option (21%; n=13). The results of the content analysis of the reasons for the preference of loose-fitting garments in general were categorized as *comfortability*, *modesty* and *freedom* as the main reasons for this fit preference.

Of these categories, most participants indicated *comfortability* was the reason they preferred loose-fitting garments in general. These participants explained that this type of fit is comfortable around some areas of the body. For example one participant commented “*for comfort especially around my waist*”. Some participants seemed to be just comfortable in loose-fitting garments in general as expressed by this participant “*loose-fitting garments are comfortable*”. With regard to the category *modesty*, few participants expressed the fact that they prefer loose-fitting garments in general in order to avoid revealing their body shapes. This was revealed through comments such as “*I don't like to show my curves*”, and “*loose fitting garments do not show bulges*”. The category *freedom* was mentioned by very few participants. One of the participants explained that she preferred loose-fitting garments in general because she can “*move freely*” in them.

5.2.3.9 Participants' reasons for the preference of tight-fitting garments in general

The least preferred fit for garments in general was tight-fitting (18%; n=11). The results of the content analysis of the participants who preferred tight-fitting garments in general revealed the category *compliments body shape* as the main reason they chose this fit option. Apart from that, participants also indicated *slimming effect*, *good feeling* and *comfortability* as the categories of the reasons for the preference of tight-fitting garments in general.

With regard to the category *compliments body shape*, most participants who prefer tight-fitting garments in general emphasized the fact that tight-fitting garments show off the body shape well “*it shapes my body well*”, while another participant explained that tight-fitting garments in general “*look appealing*”. This suggests that these female consumers are happy to reveal their body shapes. In view of the category *slimming effect*, some participants explained that tight-fitting garments in general makes them “look thinner” while another participant expressed a feeling “*you feel smaller*”. Moreover, a few participants who considered the category *good feeling* as the reason for the preference of tight-fitting

garments in general pointed out that this type of fit "... *makes me feel good*", while very few participants regarded tight-fitting garments in general provided *comfortability*. The category *comfortability* was identified in statements such as "*I am comfortable in fitted clothes*" and "*I feel comfortable*".

The overall results of the reasons for the fit preferences for pants, a blouse and garments in general clearly give an indication that female consumers in this study chose fit levels according to what they needed to achieve or project to others. Apparently these needs seemed to be highly subjective and related to personal values which female consumers seek through clothing.

According to Shim and Bickle (1993) cited in Newcomb (2009), the perceptions that consumers have regarding their body shapes is assumed to influence the way participants respond to questions related to body shapes. In order to gather this type of data, it was necessary to include the identification of perceived self-reported body shape. In the following section, data on the psychographic profile of the participants concerning perceived self-reported body shapes (section B of the questionnaire) are presented and discussed.

5.3 RESULTS FROM SECTION B OF THE QUESTIONNAIRE

In section B, the psychographic data of the participants' perceived self-reported body shapes was analyzed using a quantitative method of descriptive analysis through which frequencies and percentages of the different body shapes were derived. Table 5.6 and Figure 5.6 are presented to aid the interpretation of the results derived from the descriptive analysis.

5.3.1 Identification of perceived self-reported body shape

To identify the perceived self-reported body shapes, participants were instructed to place an **X** in the box next to the illustration of the female body shape which they perceived to be the closest to their own body shape. The choices were *the hourglass*, *the inverted triangle*, *the rectangular*, *the triangle*, *the oval* and *the diamond* body shapes. (the descriptions and motivation for the use of these particular female body shapes are found in Chapter 2. Paragraph 2.5. of this dissertation). This question addresses research **Objective 2** of this study.

Participants were further instructed to tear off their chosen body shape from the questionnaire for reference when answering questions in Section C which followed in the

questionnaire. Participants who were unable to identify their perceived own body shape from the given illustrations, were requested to sketch their own perceived body shape under the “own sketch” column. Three participants who did not identify themselves nor sketched their own body shape were excluded from the analysis.

It is important to reiterate that the results below were self-reported by the participants, thus the reported body shapes may not adequately represent exactness of the participant’s body shapes, but only a self-evaluation of the shape that according to the participants best represented their own shape.

Table 5.6 shows the frequencies and the percentages of the perceived self-reported body shapes of the participants. Almost half of the participants in this study perceived themselves to have a triangle body shape (42%; n=25). A significant number of the participants perceived themselves to have an oval body shape (25%; n=15). The remaining 19 participants were distributed into the rectangle, inverted triangle or hourglass shapes, with only two participants identifying their body shape as a diamond.

TABLE 5.6 FREQUENCIES AND PERCENTAGES OF PERCEIVED SELF-REPORTED BODY SHAPES OF THE PARTICIPANTS

	Triangle	Oval	Rectangle	Inverted triangle	Hourglass	Diamond
Body shapes						
Frequency (n = 59)	25	15	8	5	4	2
Percentage (%)	(42%)	(25%)	(14%)	(8%)	(7%)	(3%)

Source of body shape illustrations: Liddelow 2011

A graphical presentation of the frequencies of the perceived own body shapes is offered in Figure 5.6.

FIGURE 5.6 GRAPHIC PRESENTATION OF PERCEIVED SELF-REPORTED BODY SHAPES OF THE PARTICIPANTS

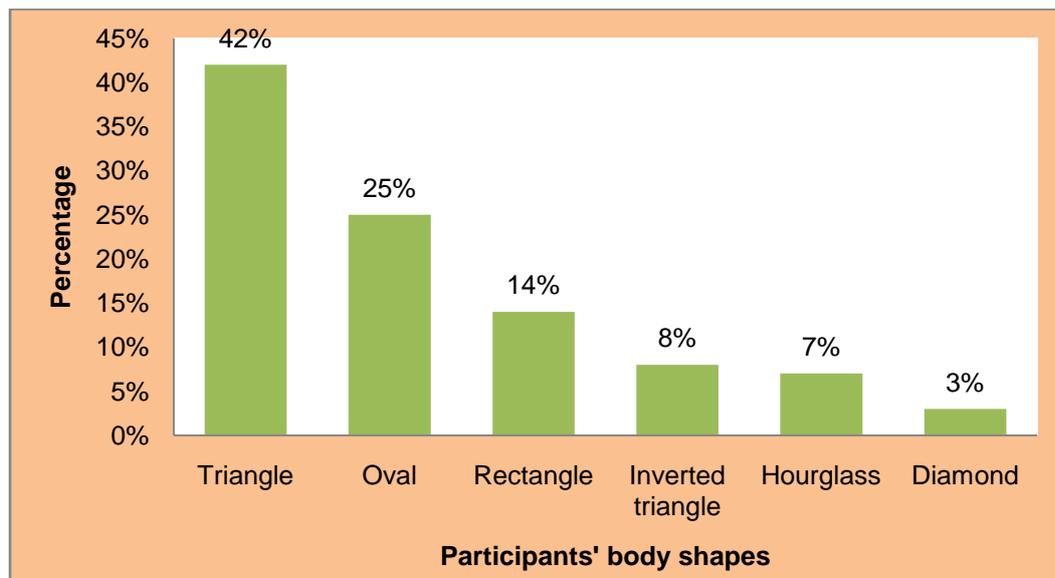


Figure 5.6 indicates the distribution of the sample in the six body shape categories. As shown in the graph, the results clearly show that the majority of female consumers in this study identified themselves with the triangle body shape. According to Rasband and Liechty (2006:24), the silhouette of the triangle body shape appears to be smaller or narrower above the waist and hips are proportionally wider and rounded as reported in Chapter 2, Table 2.3.

The results also indicate that the perceived oval body shape was also prevalent among the participants in this study. As mentioned in Chapter 2, Table 2.3. the oval body shape, according to Rasband and Liechty (2006:25), has an overall appearance of being round at the waistline. Particularly of the oval body shape is the fact that the bust, midriff, waist, stomach, hips and upper legs are larger and rounder, and the waistline is undefined (Rasband & Liechty, 2006:25). Although these findings were derived from perceived body shape inferences, the findings confirm the report of Pandarum (2010) who through limited South African data collected using a 3D body scanner, discovered that the majority of South African females are oval shaped.

Furthermore, the results of this study also show that fewer participants considered themselves an inverted triangle body shape, the hourglass body shape and even fewer the diamond body shapes. A bigger percentage (14%; n=8) of the participants still considered themselves to be a rectangle body shape.

In the following section results from Section C of the questionnaire are discussed. In this section, the hard laddering exercises which identified the personal values and the resulting emotions from the perceived body shapes and garment sizing problems are presented. The section also presented open-ended questions on body shapes and garment sizing which investigated different aspects of this study while satisfying research Objectives 4, 5 and 6.

5.4 RESULTS FROM SECTION C OF THE QUESTIONNAIRE

The main aim of this study was to explore female consumers' perceptions of garment fit and the effect of personal values on emotions. In order to determine the emotions elicited when garment fit matches or mismatches personal values through clothing, this study applied means-end chain theory. This theory, through hard laddering interviews, was used to uncover female consumers' underlying personal values and emotions driving the garment fit choices and perceptions of garment fit, the thoughts and problems about garment sizing in South Africa by eliciting attribute-consequences-personal value associations (Gutman, 1982:60).

In Section C, the responses to the open-ended questions from the hard laddering interviews on perceived body shapes and garment sizing were carefully coded and categorized into attributes, consequences and personal values. (An explanation on how the instrument allowed the researcher to identify the attributes, consequences and personal values is explained in Section 5.4.1.) Based on the above coding and categorization, the hierarchical value maps (HVMs) were constructed through the software program Mecanalyst V 9.1. As previously mentioned in Chapter 4, Section 4.7.4.3, the HVMs display the attributes, consequences and personal values mentioned by most participants and their corresponding links between them.

Additionally in Section C, a comprehensive picture of garment fit problems of perceived body shapes and garment sizing was also measured through open-ended questions. Data from the open-ended questions on perceived body shapes and garment sizing were analyzed using the open-coding system, whereby the raw data was reduced into manageable proportions. The most descriptive words were identified and similar concepts were grouped

to form the categories that best described the main concerns or facts associated with the item in question. The discussions are supported by quotations relevant to each category derived from the textual data of the participants.

Summaries of the open-ended questions on perceived body shapes and garment sizing are illustrated in the tables found in **Appendix J**. These tables (Appendix J) show the reduced data which has been coded into themes and categories formulated through concepts derived from the exact words of the participants.

Below, the presentation, analyses and discussions of the hard laddering interviews and data from open-ended questions on body shapes and garment sizing as outlined in section C of the questionnaire are presented. However before proceeding with the analysis of the HVMS from the hard laddering interview data on body shapes, it is necessary to explain the hard laddering exercise design conducted in this study and also to clarify what is depicted in the HVMS.

5.4.1 The hard laddering interview design

As previously mentioned in Chapter 4, paragraph 4.7.4.1, in this study the elicitation of the attributes involved a free elicitation or direct elicitation technique (Costa *et al.*, 2004:405). This means that participants were presented with a question for each hard laddering exercise, upon which each participant had to come up with three answers or what are referred to in laddering terms as attributes. Once the attributes were identified, only the first attribute was used for further laddering. The other two attributes were not ladderred as it was discovered through pilot testing the instrument that the laddering exercises for all the three attributes was time consuming and did not reveal anything different to the first ladder. It was, therefore, decided to ladder only the first attribute which was considered to be the most important and top of mind answer for the participants.

The elicitation of attributes was followed up by a two-step procedure whereby the participants were first asked the question “*why is this* (the attribute they identified in the first question) *important to you?*” for the reason which was given to the first attribute and afterwards this question was repeated for a further explanation to be provided by the participants. If in their explanations participants wanted to express the explanation as a feeling, they were given the opportunity to refer to the list of human emotions depicted in Appendix E. In this way, participants were able to move up the ladder of abstraction from firstly identifying an attribute to then determining the consequences resulting from the

attribute and finally leading to the personal values as the third and final step in the laddering process.

5.4.2 The hierarchical value maps (HVM)

The hard laddering exercises resulted in the hierarchical value maps (HVMs) illustrated in Figures 5.7 and 5.8 on perceived body shapes and Figures 5.9 and 5.10 on garment sizing which have been colour coded for easier identification of attributes, consequences and personal values. All attributes are in orange rectangles, the green rectangles represent consequences and personal values are represented in red coloured rectangles. Each rectangle block contains the code label and the percentage of participants that named or mentioned that particular code. Personal values which are at the top of the map are linked by arrows coming from the middle levels, which are the consumer consequences, while consequences are linked by arrows coming from the attributes which are at the bottom of the maps or form the first row at the bottom of the map. The thickness of each line represents the number of occurrences of a particular link between two codes. Thus, the thicker lines refer to links mentioned by a larger number of participants.

As already mentioned in Chapter 4, paragraph 4.7.4.3, with regard to the derived HVMs, it is worth mentioning that even though different attributes, consequences and personal values resulting from the emotional connotation with the attribute and the consequence are mentioned by many different participants, it does not necessarily mean that it is represented in the HVM. Deciding which code labels should be represented was accomplished by selecting a cut-off level to indicate which links or associations between the code label should be represented or omitted in the HVM. For example a cut-off of 2 means that all links or associations mentioned by at least two participants would be represented in the HVM. The chosen cut-off for each of the maps in this study, is based on the balance of meaningful information retained and clarity of the map created as indicated by Reynolds and Gutman (1988:20).

With regards to the derived HVM, it should be further emphasized that there are two types of links or associations that may be represented, these are direct or indirect links. According to Reynolds and Gutman (1988:20), direct links refer to relations in which one element leads to another without any intervening element. The elements flow in a sequential order within a ladder. For example, A – B – C – D – E. However, within any given ladder there are many more indirect relations, such as A–C, A–D, A–E, B–D and so forth. It is, therefore, important to determine the paths that are dominant in a map.

For more details on the presented HVMs, the attributes are the physical or perceptual characteristics (Veludo-de-Oliveira *et al.*, 2006:629) in a product (garment) or services (garment sizing) by the participants. While the consequences are results (functional or psycho-social) that the product or service is perceived to provide the customer, which can either be a desirable (positive) or undesirable (negative) outcome (McManus, Standing & Zanolli, 2009:5) of garment fit. Functional consequences are related to the results a consumer experiences physically after using the product (Peter & Olson, 1999:69). For example *improper fit* after wearing incorrect garment size. On the other hand psycho-social consequences refer to the psychological and social outcome of the product, such as how the experience makes the consumer feel (Peter & Olson, 1999:69). For example the feeling of *comfort* after wearing the style of the garment the consumer prefers.

The personal value represents beliefs and preferred end of existence that the individual tries to achieve in life (MacManus *et al.*, 2009:5). The personal values that consumers attach to products such as garments can be broken down into two types, namely instrumental and terminal values (Chema, Marks, Parcell & Bredahl, 2004:2). According to Chema *et al.* (2004:2) and Karve (2011:1), instrumental values are core values that act like tools or methods in achieving the desirable end-state, while terminal values are desirable end-state that individual work towards achieving through garments. These personal values have a large influence on the cognitive processes of consumers (Chema *et al.*, 2004:2) in their evaluation of garment fit.

Moreover, emotions and personal values are closely related to each other. According to Frijda (2007) cited in Nurkka ('n.d':3), every emotion hides a concern and in Frijda's vocabulary, concern is a synonym for motive, a need, a desire, a goal as well as the personal values, referring to all things that people care for and are important to them. In this regard, personal value is the concern which is also the terminal personal value that gives the situation (for instance improper fitting garment) its emotional meaning and the emotions point to the presence of some concern in the mind of the consumer. Hence the elicited emotions by the female consumers indicated the presence of a concern, which is also the terminal personal value for garment fit. Thus in this study, the emotional responses indicated in the HVMs are regarded as the outcome of an appraisal or evaluation process in which the problems of garment fit are linked to the underlying concerns or terminal personal values.

However, it is important to point out to the reader that the discussions of some ladders on the HVMs of body shape and garment sizing included direct quotes from the statements of the participants. These quotes are presented to indicate the importance of some answers

concerning the mentioned attribute or the consequence. Few participants included these expressions to clarify some of the consequences derived from the attributes on the map. Below are the presentations and discussions of the data derived from the hard laddering Exercises 1a and 1b on body shapes.

5.4.3 The hard laddering exercise 1a and 1b on body shapes

It is also necessary to mention that while doing the laddering exercises on body shapes (Exercises 1a and 1b), participants were asked to refer to the illustrations of the body shapes which they were previously instructed to tear off from section B of the questionnaire. This was the shape they had perceived to be closest to their own body shape. Placing the illustration of the body shape in front of the participants was one of the recommendations after pilot testing the instrument. It was noted that participants went back to the illustrations of their perceived body shapes (section B of the questionnaire) when answering hard laddering Exercises 1a and 1b on body shapes. This made it easier for them to remind themselves of the form of the body shape and where they experienced problems with body shape.

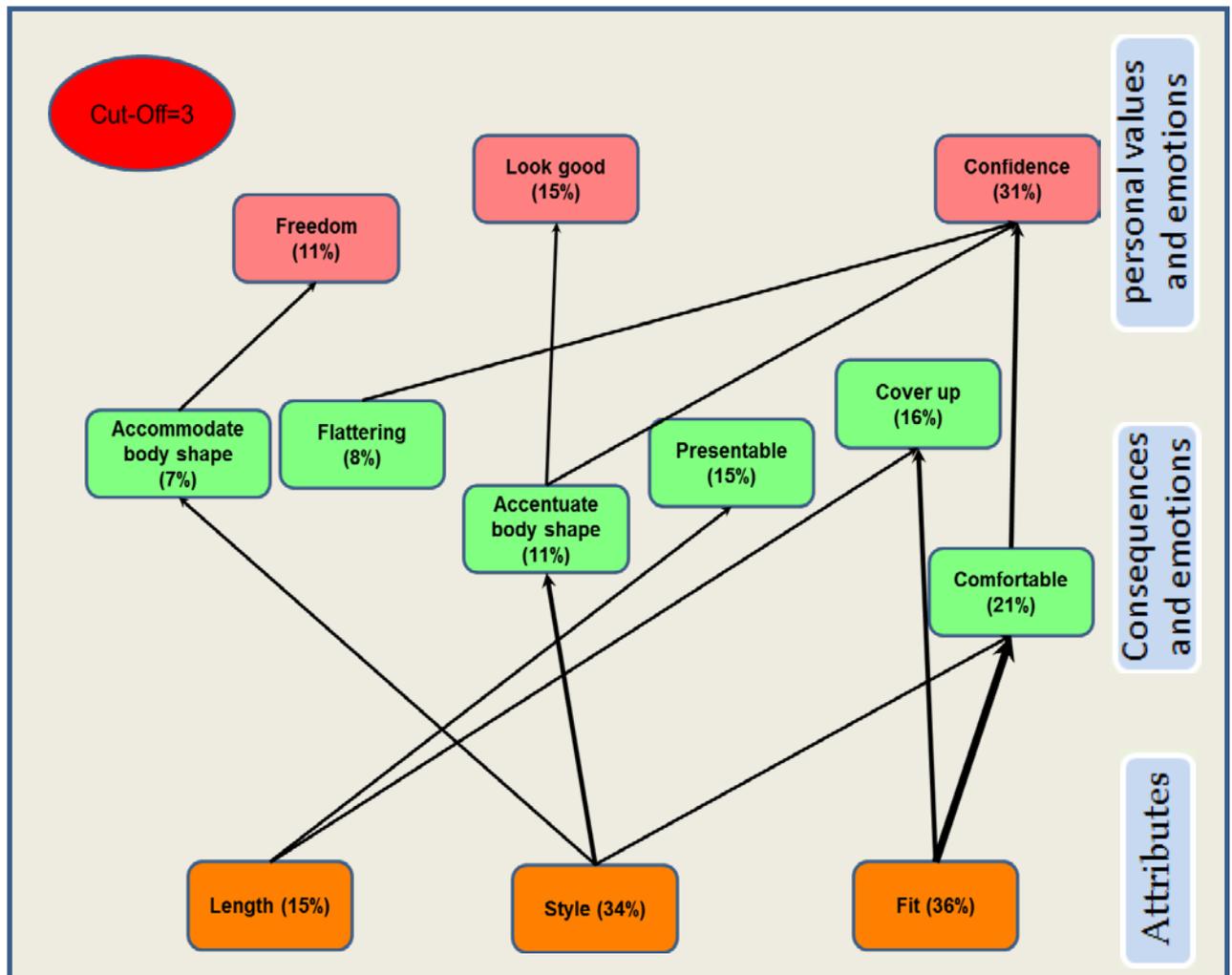
5.4.3.1 Findings on the hard laddering Exercise 1a on body shapes

The following question was presented to the participants for the elicitation of the attributes and consequently the laddering questioning for Exercise 1a on body shape, according to the process described in section 5.4.1 above. This question addresses part of research **Objective 3** and part of **sub-objective 1** of this study.

Considering your body shape, please write down the three most important criteria you always apply when choosing any of the ready-to-wear clothing items in store?

The HVM illustrated in Figure 5.7 presents the findings from the analysis of the important criteria female consumers take into account when choosing ready-to-wear garments. In this HVM, only direct links are included in the analysis and the chosen cut-off is 3.

FIGURE 5.7 HIERARCHICAL VALUE MAP OF THE CRITERIA FOR CHOOSING READY-TO-WEAR GARMENTS



The HVM in Figure 5.7 derived from the hard laddering Exercise 1a identifies “fit” (36%), as the most important attribute female consumers consider when purchasing ready-to-wear garments. “Fit” refers to the way a garment conforms to the body as well as the appearance of it, however, in this regard “fit” represents the participants’ most frequent selected fit option such as tight, semi or loose-fitting garment when purchasing ready-to-wear garments. For example, if participants indicated the consideration of semi-fitting fit option they would be referring to the word “fit”. “Style”(34%) is the second most important attribute considered after “fit”. The third attribute mentioned by the participants in this study is “length”(15%) of the garment. The attribute “length” represent the lengths of trousers, skirts, blouses, dresses and sleeves.

The HVM also suggests that the most mentioned attribute “fit” is linked to two direct consequences which are “comfortable” and “cover up”, with the direct link between “fit” and “comfortable” being the strongest on the map indicated by the thicker link on the map. Comfort of garments is a psychological feeling or judgment of the wearer under certain conditions (You, Wang, Luo, Li & Zhang, 2002:307). The comfortable feeling or sensation associated with the “fit” of garment mentioned by the participants is regarded as a psycho-social consequence. The psycho-social consequence “comfort” in the different garment fit options by the participants can well be explained by some female consumers’ responses. For example, while referring to the tight-fitting option *“I feel comfortable in tight-fitting garments as it makes me look younger”*. A few participants mentioned that they are comfortable in semi-fitting garments as they *“...enjoy the functional aspect of easiness in their movements, and feeling presentable”*. Very few indicated comfort in loose-fitting fit option because *“it is an appropriate look”*. This implies that, the comfort the consumer seeks in a garment is subjective. It is interesting to note that through different kinds of fit, female consumers seek the psycho-social consequence “comfortable” and hence the strongest link with a high mentioning of 21% on the HVM. When looking at the highest level of abstraction, it can be seen that the consequence of “comfortable” leads to a personal value of “confidence” which has a fairly strong link. The personal value “confidence” is an instrumental value which is emotional in nature. Emotions are the fundamental process which underlies every expression of the evaluation (Hannula, 2002:29). While female consumers consider the criteria for choosing ready-to-wear garments, there is a continuous unconscious evaluation of the different alternatives and consequences with respect towards the terminal values or desired end goals (Nurkka, (n.d’:2). This evaluation which is proceeding towards the terminal value is represented as a positive emotion.

Regarding the link between the attribute “fit” and the functional consequence “cover up”, the HVM suggests that this is also a fairly strong link. “Cover up” in this regard refers to the preference of the kind of fit which does not reveal the body shape. According to the participants in this study, tight-fitting garments which define the body structure were regarded negatively as they do not want to reveal their body shapes as illustrated in this comment, *“I consider loose-fitting garments so that I don’t show my body, I avoid tight-fitting garments”*. Thus the attribute “fit” is driven by the instrumental personal value “confidence” which is also a positive emotion and also the functional consequence “cover up” of the body shape.

The second most mentioned attribute which female consumers in this study consider when purchasing ready-to-wear garments is the “style”, also referred to as the design of the garment. The attribute “style” is linked to three direct consequences namely, “comfortable”,

“accentuate body shape” and “accommodate body shape”. A fairly strong link is suggested with the psycho-social consequence “accentuate body shape”. The psycho-social consequence “accentuate body shape” is linked to the instrumental personal values and emotional connection of “look good” as well as “confidence”. Another psycho-social consequence linked to “confidence” is “flattering”. Thus, some female consumers are seeking to “look good” when the style of the garment accentuates their body shape. Meanwhile others associate it with “confidence”.

Female consumers are also driven by terminal personal value and emotional expression of “freedom” which is regarded as the terminal value, when considering the attribute of “style”. The terminal personal value of “freedom” is derived from the functional consequence of “accommodate body shape”. This can be explained by some female consumers’ responses “*I prefer styles with elasticated waist, flared skirts or A – line dresses which flares out to fit over hips, stomach or the back*”. Yet others consider the high cut pants or jeans which they also mention will accommodate the big stomach or the back “*I go for high cut jeans or trousers which can accommodate my stomach and the back*”. “Style”, however, is also connected to the psycho-social consequence “comfortable” which is related to the instrumental personal value of “confidence”. Hence, the attribute “styles” is also related to the instrumental personal value and emotional experience of providing these female consumers with “confidence”.

“Length” is the third most desirable attribute for choosing ready-to-wear garments. The attribute “length” is linked to two consequences of “presentable” and “cover up”. Concerning the psycho-social consequence “presentable”, some participants considered longer lengths of pants or sleeves as important. According to one participant “*normal or shorter lengths of pants or sleeves look awkward on me as I am tall*”. It is understandable for these women to consider the length of garments in order to be “presentable”. The psycho-social consequence “presentable” was further explained by another participant “*I usually consider longer skirts so as to dress appropriately for my age*”. On the other hand, the psycho-social consequence “presentable” was also explained by a few participants for considering shorter length skirts “*I consider shorter skirts, they look presentable*”. From these responses it is clear that the perception of presentability in the choice of garments is also subjective and dependent on personal preferences. One may assume that the contradiction in preferences could be in connection with age differences, older females may want to dress age appropriately, while the younger females may feel “presentable” in shorter skirts or dresses. Regarding the link between the attribute “length” and the functional consequence “cover up”, the responses pointed out the fact that some female consumers

feel the need to purchase longer tops so as to “cover up” “ *I go for longer tops so as to cover my behind*’.

The HVM suggests that the attribute “length” did not resolve in a personal value or an emotional experience and that these ladders remained short. An explanation for this occurrence is because of the cut-off level of 3 that was applied to achieve a more meaningful representation. The lower cut-offs show the personal values which were omitted, meaning they did not have a mentioning of at least three participants. However, it is clear through the psycho-social consequences “presentability” and functional consequence “cover up” why the attribute “length” was important to the female consumers in this study.

From the above findings and an overall look at the HVM of the laddering Exercise 1a, the results indicate that participants in this study considered “fit”, “style” and “length” of the garment when they are choosing ready-to-wear garments. The idea behind Means-end Chain theory is that consumers’ decision making is about evaluating (Nurkka, ‘n.d’:2) and selecting ready-to-wear garments which will enable them to reach their personal values. Furthermore, it is also evident that the criteria “fit” and “style” of the garment are centered around the achievement of three personal values, namely, “confidence” (31%) followed by “look good” (15%) and “freedom” (11%) which are all emotional . In this regard it can be said that a personal value is a type of concern that is guiding the consumers in the evaluation of products or situations in order to reach their desired end states.

The consequences allude to the psycho-social consequences “comfortable”, “presentable”, and “flattering”, highlighting the positive (beneficial) emotional aspects of the female consumer when they evaluate the criteria (attributes) for choosing ready-to-wear garments.

5.4.3.2 Findings on the hard laddering Exercise 1b on body shapes

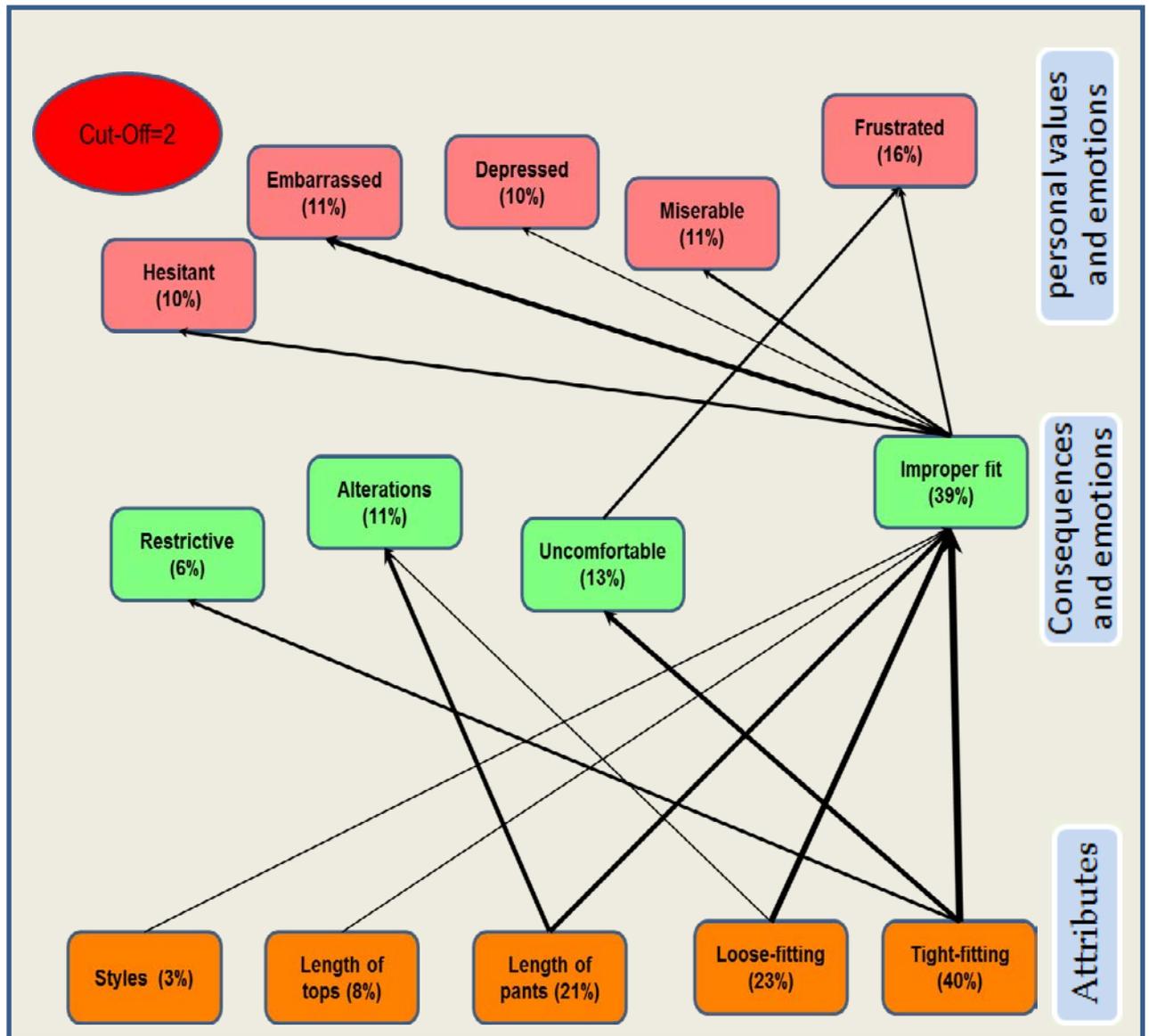
The following question was presented to the participants for the elicitation of the attributes and consequently for the laddering of Exercise 1b according to the process described in section 5.4.1 above. This question addresses part of research **Objective 3** and part of **sub-objective 1** of this study.

When considering your body shape, what are the three main problems you mostly encounter when buying ready-to-wear clothing?

The hierarchical value map illustrated in Figure 5.8 presents the findings from the analysis of the problems female consumers mostly encounter when purchasing ready-to-wear garments

taking into account their body shapes. In this hierarchical value map, only direct links are represented in the analysis and the chosen cut off is 2.

FIGURE 5.8 HIERARCHICAL VALUE MAP OF THE PROBLEMS ENCOUNTERED WHEN PURCHASING READY-TO-WEAR GARMENTS



Although female consumers appear to mention different problematic aspects, the findings reveal that “tight-fitting” (40%) seems to be the common problem when purchasing ready-to-wear garments. This is followed by “loose-fitting” (23%), and the “length of the pants” (21%).

The “length of the tops” (8%) and the “styles” (3%) were also considered to be problematic when purchasing ready-to-wear garments.

In this study, the problem of “tight-fitting” is linked directly to three negative consequences, “improper fit”, “uncomfortable”, and “restrictive” with the link between “tight-fitting” and “improper fit” being the strongest. “Tight-fitting” in this regard refers to the tight feeling female consumers experience in certain areas of their bodies, whilst fitting well in others. The HVM clearly shows that all the problems encountered with ready-to-wear garments lead to the negative functional consequence, “improper fit”. It is not surprising that a properly fitting garment is important to these female consumers. This may mean that when a consumer buys a garment, they above all want the garment that fits their body shape well. This negative functional consequence, “improper fit” is connected to all the negative instrumental personal values expressed by female consumers in this study. Female consumers mainly feel “frustrated” (16%) with “improper fit”. “Miserable” (11%), and “embarrassed” (11%), were the other feelings expressed, with the link between “improper fit” and “embarrassed” being the third strongest on the map. Some participants mentioned feeling “depressed” (10%), while others mentioned “hesitant” (10%) to wear a garment that does not fit properly. According to Frijda (1986) cited in Desmet (2003:3), every emotion hides a concern (terminal personal value) and concerns can be regarded as a point of reference in the evaluation process. The significance of the negative consequence “improper fit” in relation to the consumers’ wellbeing is determined by an evaluated concern also regarded as the terminal value. In this regard, the consequence “improper fit” did not match the concerns of the consumers. Hence the instrumental values which have been expressed through different negative emotions point to some affected underlying concerns (terminal personal values) (Desmet *et al.*, 2001:3).

The second strongest link in the HVM is from the problem “loose-fitting” also associated with the negative consequence “improper fit”, which as already illustrated, is central in the HVM. Just like the “tight-fitting” problem, female consumers complained about the looseness of garments in certain parts of their bodies because of the unbalanced measurements of the garments for different body shapes, as comment by one of the participants *“for dresses I experience loose fitting around the neck area while fitting well in the bottom part”*. “Length of the pants”, which is the third mentioned problem with garment fit, is linked to two negative consequences of “improper fit” and “alterations”. “Length of pants” represents lengths of pants which do not correspond to the various heights of the consumers. Both these links are the third strongest as well as the link between attribute “tight-fitting” and consequence “uncomfortable”. Although the length of the pants are problematic, some female consumers seem to over-turn the problem into a challenge by altering the garment to fit properly,

however, this ladder stops at the consequence level without attaining the personal value level. This probably means that female consumers feel that fixing the garment is more important than dwelling on the effects of the problem. The problem “loose-fitting” is also linked to the consequence “alterations”, suggesting some female consumers in this study are also able to alter garments which are loose in some parts of the body.

Furthermore, the HVM also suggests that the instrumental value, “frustrated” is reached in a different way by some participants. Female consumers answered that they feel “uncomfortable” with “tight-fitting” garments in some areas of their bodies such as the hips, waist and bust as expressed in this comment *“it is uncomfortable wearing garments which are fitting tightly around the hips”*. The negative psycho-social consequence “uncomfortable” is associated with the emotion “frustrated”. The link between the problem “tight-fitting” and the undesirable consequence “uncomfortable” is also the third strongest link on the map. The problem “tight-fitting” is also shown to link to the negative consequence, “restrictive”, as illustrated in this comment *“I feel restricted in my movement when I wear “tight-fitting” garments”*.

With regards to the remaining problems encountered when purchasing ready-to-wear garments, “length of tops” and “styles” are also found to be related to the negative consequence, “improper fit”. According to the responses of some of the participants, *“the tops are not long enough to cover the bottom”* and another participant commented *“styles of the garments are too youthful, which makes them wrong for the mature bodies”* while referring to the problem of “styles” of the garment.

The negative instrumental values, expressed as emotions specify the desired-end state goals or terminal personal values these female consumers desire to achieve through clothing. The terminal personal values may involve many different and specific goals not known to the researcher and not goals that differentiate the emotions.

To add, the undesirable consequence “improper fit”, “uncomfortable” and “restrictive” also describe the negative emotional aspects expressed resulting from the evaluations of the problems they encounter with ready-to-wear garments. This corresponds well with what different researcher had pointed out in Chapter 1, that when it comes to garment purchases, women find it difficult to find garment that fit well, which makes them unhappy consumers (Horwaton & Lee, 2010:22; Barona-McRoberts, 2005:2; Otieno, *et al.*, 2005:307).

Following the laddering exercises on body shapes, section C of the questionnaire presented about open-ended questions on body shapes. The discussion that follows is the presentation and analyses of open-ended questions data on body shapes.

5.4.4 Open-ended questions on body shape

The open-ended questions on body shape were aimed at exploring various objectives. These are “*the effect of body shape on the purchase decision of a garment*” which addresses part of research Objective 5, “*the effect of body shape on garment fit*” which addresses part of research Objective 4 and “*the possible solutions to the problems of garment fit contributed by body shapes*” which addresses part of research Objective 6. The procedure for analysing data from open-ended questions described in Section 5.4 above was followed in analysing data from open-ended questions on body shape. The first part of the open-ended question on body shape is discussed next.

5.4.4.1 The effect of body shape on the purchasing decision of garments

The results of the hard laddering Exercise 1b above have suggested that different garment fit problems which cause improper fit result in the elicitation of various negative emotions among female consumers. According to Lazarus (2001:55), an ill-fitting garment does not cause emotions. In this instance, the evaluation of the ill-fitting garment in relation to the personal values is what elicited the negative emotions.

The following question was asked to determine whether garment fit problems contributed by body shape have any effect on the purchasing decision of garments.

The question that was asked to address part of research Objective 5 was; “***when you experience garment fit problems because of your body shape, how does it affect your decision to purchase ready-to-wear garments?***”

In response to the question, the analysis resulting from this question identified two purchasing themes that consumers would follow when faced with garment fit problems because of their body shape. The first theme is that the participants ***would purchase*** and the second theme is that they ***would not purchase***. Participants who indicated that they ***would purchase*** ready-to-wear garments, mentioned three different conditional circumstances (these conditional circumstances are regarded as the conditional purchasing categories) that would make them purchase the selected garment. These conditional purchasing categories were *possible alterations*, *purchasing at specific outlets*, and *stylistic features of the garments* but only if they were able to make a purchase.

In terms of *possible alterations* that could be made to the garment, it seemed as if female consumers regarded the fit problem as a challenge which could be corrected by alterations

through specifically as suggested by one participant, *“if not too bad, I buy and alter a little”*. Some participants also seem to suggest that there is always a need for alterations when they purchased ready-to-wear garments, as they mentioned that they prefer purchasing their garments where there is an alteration services. This was expressed through comments such as *“I only buy where there are alteration services”*. The alteration of garments for the South African consumer could be a way to achieve the desired fit in garments. Although alterations seem to be a way of achieving the preferred fit for some female consumers in this study, Howarton and Lee (2010:227) undertook a study on market analysis of fit preferences of female boomers only to find that respondents were unlikely to request alterations, but would rather continue looking for fitting garments.

The second purchasing condition where participants indicated that they would only *purchase at specific retail outlets*, this was because some participants would only purchase ready-to-wear garments at a limited number of clothing retailers that catered for their body shapes in their clothing ranges. They explained *“I only go to certain shops which cater for my needs”* and *“I buy at a particular shop”*. These findings reinforced results by Holmlund *et al.* (2011:113) of mature women’s long relationships with favourite shops because of their age appropriate clothing ranges, which may also be catering for the changes in the body shapes. The results of this study seem to suggest that female consumers will identify and patronize the clothing retailers that offer ready-to-wear garments which fit their body shapes. Patronizing clothing retailers that offer garments that fit their body shape was also pointed out as one of the reasons female consumers in this study frequently patronized clothing retailers such as Woolworths, Mr Price, Edgars, Donna Claire and Jet as mentioned in section 5.2.2.3 to 5.2.2.5, 5.2.2.8 and 5.2.2.9.

With regard to the third purchasing condition which refers to the particular *stylistic features of the garments*, participants revealed that design attributes such as colour of the garment would be considered as this allowed the participants to camouflage their body shapes. To these women the usefulness of colour would influence them to purchase ready-to-wear garments even if they experienced fit problems. This was evident through the comment *“I prefer colour to camouflage my body shape”*. Some participants regarded the design or style of the garment to be an important aspect that would make them purchase ready-to-wear garments as illustrated through this comment by most of the participants *“I still buy if I like the design”*. This may suggest that stylistic features are some of the important elements that can influence some female consumers to purchase ready-to-wear garments, although these garments may not fit properly.

On the contrary, participants who indicated they **would not purchase** ready-to-wear garment which does not fit their body shape properly mentioned the high importance they placed on the *comfort of their garments* as the reason why they would not purchase ill-fitting ready-to-wear garment as indicated by these comments “*unless comfortable otherwise I don't buy*” and “*comfort matters, there is no use buying something you are not comfortable in*”. This seems to suggest that female consumers in this study highly value comfort in garments. This finding is similar to the study of Apeageyi (2008:8), who upon investigating clothing selection and consumer buying behaviour found a huge number (82%) of the participants maintained that they would not wear clothes that do not fit well even if they were fashionable and expensive. This was also supported by another study by Holmlund *et al.* (2011:112) who found that good fit is an important aspect of the garment, in the sense that garments should be easy to change into and be comfortable.

Furthermore, if participants are unable to purchase ready-to-wear garments because of their body shape, they revealed two measures they would implement to ensure that the clothing fits their body shape. They opted to *design their own garments* to suit their body shape and also to *look elsewhere*. The option of *design of their own garments* for their body shape was illustrated through comments such as “*I tend to make my own clothes I like*” or “*I tend to go into the shops and copy the styles I like and have someone reproduce it for me*”. Some participants expressed that mixing and matching their garments as this participant illustrated “*I have become an expert at “mix and match”*”.

Regarding the measure to *look elsewhere*, a few participants explained that they would opt to go elsewhere and look for the garments that suited their body shapes. This was identified through comment such as “*I look around until I find what fits my body shape*” This finding is to some extent consistent with the claims of Chattaraman and Rudd (2006:47) who argued that consumers were willing to spend the most on clothing items that have a high aesthetic value, irrespective of their utilitarian appeal.

The second part of the open-ended questions on body shape which explored the effect of body shape on garment fit is presented next.

5.4.4.2 The effect of body shape on garment fit

A significant proportion of consumer complaints about clothing products are related to fit (Park *et al.*, 2009:374). According to Pisut and Connell (2007:368), body shape is reported to be one of the factors that contribute to garment fit problems. Since garments conform to

the body and the nearest environment to the body, it is expected to fit closely yet move with the body (Ashdown & DeLong, 1995:47). However, female body shapes vary greatly and change dramatically over time (Howarton & Lee, 2010:220) and female consumers who do not have a body shape that meets the standards of the ready-to-wear sizing systems are more likely to have fitting problems (Park *et al.*, 2009:374). Two different open-ended questions were presented to the participants in order to determine if body shapes contribute to garment fit problems which female consumers experience with ready-to-wear garments.

The first question that was asked to address part of research **Objective 4** was, “**does your body shape affect the choice of clothing you buy?**”

In response to the question, it was evident from the analysis resulting from the question that body shapes affected the choice of clothing participants purchased. Through the statements given by the participants, two main reasons were identified as to why they thought body shape affected the choice of garments. The reasons were categorized into *design features of the garments* and *comfortability of the garment*.

Participants who had indicated that *design features of the garments* affected the choice of clothing purchased expressed the concern that variations of body shapes are not considered in some designs of the garments “*I cannot buy some jeans and some tops even if I want to, my body shape won't fit*” and “*most items are made for the hourglass body shape which I'm not*”. This demonstrates that some design features of the garments do not accommodate body shape variations, which can affect the choice of garments. This finding is consistent with the results of the study conducted by Apeageyi (2008:5). The researcher reported that six out of twelve interviewees stated that specific body parts influenced their garment selection and identified these parts as the bust, waist, hips and buttocks, suggesting that participants cannot wear some designs because of their body shape. Furthermore, some participants indicated that there were limited garment designs that they can wear because of their perceived body shape as illustrated by these comments “*I cannot wear some styles*” and “*I only buy semi-fitted or loose*”.

With regard to the category *comfortability of garments*, some participants explained that body shape can affect the choice of garments when they seek comfort in what they wear as illustrated through these comments “*I only want comfort*” and “*I need comfort not distracted*”. This suggests that these female consumers only choose garments which are comfortable. A point which is in agreement with North, De Vos and Kotze (2003:42) who mentioned that some consumers make choices concerning apparel on the basis of comfort and practicality. Some participants associated comfortability to suitability. They expressed that garments should be suitable for their perceived body shapes in order to be comfortable. This was

evident through comments such as “*I want to dress according to my shape*”. An indication that some female consumers may avoid some garment designs because of their perceived body shape.

The second question on the effect of body shapes on garment fit was: “***do you feel limited by what you can wear because of your body shape?***”

In response to the question the majority of the participants felt ***limited*** to what they can wear because of their body shapes, while a few indicated that they had ***no problem*** with their body shapes. The participants who indicated the theme ***limited*** disclosed three reasons as to why they felt that way. The reasons were categorized into *body shape imperfections*, *garment design irregularities* and *comfort for their body shape*.

Regarding the reason *body shape imperfections*, participants complained of not having the type of bodies which can fit into some of the designs of the garments which limited them of what they can purchase “*I love tight tops, but because of my stomach then I buy loose*” and “*I only buy elasticized skirts or pants because of my body shape*”, suggesting that perceptions of body shape could limit participants of what they can wear. Concerns of the type of body shape are supported by other studies conducted by Apeagyei (2008:6) who found that a large number of participants (86%) were conscious of their bodies and how a garment fitted them. Some participants shared that they feel limited to the suitable garment designs they can wear because of their perceived body shape as illustrated through these comments “*it is hard to find clothes that fit my body shape*” and “*few styles fit my body shape properly*”.

The reason *garment design irregularities*, was expressed by some participants who regarded some styles of the garments are unsuitable for their body shapes, which limited what they can wear. Comments of the participants relating to the unsuitability of the garment designs included “*I cannot wear other styles*” and “*not everything looks good on me*”. Limitations of some styles with regards to body shape are supported by Jones and Giddings (2010:62) who examined tall-women’s satisfaction with fit and style of tall-size apparel. The researchers pointed out that clothing retailers provide limited product categories targeted for tall women. The researchers went further to argue that even in these offerings a limited number of styles are offered, meaning not every product that is offered in smaller size is also offered in larger sizes. This may be an indication that clothing manufacturers do not take into consideration different body shapes and sizes when manufacturing garments.

A few participants in this study also explained that they are limited to wearing only designs which provide *comfort for their body shape* as illustrated in these comments “*I feel*

uncomfortable in sleeveless” and *“I do not feel comfortable in some styles”*. This implies female consumers in this are limited to purchasing only garments they feel comfortable in because of their body shape.

On the other hand, the responses of a few participants who indicated that they were not limited by what they can wear because of their body shape through the theme ***no problem***, explained that their body shape was not an issue. They expressed confidence in finding garments which were suitable for their body shapes as this one participant remarked *“not applicable to me”*. Some participants revealed that they could wear most of the designs of the garment. This was evident through comments such as *“I don’t have a problem I can wear anything”*. Alexander *et al.* (2005:59) also investigated fit problems and body shape, they discovered that the respondents who had the inverted triangle body shapes were satisfied with the fit of ready-to-wear garments. It can also be assumed that the few participants in this study, who felt unlimited in what they can wear, could more than likely have the inverted triangle body shape.

Open-ended questions on body shape also explored the possible solutions to the problems of garment fit contributed by body shapes.

5.4.4.3 Findings on the solutions to garment fit problems contributed by body shapes

Garment fit problems are said to be costly and frustrating not only to the consumers but also for clothing manufacturers and retailers (DesMarteau, 2000:1). The question that was asked to address part of research Objective 6 was; ***“what do you think should be done to help reduce garment fit problems contributed by body shapes?”***

In response to the question, the analysis resulting from the question indicated that there were several solutions which were suggested by the participants in this study. The solutions were categorized into five main groups namely *consideration of different body shapes, design features of the garments, female empowerment, target market knowledge and in-store assistance*.

Some participants, who indicated the first category, *consideration of different body shapes* as the solution to the garment fit problems contributed by body shape, explained that clothing manufacturers should consider variations of female body shapes when they are designing garments. This was expressed through comments such as *“make different lengths of trousers”* and *“consider different style”* when designing garments. This indicates

that specific needs of some of the participants were being overlooked, suggesting it is extremely important for clothing manufacturers to know their target market. Few participants pointed out that garment designs were limited and that clothing manufacturers should be more flexible with their designs as illustrated through this comment “*we need more flexibility with designs*”. This may imply that manufacturers of clothing still need to address consumer’s concerns regarding various garment designs and to be flexible with the designs in relation to the various body shapes and sizes.

Regarding the second category *design features of the garments*, some participants highlighted some design elements such as *material* and *colours* of the garments to be important aspect in helping solve the problem of garment fit contributed by body shape. Concerning the element material of the garment, it appears participants regarded fabric specifics such as stretch materials to be important as illustrated through this comment “*we need more stretch material to accommodate our shapes*”. This may indicate that some female consumers in this study can be able to fit into some garment designs if a stretchy material was used possibly for comfort and ease. This is consistent with the report of Howarton and Lee (2010:222) who stated that female baby boomers welcome stretch and lycra blends of fabric for ease, so long they do not hug the body. With regards to the element *colour*, some participants shared that colour can be used to camouflage the perceived body shapes. Comments of the participants relating to the use of colour in solving fit problem included “*...more colour option, we need bright colours to hide body shape flaws*”. Howarton and Lee (2010:225) also found that most female baby boomers (72.1%) use colour as a tactic to emphasize or de-emphasize certain body parts. Although colour is important to some female consumers in this study, Miller, Campbell, Littrell and Travnicek (2005:68) discovered in their study that colour did not dominate consumer’s acceptance of garments.

Few participants who indicated the third category *female empowerment*, explained that the solution lies in the knowledge of which garment designs suit different body shapes “*don’t choose garments that don’t fit well on your body*”. This suggests that female consumers should be in charge of their own bodies by knowing what fits their body shape properly. Rasband and Liechty (2006) agree that women may be trained to know what fits their body types best. Participants also explained that “*female consumers should be empowered to design and make their own garments*”. This finding is interesting as not everyone can develop the skill to design and make own garments. Furthermore, some participants suggested female consumers can be empowered to learn and take care of their bodies through weight control. Comments of the participants relating to body care included “*teach*

women how to lose weight". It can only be speculated that these women were thinking of garment fit problems brought on by weight gains.

Concerning the fourth category *target market knowledge*, most participants reported that clothing manufactures should research the needs of their target market by determining their preferences in garment fit and designs as well as their body shapes. They explained that understanding what makes female consumers comfortable can help solve the problem of garment fit caused by the differences in body shapes. This was illustrated through the comment "*research what makes people comfortable*". Some participants also emphasized the importance of focusing on the body shapes of their target customers "*focus on real woman not model bodies*". The suggestion of knowing the target market by the participants is in line with the findings of the study conducted by Park and Sullivan (2009:196) who pointed out that it is necessary for fashion retailers to determine the core benefits sought by clothing consumers and provide those core benefits in their products and services. Vuruskan and Bulgun (2011:58) went further to state that body shape identification is the key issue to develop sizing standards for ready-to-wear and the development of made-to-measure concepts.

Some participants who indicated the fifth category *in-store assistance* explained that in-store services such as guidance of which garment styles are suitable for various consumers' body shape, were important to help solve the problem of garment fit contributed by body shape. According to these participants, if consumers are directed to the garments design that are suitable for their body shape, they are less likely to experience fit problems as indicated in this comment "*an indication of which body shape can wear the type of style can help...*". some participants in this study also regarded "*in-store alter per customer*" as an important strategy which clothing retailers can implement to help solve garment fit problems caused by body shapes. Furthermore, few participants in this study suggested advice on weight issues can also be helpful as one participant commented "*advice to lose weight*".

Besides hard laddering Exercises 1a and 1b and open-ended questions on body shape, section C of the questionnaire also included laddering Exercises 2a and 2b and open-ended questions on garment sizing. In the following section, the results from the hard laddering Exercises 2a and 2b data are first presented and discussed, followed by the results of open-ended questions data on garment sizing.

5.4.5 Hard laddering exercises and open-ended questions on garment sizing

According to Ashdown (1998:325), sizing systems that are used in the design and distribution of ready-to-wear garments are generally based on a selection of dimensions from anthropometric studies of the population for which the sizing is designed. Key body dimensions are chosen to divide the population into size groups and the goal of any sizing system is to choose these size groups in such a way that a limited number of sizes will provide clothing that fits most individuals in the population. However, current methods of creating sizes in most countries, South Africa included, are flawed in many ways. For example they are based on measurements of the “ideal” customer, are adjusted for additional sizes by using grade rules to define proportional increases and decreases from base patterns and are visually evaluated on the fit model and in two dimensions (Loker *et al.*, 2005:1). Moreover, the relation between the size charts and body dimensions is not constant due to the body shape changes that occur in the human population (Mpampa, Azariadis & Sapidis, 2010:50). Through the laddering exercises and open-ended questions on garment sizing, a better insight of the problems of garment sizing in South Africa was possible.

Below are the presentations and discussions of the data derived from the hard laddering Exercises 2a and 2b on garment sizing. The same procedure for analyzing and presenting the laddering interview data as previously explained in Section 5.4 was followed in the analysis and presentation of the data on hard laddering questions regarding garment sizing.

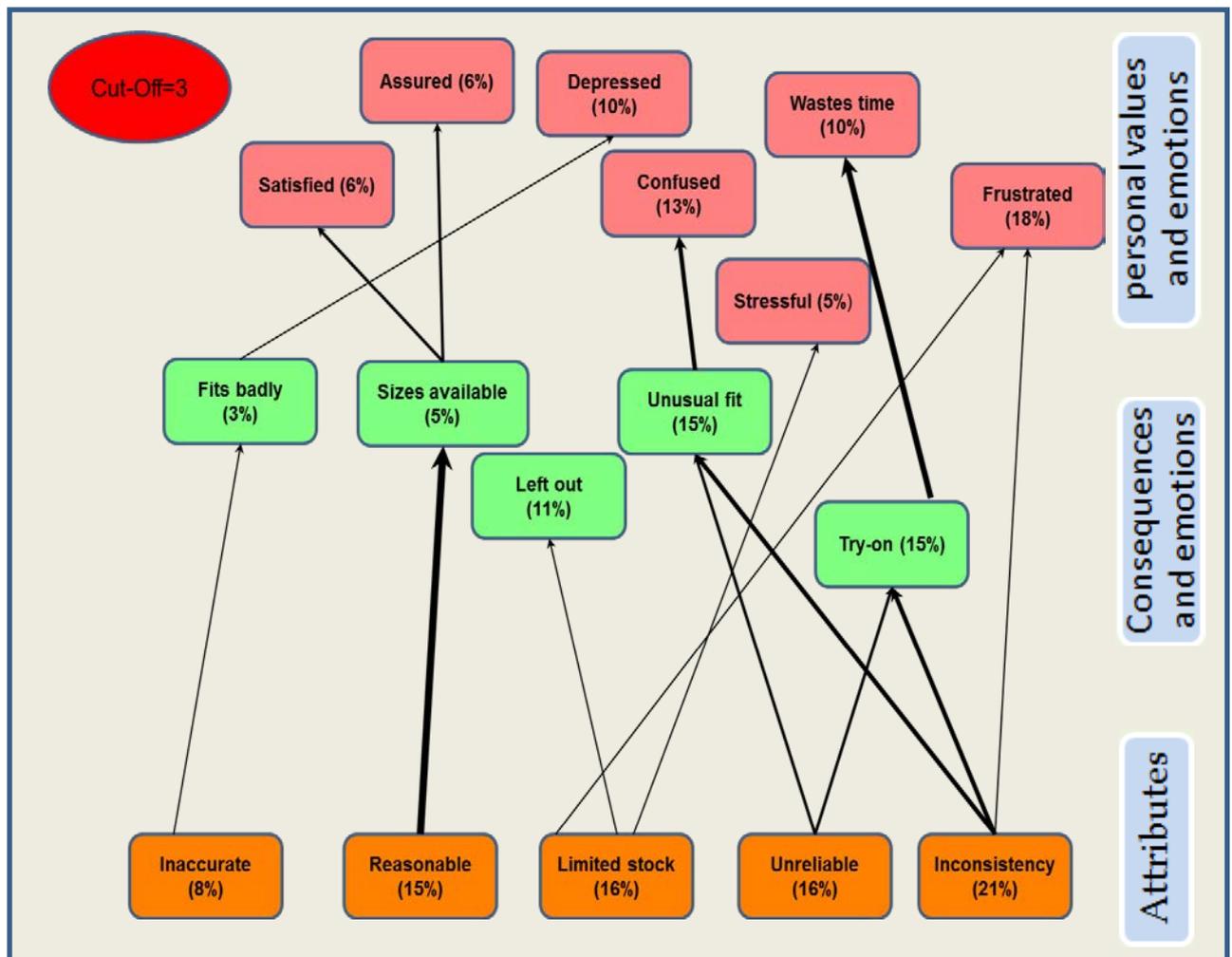
5.4.5.1 Findings on the hard laddering Exercise 2a on garment sizing

The following question was presented to the participants for the elicitation of the attributes and consequently the laddering questioning for Exercise 2a, according to the process described in section 5.4.1 above. This question addresses part of **Objective 3** and part of **sub-objective 2** of this study.

In this part of the study I am interested in finding out three (3) main important thoughts that come to your mind when considering garment sizing in ready-to-wear clothing in South Africa.

The HVM illustrated in Figure 5.9 presents the findings from the analysis of the thoughts that female consumers have when considering garment sizing in ready-to-wear garments in South Africa. In this HVM, direct and indirect links are represented in the analysis and the chosen cut-off is 3.

FIGURE 5.9 HIERARCHICAL VALUE MAP OF THE THOUGHTS ABOUT GARMENT SIZING IN SOUTH AFRICA



The analysis of the HVM in Figure 5.9 suggests that “inconsistency” (21%) is a common thought in the minds of female consumers in this study when they think of garment sizing in South Africa. They also are of the opinion that the garment sizing as “unreliable” and that the retailers carrying “limited stock”, both mentioned by 16% of the participant. Furthermore, they are of the opinion that garment sizing is “reasonable” (15%) with some who indicated “inaccurate” (8%).

Interestingly enough, the HVM suggests that the strongest link is between the attribute “reasonable”, mentioned third by the participants and the beneficial consequence “sizes available”. The strength of this link is explained by some of the participants as that of them spending enough time looking around they usually find the garment that fits them properly.

This was illustrated through the comment such as *"I usually find my size if only I look around"*. To these female consumers finding the correct size after some time of searching signals that garment sizing is reasonable. This finding suggests that the female consumers in this study acknowledge that there are some issues with garment sizing, however, somehow they overlook the problems by focusing on finding garments sizes that fit them properly. Additionally some participants in this study mentioned that garment sizing is reasonable because they easily find their sizes without much effort *"I easily find my size"*. This leads to one speculating that these could be women who have the "perfect body shapes" almost similar to the graded pattern manufacturers use for their size tables. The positive consequence "sizes available" is linked to two positive instrumental values of "assured" and "satisfied" which are expressed as emotions. Both links to these have similar strength. Some female consumers in this study explained that they feel assured that sizes are available as illustrated by this participant *"I feel assured of finding my size"*, whilst the others expressed satisfaction with the availability of sizes as indicated in this comment *"I am satisfied because the sizes are available"*. Thus the thoughts of "reasonable" were evaluated to be beneficial by these participants, because it matched the concerns (terminal personal values) of what female consumers in this study expected with garment sizing. Hence the emotions (positive instrumental values) which have a hidden concern or terminal personal value.

The most mentioned attribute concerning the thoughts on garment sizing, "inconsistency", which refers to the irregularities and lack of agreement of garment sizing across the clothing retailers and within the same shop, is linked to the negative consequences, "try-on" and "unusual fit". Both these connections are the third strongest links on the map. Concerning the negative consequence "try-on", participants in this study explained that garment sizing is so irregular that it is hard to predict the correct size, as a result they always have to "try-on" garments before making a purchase as commented by one participant *"you always have to try-on because you cannot just pick the correct size"*. The HVM also suggests there is a strong relationship between the consequence, "try-on" and the negative instrumental value, "wastes time", the second strongest link on the map. Female consumers in this study explained that they felt unsure of the garment size which will fit their body sizes. This leads them to always "try-on" garments. This was identified through a comment such as *"trying on garments is a process which, especially to the modern consumer, is a waste of valuable time"*, and hence the link to instrumental personal value "wastes time"

The association between the attribute "inconsistency" and the negative consequence "unusual fit" refers to the situation when the same size of the garment may fit differently at different times, either too tight or too loose. This was expressed through comments such

as, *"I feel confused when I thought I knew my sizes only to find it does not fit anymore yet I did not gain or lose weight"*. The consequence "unusual fit" is linked to the instrumental value, "confused" which is also suggested to be the third strongest link on the HVM. "Inconsistency" is also directly linked to the instrumental personal value, "frustrated", which is an understandable emotion when consumers evaluate the problem of "inconsistency" that affects their concern or terminal personal value through garment sizing.

"Unreliable" which is the third mentioned attribute of the thoughts on garment sizing is equally linked to the negative consequences "try-on" and "unusual fit" which are connected to the negative instrumental personal values, "confused" and "wastes time". Some female consumers expressed a remarkable level of mistrust towards garment sizing when ready-to-wear garments are concerned, as illustrated through this comment *"it is hard to trust that the size will just fit, I have to try-on"*. They also think that garment sizes are misleading as a result they always have to "try-on" to make sure they are buying the correct size as the following comment explained *"sizes are misleading, you always have to try-on"*, which according to the participants "wastes time". Participants also mentioned that they feel "confused" when the fit of the garments is not always what they expected resulting in an "unusual fit".

"Limited stock" is the third mentioned attribute of the thoughts on garment sizing. Some female consumers revealed the thought that *"smaller sized garments sell out quickly, but medium size ranges are common"*. While few participants mentioned that *"some fashionable styles do not include larger sizes, it is only limited to smaller sizes"*. The HVM also shows that the attribute "limited stock" is directly linked to the negative instrumental personal value of, "frustrated" and "stressful". These negative emotions were expressed because according to these participants "limited stock" can *"contribute to choosing wrong garments sizes"*. "Limited stock" is also connected to the consequence, "left out". Some participants mentioned that *"different body sizes are not considered much by the clothing manufacturers so we are left out"*.

The remaining attribute of the thought about garment sizing, "inaccurate" is found to be associated with the undesirable consequence of "fits badly", which links to the instrumental negative personal value, "depressed". It was evident from some participants' responses that female consumers seem to be concerned that *"garment labels do not correspond with the measurements of the garment"* which leads them to express the emotion of "depressed" when the garment "fits badly".

The HVM clearly revealed that positive and negative emotions were expressed in the process of evaluating different thoughts concerning garment sizing in South Africa. The

thought included “inconsistency”, “unreliable”, “limited stock”, “reasonable” and “inaccurate” about garment sizing in South Africa. According to Siemer *et al.* (2007:592) and Roseman *et al.* (1990:899), the other central assumption to the cognitive appraisal theory of emotions is that different people may respond with dissimilar emotions to the same situation depending on how each one of them evaluates or appraises the situation. In the case of products, garments included, an evaluation has three outcomes, for example garment sizing is beneficial, is harmful to personal value or is not relevant for personal wellbeing (Demir *et al.*, 2009:3). These three outcomes result in a positive emotion, negative emotion or an absence of emotion respectively. In this study garment sizing is seen by some female consumers as beneficial, while others think of it as harmful to achieving personal values through clothing, hence the elicited positive and negative emotions.

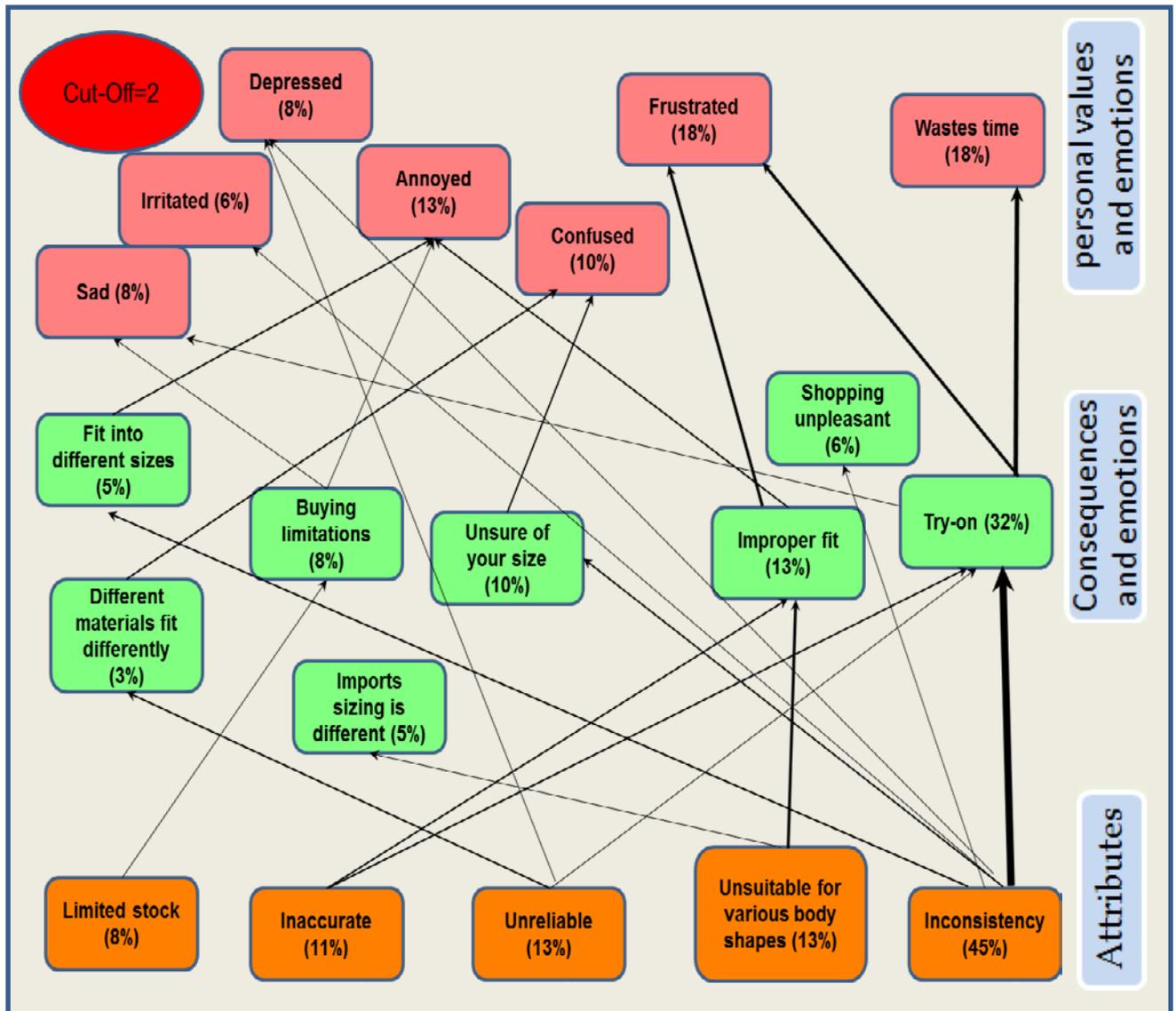
5.4.5.2 Findings on the hard laddering Exercise 2b on garment sizing

The following question was presented to the participants for the elicitation of the attributes and consequently for the laddering of Exercise 2b according to the process described in section 5.4.1 above. This question addresses part of research **Objective 3** and part of **sub-objective 2** of this study.

When shopping for clothing, what are the three (3) main problems you have experienced in South Africa with garment sizing in general?

The hierarchical value map illustrated in Figure 5.10 presents the findings from the analysis of the problems female consumers have experienced in South Africa with garment sizing in general. In this HVM, direct and indirect links are represented in the analysis and the chosen cut off is 2.

FIGURE 5.10 HIERARCHICAL VALUE MAP OF THE PROBLEMS EXPERIENCED WITH GARMENT SIZING



The HVM illustrated in Figure 5.10 suggests that the main problem female consumers have experienced in South Africa with garment sizing in general is “inconsistency” (45%). Besides the problem of “inconsistency” participants in this study also mentioned that garment sizing is “unsuitable for various body shapes” (13%), is “unreliable” (13%), is “inaccurate” (11%) and carry “limited stock” (8%) of some garment sizes.

The HVM clearly suggest that the most mentioned problem with garment sizing, “inconsistency”, which is linked to several negative consequences and negative instrumental personal values, with the link to the consequence “try-on” being the strongest on the map.

The reasons expressed by some participants for the forced connection between “inconsistency” and “try on” is that it is not easy to predict the correct size. One of the participants explained, “*the cut of the sizes is different in various shops you cannot buy without trying on*”. Another participant expressed that “*fitting is a must as there are no standards of garment sizing*”. According to these participants, the problem of “inconsistency” makes it obligatory to try-on garments before purchasing. The consequence, “try-on” is linked to the negative instrumental personal value “wastes time”, which is the second strongest link on the map. This was evident through comments such as “*because I cannot buy without fitting, it makes shopping longer and tedious*”. This outcome of the ladder is not surprising, when the sizes are erratic, female consumers feel the need to try-on garments before purchasing, which is a time consuming process. The undesirable consequence “try-on” also leads to the negative instrumental personal value “frustrated”, a third strongest link on the map. Some female consumers explained that “*although trying-on garments is necessary to enable them choose a good fitting garment, it is also frustrating to carry so many different sizes of the same garment. It is as if you don't know your size*”. Another female consumer also explained that “*it is frustrating, when after carrying and fitting so many clothes, none of them fit properly*”. “Try-on” is also linked to the instrumental personal value of “sad”, a negative emotion.

The other negative consequence being linked to “inconsistency” is “shopping unpleasant”. According to the participants, “*inconsistency makes shopping difficult*”, and “*I do not enjoy going to the shops because of inconsistency*”. The negative consequence “unsure of your size” is also attached to the problem of “inconsistency”. Female consumers made this link for the fact that they seem not to know their exact size, because the sizes keep changing through comment such as “*I am not sure of my size because*”. “Unsure of your size” is linked to the negative instrumental value, “confused”. Thus female consumers feel confused when they seem unsure of the size which can fit them. There is again a connection between “fit into different sizes” and “inconsistency”. The reason given by one of the participants was that “*same size fit differently in different shops as a result I end up buying different sizes so long they fit*”. The consequence “fit into different sizes” leads to another negative instrumental personal value, “annoyed” expressed as a negative emotion. It seems female consumers feel annoyed when they have to wear different sizes of garments. The HVM also suggests that negative instrumental values of “depressed” and “irritated” which are emotions are also directly induced by the problem of “inconsistency” in garment sizing. Given that there is inconsistency in garment sizing, some female consumers seem to think their bodies are not right or they are too fat, especially if they have to buy a bigger size label as expressed in this comment “*it makes feel my body is fat when I buy bigger size*”. This leads

to the negative instrumental personal values or negative emotions of being “depressed” or “irritated”.

“Unsuitable for various body shapes” is the second mentioned problem (attribute) for garment sizing in South Africa and is linked to the consequence “improper fit”, also the third strongest link on the map. Female consumers expressed the concern that “*sizing of the garments is not proportional and some styles do not accommodate other body shapes*”, as a result they cannot fit into their size label. Furthermore, one participant also explained “*some parts of the garments are either too small or too big for certain body shapes*”. For instance a dress can fit at the bust, but might be too tight around the hips or waist. This makes consumers think that sizes are only for certain “perfect” body shapes. Additionally, some participants also highlighted that various heights are not considered in some sizing of the garments, meaning sizes and length measurements do not correspond. The problem of garment sizing being “unsuitable for various body shapes” makes some female consumers deliberately buy a bigger size in order to get longer sleeves in blouses or longer legs of pants as expressed in the following comment “*I tend to buy larger sizes for the sake of to have longer sleeves of blouses or pants*”. This seems to suggest that improper fit of garments is to some extent contributed by garment sizing which is inconsiderate of various body shapes and proportions. The consequence “improper fit” is linked to two different negative instrumental personal values of “frustrated” and “annoyed” with the link to “frustrated” being another third strong link on the map. For example one participant explained “*it is frustrating if one struggles to find a garment that fits well and altering garments is annoying*”.

The negative consequence, “imported sizing is different” is also attached to the problem of, “unsuitable for various body shapes”. Some female consumers explained that “*garment sizing of imported garments for instance Chinese is very different to suit the various body shapes of the South African females*”. Furthermore, a few participants commented that they “*do not to like larger size labels*” which according to them is rather “embarrassing”.

“Unreliable” was also ranked second by the participants as a problem with garment sizing in South Africa. The problem of unreliability of garment sizing also leads to the consequences of “try-on” which is associated with negative instrumental personal value of “frustrated”. The reasons provided for this connection were that because female consumers do not trust the size labels, they have to make sure it will fit by trying-on first as illustrated by this participant “*I do not trust the size labels I have to fit*”. As already mentioned above, it is evident in this study that trying-on garments takes up time, one participant confided “*when pressed for*

time, I avoid going shopping for clothes". Trying-on garments is also "frustrating" to some female consumers.

The HVM also highlighted that the negative instrumental personal value, "confused" also stems from the problem that garment sizing is "unreliable" which is linked to the negative consequence of "different materials fit differently". Some participants revealed that with some materials (fabric), they have to go a size up or down in order to fit into the garment through comment such as *"I wear different sizes depending on the material, either I go up if non stretchy or down if stretchy material."* This suggests that consumers cannot rely on the size label if the materials are different. Moreover, the negative instrumental personal value, "depressed", is also attached to the attribute "unreliable". One participant explained *"the unpredictability of garment sizes is depressing"*.

"Inaccurate", (when the measurements of the garment and the size labels do not correspond) is the third mentioned problem with garment sizing in South Africa. Likewise this problem is linked to the two main already mentioned consequences, "try-on" and "improper fit", which are connected to the negative instrumental values, "wastes time", "frustrated", "annoyed" and "sad".

The remaining problem provided as the reason for garment sizing problem, "limited stock" is found to be related to only one consequence, "buying limitations". Some female consumers in this study expressed the need *"...for in-between sizes"*. They explained that at times their size can be a bit smaller and the next size too big which leaves them nowhere. Furthermore, some participants in this study complained of unavailability of stock for larger sizes for some garment designs as illustrated in the following comment *"some designs do not include larger sizes"*. They also suggested *"have more stock for the popular size range (medium sizes) which seems to run out quickly"*. Likewise those who wear smaller sizes also complained they hardly find their sizes. This was explained in the comment such as *"smaller sizes finish quickly"*. Additionally some participants in this study also expressed comments such as "I am restricted to shop at certain shop, for instance, Woolworths where I'm sure to get my size. These findings seem to suggest that female consumers with various body shapes and sizes all have problems with the garment sizing. The negative consequence of "buying limitations" links to negative instrumental personal values, "annoyed" and "sad". Thus some female consumers seem to feel "sad", while others get "annoyed" when they have to settle for garments which they know do not fit properly or for designs they did not want in the first place only because they fit.

The above findings and an overall impression of the HVM, show that the participants in this study clearly indicated that the problems with garment sizing in South Africa are

“inconsistency”, “unsuitable for various body shape”, “unreliable” “inaccurate” and the fact that retailers carry “limited stock” within the size ranges or that certain size ranges are not included for some garment designs. The HVM also clearly revealed that only negative emotions were elicited in the process of evaluating these different problems concerning garment sizing.

The discussion that follows is the presentation and analyses of open-ended questions on garment sizing which are taken from section C of the questionnaire (see Appendix C).

5.4.6 Open-ended questions on garment sizing

Open-ended questions on garment sizing investigated “*the effect of garment fit problems on purchasing decision of garments*”, which addresses part of research Objective 5, “*the effect of garment sizing problems on garment fit*” which addresses part of research Objective 4 and “*the possible solutions to the problems of garment fit contributed by garment sizing*” which addresses part of research Objective 6. Open-ended questions on garment sizing were analyzed using the same procedure of open-coding system already discussed in Section 5.4.

5.4.6.1 Findings on the effect of garment sizing problems on purchasing decision of garments

Consumer satisfaction with garment fit is a desirable outcome for clothing manufacturers and retailers, as satisfied consumers can lead to increased repeated purchases (Otieno *et al.*, 2005:299). However, dissatisfaction with fit in available sizes has been identified to contribute to the perceptions of garment fit. The following question was asked to explore whether garment sizing has any effect on the purchasing decision of ready-to-wear garments.

The question that was asked to address part of research Objective 5 was; “***how do garment sizing problems in South Africa influence your decision to purchase ready-to-wear garments?***”

In response to the question, two purchasing themes that female consumers in this study would follow were identified from the analysis of this question. The first theme is described as that the participants **would purchase** while the second theme is that they **would not**

purchase. Participants who indicated that they **would purchase** ready-to-wear garments with garment sizing problems mentioned two conditional circumstances (these conditional circumstances are regarded as the conditional purchasing categories) that would make them purchase the garment. These conditional purchasing conditions were; the *possibility of alterations* and the *time factor*.

With regard to the first purchasing condition which refers to the *possibility of alterations* of garments, some participants seemed to suggest that alteration is a solution to fixing the garment sizing problems if they really like the garment “*if I really like it I buy and alter*”. To these participants, the problem of garment sizing appears to be insignificant if they can alter the garment. Altering of garments seems to have become an acceptable trend among some South African female consumers.

The second purchasing condition, which participants indicated they would only purchase when they considered the *time factor*, was explained by some participants that they only purchase ready-to-wear garments if they have enough time to try-on different garment sizes. Comments relating to time factor were “*I should have enough time to try-on*” and “*no time no buying*”. This seems to suggest that female consumers in this study are clearly aware of garment sizing problems in South Africa, however, somehow they seem to accept that shopping for garments is a long process which needs time.

Within the group of the participants who indicated that they would purchase ready-to-wear garments, the analysis also shows there were a few participants who felt that there is no problem with garment sizing. These participants explained that they easily find their garment sizes which is illustrated through comments such as “*I usually find my size so I enjoy shopping, I buy*” and “*not a problem at all*”. This may also imply that once these participants found their garment size they had no reason to complain about garment sizing. This finding that only a limited number of participants find their garment sizes with ease seem to concur with the findings of Thomas and Peters (2009:1034) who also found that only three of the 20 informants stated that they did not have trouble finding clothes.

On the contrary, some participants who stated that they **would not purchase** ready-to-wear garments because of garment sizing problems, presented two factors that would make them not purchase. These factors included, *time factor* and *negative blocking emotions*. Participants who indicated *time factor* explained that if they are limited by time they prefer not to make a purchase “*until I have time, I don't buy*” and “*if pressured for time I don't buy*”, most probably because they need to try-on to make sure the garment size fits them properly. This may imply that time-conscious female consumers would appreciate if shopping was easier by proper sizing, than spend much time looking for sizes that fit.

The factor *negative blocking emotions*, was explained by most participants in this study, in that when they encountered garment sizing problems, the elicited negative blocking emotions influence them not to purchase ready-to-wear garments. This was expressed through comments such as “*It is irritating when you don’t find size, I end up leaving*”, “*it is stressful and confusing, I end up not buying*” and “*If tired of fitting, I get frustrated and go home*”. This indicates that garment sizing problems cause considerable negative emotions among female consumers in this study and to some extent these negative emotions affect them purchasing ready-to-wear garments. The elicitation of negative emotions because of garment sizing problems is also supported by the findings of the laddering Exercises 2b (section 5.4.4.2) in this study. The HVM (Figure 5.8) suggested that because of inconsistency, inaccuracy and unreliability of garment sizing, sizes which are unsuitable for various body shapes and retailers which carry limited stock of garment sizes, negative emotions such as frustration, depressed, annoyed, irritated, confused and sad are elicited.

Open-ended questions on garment sizing also explored the effect of garment sizing problems on garment fit.

5.4.6.2 Findings on the effect of garment sizing problems on garment fit

Garment sizing is considered a secondary factor that influences garment fit (Barona-McRoberts, 2005:2). However, a leading complaint from female consumers is that garment sizing is inconsistent and confusing (Lee, 2005:25). The following question was posed to determine that garment sizing contributes to garment fit problems.

The question that was asked to address part of research Objective 4 of this study was; “***how do you think garment sizing affects garment fit?***”

In response to the question, the content analysis of the question indicated three reasons as to why garment sizing affect garment fit. The reasons were categorized into *unreliable garment sizing*, *product constraints* and *design constraints of the garments*. Most participants who indicated that *unreliable garment sizing* affect garment fit expressed that garment sizing is wrong and is misleading. This was expressed through comments such as “*the same size can have different measurements on other garments*” and “*if wrong sizing, you choose wrong items which do not fit properly*”. Some participants in this study mentioned that garment sizes are not a true reflection of the garment measurements as illustrated in this comment “*I don’t rely on the size, mostly it is not true of the garment*”. Winks (1997:1) attributes such problems to manufacturers who make garments to their own

specification, basing these upon their own or consumer experiences or alternatively of the retail houses or wholesalers they supply. This may partly explain why female consumers report garment sizing problems and consequently poor fitting garment, possibly due to vanity sizing. Furthermore, unreliability of garment sizing has led to some participants doubting the knowledge of their garment sizes which has lead them to rely on trying on the garments before they can purchase, as this participant remarked "*you have to try-on to be sure or you buy the wrong size*". This suggests that trying-on garments is a way of making sure the sizing of the garments is correct.

The second category, *product constraints* which some participants indicated as the reason garment sizing affect garment fit was explained in terms of limited garment size ranges in stores "*if your size is smaller and is not there, you take a bigger size which doesn't fit well*" and uncertainty of sizes within the same range in stores "*I compromise if I don't find my size I buying a different size which is available*". This seems to indicate that the limitation of garment sizes leaves them with no option other than to settle on the available sizes which do not fit properly. Such garments do not provide the desired fit. This finding is supported by a study conducted by Laitala *et al.* (2011:34) who reported that some respondents felt they had no option as their own bigger size did not exist. The uncertainty of available sizes was also acknowledge by Holmlund *et al.* (2010:112) who found that finding the right size by women was complicated, not only because of weight changes but also due to different size criteria used by the manufacturers. Although they settle for the available garment sizes on the rack, the female consumers in this study indicated that they are unhappy with the limitation of garment sizes as one participant commented "*you buy what you don't want if there is no size*". Again a few participants expressed the concern of the difficulty of altering garments of different garment sizes. These participants explained that through alterations the garment may not be reproduced to its original style or shape, which can affect the fitting of the garment. Comments by the participants relating to the difficulty of altering garment sizes included "*alterations make the garment lose the shape*" and "*sizes are not increased proportionally*".

With regard to the third category *design constraints of garments*, some participants indicated that variations of body shapes and proportions are not taken into account in the sizing of some designs "*body shapes are not considered in the sizing of the garments*" and inconsideration of body shapes when designing garments make designs of some garments restricted only to certain body shape, which can affect garment fit, as this participant commented "*some designs are restricted to certain shapes, when you buy it will affect*". Zwane and Magagula (2007:284) agree that women with disproportionate figures, particularly a bottom heavy figure type, may be dissatisfied with the current clothing sizes

offered by apparel retailers. This finding suggests that there is a need for developing a sizing system for measuring and classifying female body shapes in South Africa.

Open-ended questions on garment sizing further explored the possible solutions to garment fit problems contributed by garment sizing.

5.4.6.3 Findings on the solutions to garment fit problems contributed by garment sizing

The following question was asked to explore possible solutions to garment fit problems contributed by garment sizing. The question that was asked to address part of research Objective 6 of this study was; ***“what do you think should be done to reduce garment fit problem contributed by garment sizing?”***

In response to the questions, four possible solutions emerged from the analysis results of the question. The solutions were categorized as *introduction of standardization*, *various garment sizes*, *in-store services* and *realistic garment sizing*. Participants who suggested the first category of *introduction of standardization*, shared that having a standard sizing system which manufacturers can follow at all times could be a solution to the problem of garment fit as illustrated by most of the participants *“all manufacturers must adhere to the same standards then the problem will be solved”* and *“standardization would help”*. Additionally, participants in this study also mentioned that communication amongst clothing manufactures would help bring standards of garment sizing *“manufacturers must communicate with each other so as to know what each is doing”*, most probably to bring about transparency among clothing manufacturers. Having a standardized sizing system could help with the confusion South African female consumers face when purchasing ready-to-garments.

With regard to the second category, *various garment sizes*, some participants suggested that having a variety in garment size ranges which can fit various body shapes and sizes can be a solution to the problems of garment fit. They explained that different body shapes and heights should be included within the same size range for example size 16-petite, 16-tall and 16-comfort. This was discovered through comments such as *“introduce more sizes e.g. 16 – petite, 16 – tall, 16 – comfort”*. Some participant perceived having more size ranges would also be a solution *“introduce in-between sizes”*. Having in-between sizes can be helpful to some female consumers who find it hard to fit into for instance size 12 yet the next size 14 is a bit larger.

Furthermore, some participants also expressed the need for more stock of garment sizes within the same size range as this participant commented “*have enough stock for popular sizes*”. This may imply that there are some size range categories which most female consumer fall into do not get enough stock. It would, therefore, be helpful if clothing retailers can be aware of the supply demand by researching the need of their target markets. Some participants also mentioned that clothing manufacturers should “*include all size ranges in all the designs*”. This seems to indicate that some size ranges are excluded in some garment designs.

Participants who indicated the third category, *in-store services* as the solution to garment fit problems contributed by garment sizing, mentioned alteration services and fitting sessions in stores can be useful. According to the participants “*having tailors to alter the garments when the need arises*” and “*to have a personalized fitting sessions*” can be helpful to attain the desired fit in clothing. Few participants in this study suggested keeping records of consumers can be a solution to the problem of garment fit through comments such as “*take records of people*” and “*keep records of sales*”. This may suggest that keeping track of consumer needs, complaints, returns as well as records of sales could also help identify problems of garment sizing and fit of the garment.

The fourth category *realistic garment sizing* was explained by some of the participants that clothing manufacturers should consider the body shapes of their target market when designing the garments to be the solution to garment fit problem. They revealed that most garment size dimensions did not reflect the body sizes of “real people” and are not suitable for different body shape. This was expressed through comments such as “*use ‘real women’ not catwalk models*”. Some participants in this study also suggested that getting information about garment sizing from the consumers would help the problem of garment sizing and garment fit as illustrated by these comments “*research on how to improve sizes, sizes for everyone*” and to “*look at the target market instead of just producing garments without the input of the consumers*”. This indicates that garment sizing needs to be upgraded at all times in order to have the correct measurements of the population and meet the requirements of the consumers.

In Chapters 1 and 2 this study argued that body shapes, garment sizing and communication of size labels are some of the many factors that contribute to garment fit problems. The section that follows presents the findings of open-ended data on communication of size labels.

5.5 FINDINGS FROM SECTION D OF THE QUESTIONNAIRE

In section D, data from the open-ended questions on garment size label communication were analyzed using the open-coding system, whereby the raw data were reduced into manageable proportions. The most descriptive words were identified and similar concepts were grouped to form either themes or categories that best described the main concerns or facts associated with the item in question. The discussions are supported by quotations relevant to each category derived from the textual data of the participants.

Summaries of the open-ended questions on garment size label communication are illustrated in the tables found in **Appendix J**. These tables (Appendix J) show the reduced data which has been coded into themes and categories formulated through concepts derived from the exact words of the participants.

The analyses and discussions of open-ended questions data on garment size label communication are presented in the following section.

5.5.1 Open-ended questions on garment size label communication

According to Ashdown (1998:327), size label, the number or letter that identifies each size of garment is generally not related to body measurements. Since the size labels do not refer to any actual body measurement, the sizes can easily change. Currently different clothing manufacturers use the same size labels for garments that fit different body measurements. As a result of the confusion about garment size labels, consumers have to try-on multiple garments to discover the one which will fit their particular body size and shape (Ashdown, 1998:327).

However, because of the lack of standards and confusion about size labelling, the ISO 3635 was developed by the Technical Committee ISO/TC133 for *Sizing systems and designations of clothes* as a reference for up dated standards applicable to the garment under construction. [The ISO (the international Organisation for Standardization) is a worldwide federation of national standards institute. The work of developing International Standards is carried out through ISO technical committees of which South Africa is a member].

According to the document ISO/TC133, the size designation of clothes, certain measurements have been so prescribed that when taken in accordance with a standard procedure using standard terms and definitions, they will define a body size. This body size is indicated on the label, on the swing ticket, or on both, so that the correct selection of a

garment may be possible according to the appropriate personal measurements, irrespective of current fashion or garment style (ISO TC133 WG3 Meeting, 2012). Through the open-ended questions on garment size label communication, a better insight of the problems of garment labelling in South Africa is possible.

Seven different questions were asked to explore different aspects relating to garment size label communication. These questions included:

- the general problems with information on size labels, which addresses part of research Objective 4.
- the effect of garment size labels communication on garment fit, which addresses part of research Objective 4.
- the emotions resulting from the problems of garment size labels communication which addresses part of research Objective 3 and sub-objective 3.
- the effect of garment size label communication on purchase decision which addresses part of research Objective 5 and
- the solutions to the problems of garment fit contributed by garment size label communication which addresses part of research Objective 6.

5.5.1.1 Findings on the general problems with current information communicated on garment size label.

Garment size labels help consumers to make an informed garment size buying decision (Chun, 2007:220). Thus garment size label communication can be regarded as crucial to the consumers when purchasing ready-to-wear garments. The following question was asked to explore the problems female consumers encounter with the garment size label communication.

The question that was asked to address part of research Objective 4 of this study was; ***“what are the main problems you have with the current garment size label communication on ready-to-wear clothing in South Africa?”***.

In response to the question, the results of the content analysis reported three main problems with the current information communicated on the garment size label on the ready-to-wear clothing in South Africa. These problems were categorized into three themes namely, ***confusing, ambiguous information*** and ***labels in garment’s features***. Participants who had indicated that the information on the current garment size label is ***confusing*** expressed three circumstances (these circumstances are regarded as the categories) that make the

current garment size labels confusing. These circumstances were that the information on the garment size labels *does not make sense*, *wrong information* and is *inconsistent information*.

With regard to the first circumstance which refers to information on the garment size label *does not make sense*, some participants pointed out that there are no explanations of what alphabetical or descriptive size labels such as small, medium, and large represent, which often are unrelated to body size. This was illustrated through comments such as “*alphabetical size labels such as S, M L or XL do not make sense*” and “*there is no reflection of the real size*”. This view is supported by Kennedy (2008:4) who postulated that size designations have no obvious relationship to garment measurements. This seems to suggest that female consumers need more information about the actual intended fit of the garment than the labelling system that does not represent body measurement the garments is designed to fit.

The second circumstance which participants indicated *wrong information* was expressed by some participants “*some size labels are wrong, they are too small for the garment measures*” and “*garment size label appears twice your garment size*”. With regard to the circumstance *inconsistent information*, participants had specified that current garment size labels’ information were inconsistent across or within the shop. This was identified through comments such as “*uniform size labels from store to store have different fit*” and “*labels of the same garment measurements differ in different shops*”. Accordingly garment size labels are confusing to these female consumers. The problem of *inconsistent information* can possibly be attributed to what Faust *et al.* (2006:72) demonstrated that apparel order givers and manufacturers do not adhere to established national standards. Furthermore, the problem of *inconsistent information* is also reiterated by Laitala *et al.* (2011:32) who explored problems with size designations, the results from in-store trousers’ waist girth measurement showed great variations in waist size between trousers that should be the same size according to the size label.

Participants who had indicated that garment size label carries ***ambiguous information*** also gave two reasons that make the information communicated on the garment size label ambiguous. The reasons were that the information on the size label is *limited* and that it is *not clear*. Some participants who expressed that the information on the garment size label is *limited* explained “*there are no guidelines to show size L or XL is equal to size 34*” and “*they only refer to the measurements of bust, waist and hips, arms are not included*”. This lack of information was also highlighted by Tongue *et al.* (2010:443) who reported that half of the parents reported that retailers did not provide enough information regarding sizing in-store

and that they preferred size charts giving average body measurement for each age. This suggests that the information communicated on the garment size labels need more clarification. With regard to the reason that the information communicated on the garment size label is *not clear*, some participants indicated that they were uncertain of the numerical codes in that the information on the garment size label was not explained, as it was illustrated in these comments “*the meaning of the numerical codes information not clear*” and “*most people are ignorant with information on the labels*”. This seemed to suggest that the information communicated on the garment size label needs to be clarified to the ordinary consumers.

On the other hand, participants who had in the category ***labels in garment’s features*** complained that the labels in garments irritate the skin as these participants complained “*it is irritating on the neck*” and “*it scratches*”. Very few participants thought the fading away of the information on the garment size label was problematic as this participant commented “*it washes out over time*”. Interestingly, these participants were concerned with the fading of the information on the swing tags. This was probably important for future reference when deciding which garment size to purchase.

5.5.1.2 Findings on the effect of garment size label communication on garment fit

Three different questions which address part of research Objective 4 were asked to determine that garment size label communication can be regarded as one of the many factors that contribute to garment fit problems.

The first open-ended question on the effect of garment size label communication on garment fit was; “***when purchasing ready-to-wear garments, do you trust the information on the garment size label to guide you in your choice of what to buy?***”

In response to the question, the analysis resulting from the question indicated two opposing trusting themes. The themes were categorized into ***do not trust*** and ***do trust***. The majority of participants who reported that they ***do not trust*** the garment size label information to guide them what to purchase mentioned two reasons (these reasons are regarded as the categories) for not trusting the size labels namely *untrustworthy information* and *false information*. Participants who indicated that the information on the garment size label is *untrustworthy* explained “*the garment might be smaller than what is labelled*” and “*it does not correspond*”, it is misleading “*they are misleading, M becomes smaller after washing, I tend*

to buy XL even if I wear medium” and *“size labels do not always reflect the exact size”*, the information is limited *“on labels M, L they don’t have explanation, you need to try-on”* and *“I struggle with alphabetical labels”* and are inconsistent *“the sizes vary from one shop to another”*.

Participants who had indicated that the information on the garment size label is *false* mentioned that they relied on other strategies such as *try-on* of garments, *visual judgment* and *shop assistance* to guide them in what to purchase rather than to trust the garment size label information. Most participants who relied on trying on of garments explained *“I prefer to fit than trust the labels”* and *“I try-on until I find correct size”*. This finding affirms the findings of Sindich and Black (2011:453) who reported that many respondents did not know their sizes. This may imply that the majority of the information communicated on the garment size labels does not efficiently assist female consumers find the garment that fits properly, as a result most consumers spend more time shopping trying to locate the correctly fitting garment. Some participants who indicated that they relied on *visual judgment* expressed that they make sure the garment will fit them by inspecting garment size visually as these participants illustrated *“I judge with my eyes as well to make sure it will fit”* and *“I check it at an arm length away”*. Furthermore, few participants who indicated that they relied on the shop assistance confided that they ask for shop assistance to guide them in their choice instead of relying on the garment size label information as this participant explained *“I cannot rely on the label, I have to ask help from shop assistance”*.

On the contrary, very few participants who indicated that they **trust** garment size label information believed there is *no problem* with the information on the garment size label. These participants seemed confident with the information, especially the numerical labels, as it guides them to correct fitting garments. According to these participants, *“I am confident with numerical labels”* and *“they always fit the way I want”*. However, within this group that indicated that they trust the information communicated on the garment size label, some participants indicated that the communication of garment size label is somehow accurate as this participant expressed *“they seem accurate”*. Some participants mentioned that they only trust garment size labels in certain shops. This was evident through comments such as *“I trust some shops, they are accurate”* and *“it depends on the shop if I am familiar”*. Although these participants seem to trust the information communicated on the garment size label to guide them in their choices for garment, the finding seems to suggest that there were some indications of not totally trusting the information on the garment size label, unless in certain shops. This means these participants were unsure if they were to go to unfamiliar shop.

The second open-ended question that explored the effect of garment size label communication on garment fit problems was; “**does the garment size label provide you with valuable information?**”

In response to the question, the results of content analysis reported two agreement themes namely **disagreed** and **agreed**. The majority of the participants who **disagreed** mentioned *insufficient information* and *false information* to be the reasons (these reasons are regarded as the categories) for the information on the garment size label to be invaluable.

The majority of the participants who had indicated *insufficient information* explained that the information on the garment size label was a basic indication of categories of garment sizes with no explanation “*it is just a basic indication, no details*” and “*only an indication of size not fit*”. While some participants regarded the information communicated on the garment size label to be limited with nothing related to the body shape. This was evident through comment such as “*information is not enough*” and “*nothing relating to body shape*”. These results seem to suggest that female consumers in this study need more information on the garment size label, affirming Faust & Carrier’s (2010:120) study who found that 78% of the women subjects preferred the label with an image of a silhouette to the existing ones.

With regard to the category *false information* some participants pointed out that the information on the garment size label is false in most instances “*false information most of the time*” and “*the information is wrong*”. Few participants mentioned that *inconsistency* caused the information on the garment size label to be false through comments such as “*sizes are different in shops (inconsistency)*”.

On the contrary, few participants who **agreed** that the garment size labels provided valuable information perceived the information on the size label as a basic guideline of where to start looking for the garment size. Some participants expressed this view through comments such as “*it generally guides, that is good*” and “*it guides where to start*”. Furthermore, some participants expressed the necessity of the provision of an idea of where to find the correct garment size as these participants explained “*it gives the idea of the size*” and “*it give an idea of how close to finding my size*”. Some participants mentioned that the information on the garment size label was valuable because it gives an *indication* of the garment size, “*it is important to know the size I am wearing*” and “*it shows the size I am looking for*”.

However, within the group of the participants who indicated that garment size label provided valuable information, few participants gave *conditional agreement*. These participants agreed that the information provided on the garment size label is valuable only if they are

able to fit into size indicated. According to the participants, “*only if the size label is accurate and correct then the information is valuable*” and “*if that size fits you*”.

The third open-ended question that explored the effect of garment size label communication on garment fit problems was; “***do you think garment size label communication contribute to garment fit problems you are currently facing?***” ***Please explain.***

In response to the question, the content analysis results from this question indicated that most participants think that garment size label communication do ***contribute*** to garment fit problem while a few indicated it ***did not contribute***. The group of participants who thought that garment size label communication ***contribute*** to garment fit problems indicated three main reasons (these reasons are regarded as the categories) why they thought so. These reasons were *inconsistent information*, *unreliable information* and *ambiguous information*.

In terms of *inconsistent information* as the reason garment size label communication contribute to garment fit problems, some participants expressed the view that the garment size label communication were inconsistent across the shops, which can cause significant problems with garment fit as this participant explained “*you are not sure of your size if you find different size labels at different shops*”. This suggests that inconsistency can contribute to choosing incorrect fitting garments if you do not try-on.

With regard to the second reason which refers to *unreliable information*, participants pointed out that incorrect information on the size labels make it difficult for consumers to locate the correct fitting garment. This was evident through comments such as “*it is hard to determine the correct size*”. Since there are no labelling standards followed in South Africa, the finding seems to imply that female consumers are not sure of their true garment sizes because of the unreliability of size labels. This can contribute to purchasing the incorrectly fitting garments. Some participants expressed the view that the information communicated on the garment size label is untrustworthy because there are no standards followed by the manufacturers as illustrated through this comment by most participants “*garment size labels are not standardized, what you think is your size might not fit*”. Additionally, participants in this study emphasized the importance of trying-on garments because of the unreliability of the size labels as illustrated by these participants “*you pick what doesn’t fit if you don’t fit*” and “*there will be a problem if you did not fit*”. This seems to suggest that *unreliable information* communicated on the garment size labels can contribute to garment fit problems if the consumers do not try-on the chosen garment.

The third reason where participants indicated that garment size label communication contribute to garment fit problems because of *ambiguous information*, explained that the

information communicated was incorrect and with incorrect information consumers can be lead to purchase the wrong fitting garment “*wrong labels make you buy wrong size then it doesn’t fit properly*” and “*It doesn’t fit as the size says*”. Thus the researcher can speculate that female consumers can be misguided into purchasing the incorrectly sized garment, especially when in a hurry and cannot try-on the selected garment. Some participants indicated that the information communicated on the size label was limited which can contribute to the problems of garment fit as illustrated through these comment “*it is confusing when they don’t mention body shape*” and “*there is no indication of the measurements*”. Although some measurements such as bust, waist or hips are indicated on some female garments to all or some of the clothing retailers that participants in this study frequented, Faust and Carrier (2010:120) argue that a label giving waist and hips measurements will only be of value if women know their body measurements. In the same study, the researcher found that most women appreciated a pictogram with key body measurements, although they questioned the actual use made of this information, since they do not yet know their body measurements. This dilemma could also be true of the participants in this study.

On the contrary, few participants who reported that garment size label communication do **not contribute** to garment fit problems believed that they can find the correct fitting garment by investing more time in shopping “*you just have to look carefully*” and “*fit until you find what fits*”. This may imply that if the consumer is in a hurry, it can also be difficult to find the garment they wish to purchase based on the information communicated on the garment size label.

Open-ended questions on communication of size labels in section D of the questionnaire also explored the emotion elicited when female consumers experience problems with garment size label communication.

5.5.1.3 Findings on the emotions resulting from the problems of garment size label communication

Desmet *et al.* (2001:32) mention that human interactions, including our material world such as garments involve emotions. That is, female consumers can experience emotions when they are faced with garment fit problems. The following question was asked to find out the emotions elicited by female consumers as a result of the problems of garment size label communication.

The question that was asked to address part of research Objective 3 and sub-objective 3 of this study was; “**how does it make you feel when you experience garment fit problems because of the information communicated on the garment size label?**”

The results from the content analysis of this question clearly show that the majority of the participants in this study feel **negative emotions** when experiencing garment fit problems, while few seemed to be **uninvolved**. Some of the expressed negative emotions included *frustration, doubtful, discouraged, disappointed, revolting and depressed*.

With regards to the negative emotion *frustration*, most participants explained that they feel frustrated after trying on a number of garments and none fits properly. “*I get frustrated to consider trying more*”. While some participants expressed *frustration* for misleading information on the garment size label through the comment “*I get frustrated because they are misleading*”. The negative emotion *doubtful* was expressed by some participants because of inconsistency. The problem of inconsistency in the garment size labelling causes these participants to doubt their bodies and even label themselves fat as this one participant demonstrated “*it makes me doubtful of myself and I feel fat*”. Concerning the negative emotion *discouraged*, some participants expressed “*I get discouraged and worry going shopping*” when the experienced garment fit problems because of the information communicated on the garment size label, while the negative emotion *disappointed* was explained “*it is so disappointing, I don’t like shopping*”. With the negative emotion *revolting*, few participants explained that garment fit problems experienced because of garment size label communication is revolting and makes them feel fat. This was evident through comments such as “*is revolting, I feel fat, not worth spending money on new clothes*”. Regarding the negative emotion *depressed*, participants expressed the view that incorrect garment size label, specifically larger size label is depressing as illustrated through this comment “*bigger sizes make me depressed*”. These findings suggest that female consumers in this study experience all sorts of negative emotions when faced with a situation of difficulty when trying to identify their garment size. According to O’Cass (2000:550), emotions can only be elicited if garment fit is a central object or an important part of consumers’ lives. As such the appearance perceptions of the garment may be shaped by personal values they want to achieve through their clothing. Thus the negative emotions which female consumers have demonstrated in this study, could be related to personal values they want to achieve through garment fit.

Furthermore, the a few participants who seemed **uninvolved** indicted that they had *no problem* with the information communicated on the garment size label as these participants explained “*I have not experienced problem*” and “*not applicable to me*”.

5.5.1.4 Findings on the effect of garment size label communication on purchasing decision

The following question which addresses part of research **Objective 5** was asked to determine the effect of the problems of garment size labels communication on purchasing decision.

“How do garment size label communication problems influence your purchasing decision of ready-to-wear garments?”

In response to the question, the analysis resulting from this question identified two purchasing themes that consumers would follow when faced with garment fit problems because of garment size label communication. The first is **would purchase** and the second is **would not purchase**. Participants who reported that they **would purchase** ready-to-wear garments with garment size label communication problems revealed two conditional circumstances (these conditional circumstances are regarded as the conditional purchasing categories) that would make them purchase. These conditional circumstances were categorized as *the fit of the garment* and *attractiveness of the garment*.

With regard to the first purchasing condition which refers to the *fit of the garment*, some participants in this study emphasized the importance of garment fit. These explained that if the garment fitted them well they would purchase ready-to-wear garments regardless of the garment size label information “*if it fits then there is no problem*” and “*so long it fits and I am happy with the look*”. These findings suggest that female consumers consider fit of the garment to be important, and if a garment does not fit to the wearer’s standards or preferences, it will simply not be purchased (Sindicich & Black, 2011:448) regardless of the information communicated on the garment size label.

The second purchasing condition where some participants reported that they would be influenced to purchase was because of the *attractiveness of the garment* regardless of the communication problem. This was explained “*the garment should attract my attention*” and “*so long it looks good and feels thin*”. This seems to suggest that some female consumers do not allow the garment size label problems to affect their purchasing decision when shopping. This finding is similar to the finding of Weidner (2010:29) who reported that female consumers are aware of vanity sizing, but do not allow the garment size label to affect their purchasing decision.

On the other hand participants who indicated they **would not purchase** ready-to-wear garments with garment size label communication problem also revealed conditional

circumstances that would make them not purchase. The conditions were categorized into *larger size label*, *time factor*, *no fitting option*, *“one size fit all” size label* and *negative blocking emotions*.

With regard to the condition *larger size label*, some participants in this study explained that they will not be influenced to purchase a garment with a larger garment size label than they usually wear. It can be suggested that these female consumers perceive the larger garment size label indicates the size of the person wearing it which can be associated with their personal values. This was expressed through comments *“if the size on the label is big I will not buy”* and *“if the size is larger than 20 I won’t buy, I can get size 16/18 in other shops”*. This finding concurs with Laitala *et al.* (2011:36) who also found some participants refused to try-on a larger garment size label if they did not fit into a medium. Additionally, Holmlund *et al.* (2010:114) also mentioned that mature women avoided international chains where they have to buy larger sizes than normal.

Concerning the condition *time factor*, participants indicated that they would not be influenced to purchase if they are time restrained as illustrated through these comments *“if I don’t have time to fit I will not buy”* and *“if in a hurry I will not buy”*. This seems to suggest that female consumers find it impossible to locate a properly fitting garment with the current information communicated on the garment size label, female consumers need to take time and verify the garment size before purchasing, a process which takes time.

The condition where some participants indicate that they would not purchase if there were *no fitting option*, explained *“if there is no fitting option I don’t buy”*. The refusal to purchase if they cannot try-on the garments shows that female consumers in this study do not trust the size label to guide them to the correct garment size. Without verification of the garment size, some female consumers will simply not purchase.

Furthermore, regarding the condition *“one size fit all” size label*, few participants seemed to doubt the authenticity of such kind of garment size labelling. To these female consumers, this size code does not make sense as illustrated through these comments *“I don’t buy the label”*, *“one size fit all” it does not make sense* and *“I don’t believe the label which says ‘one size fit all’, it’s not simply true”*. While the condition *negative blocking emotions* was explained by some participants that once they are frustrated with the information communicated on the garment size label, they avoid purchasing ready-to-wear garments as this participant remarked *“I lose patience, I don’t buy after frustration”*. Another participant expressed the following about the effect of negative emotions *“if I doubt the label I don’t purchase”*. This indicates that negative emotions affect purchasing decision as well.

5.5.1.5 Findings on the solutions to the problems of garment fit contributed by garment size label communication

Providing more and clear information on the garment size label may help reduce the time and the frustrations which consumers often feel when looking for a garment that fits well. The following question was asked to explore possible solutions to the problem of garment size label communication.

The question that was asked to address part of research Objective 6 of this study was; **“what do you think has to be done to improve garment fit problems contributed by garment size label communication in South Africa?”**

In response to the question, the results of content analysis revealed four possible solutions to the problems of garment size label communication. The possible solutions were categorized into *standardization of the labelling systems*, *target market knowledge*, *information availability* and *consistent information*.

Participants, who suggested the first category *standardization of the labelling system* as the solution to the problems of garment fit emphasized the importance of standardizing the labelling system to improve garment size labelling in South Africa. This was expressed through comments such as “*manufacturers must agree on one standard*” and “*standardization could help*”. This implies that it would help female consumers locate correct fitting garments if all retailers used the same grading system of labelling the garments. Standardizing the labelling system concurs with Winks (1997:1) who stated that having a uniform system of coding would be useful and beneficial to manufacturers, distributors and consumers in terms of reducing returns and exchanges of merchandize because of incorrect size garment.

With regards to the second category *target market knowledge*, participants in this study suggested that clothing manufacturers and retailers should find out what their target market needs to see on the garment size label as this one participant explained “*survey consumer preferences on the label*”. This implies that female consumers in this study need the information they prefer, to enable them choose the correct fitting garment. Some participants indicated catering to the needs of South African consumers to be an important move that would help to solve the problems of garment size labels. This was evident through comments such as “*decide on a sizing and labelling convention for South Africans*”.

The third category where participants reported that *information availability* can help with the problems of garment fit caused by garment size labels was explained in terms of relevant

informative garment size label. Some participants suggested information specifics such as comfort, fitted or loose as well as height would be helpful. This was identified through comments such as “*information such as comfort, fitted or loose should be included*” and “*include height*”. Additionally, participants in this study also recommended the use of numerical codes instead of alphabetical code “*don’t use S, M, L or XL rather use numerical such as 6 – 16 size codes*”.

Furthermore, participants who suggested the fourth category *consistent information* expressed that consistent information was needed to help improve garment fit problems contributed by garment size label communication. Comments in this regard included “*all stores must have consistency in the labels*” and “*distinguish import labels with correct garments*” Distinguishing imported garment was regarded important as perhaps to be alerted of the differences in the garment size labelling system.

However, few participants indicated that they had no problem with garment size label communication, as a result they could not come up with any solution. This category was identified as *uninvolved*. Comments included “*not applicable to me*” and “*no recommendation*”

5.6 CONCLUDING SUMMARY

This chapter firstly presented the findings for the demographics and psychographic profile of the participants in section A of the questionnaire. The demographic profile data of the participants concerning ethnicity and age distribution and psychographic profile data for the most frequently patronized clothing retailer and garment fit preferences which were aimed at determining the role that clothing retailers play in the perceptions of garment fit. Both the demographic and psychographic data were analyzed using descriptive analysis and the results were presented in frequencies and percentage as well as content analysis for the qualitative data on reasons for the most frequently patronized clothing retailer participants had ranked number 1 and for the reasons for their garment fit preferences. The chapter then proceeded to present the results of the psychographic question on perceived self-reported body shapes which was in section B of the questionnaire using descriptive analysis. Self-reported body shapes were for identification of the perceived body shapes of the participants.

Furthermore, the chapter presented hard laddering interviews data on body shapes and garment sizing of section C of the questionnaire. The hard laddering interviews were aimed

at uncovering the emotions resulting from personal values female consumers have with regards to criteria for choosing garments, perceptions of garment fit, thoughts and problems with garment sizing. The responses to the open-ended questions from the hard laddering interviews were content analyzed coded and categorized into attributes, consequences and personal values and the findings were presented in the HVM which were constructed through the software program Mecalyst.V 9.1.

Additionally, open-ended questions on body shape and garment sizing, which were intended to supplement information on the topic of garment fit problems, such as the effect of body shape and garment sizing on purchasing decisions, the effect of body shape and garment sizing on garment fit and the possible solutions to garment fit problems contributed by body shapes and garment sizing which were also presented in section C of the questionnaire were explained. Lastly, the findings and discussions on garment size labels communication (section D of the questionnaire) which were also open-ended question were also provided. The open-ended questions on garment size label communication were aimed at investigating the problems with the information communicated on the size labels, the effect of garment size label communication on garment fit, the emotions resulting from garment size label communication, the effect of the garment size label communication on purchasing decision and the possible solutions to the problems of garment fit contributed by garment size label communication. The findings of all open-ended questions were specified and discussed and the most descriptive words were categorized into themes or categories. The discussions were supported by quotations relevant to each theme and/or category derived from the texts of the participants.

In the next chapter, the conclusions drawn from the findings and discussions will be provided.

CHAPTER 6

CONCLUSION OF THE STUDY

This chapter presents the conclusion of the study that emanates from the analysis of the data. Personal reflections of the most salient elements of the investigated problem are presented.

6.1 INTRODUCTION

Chapter 5 presented the findings and results of the study on “an exploration of female consumers’ perceptions of garment fit and the effect of personal values on emotions” and discussed in accordance with the questionnaire that was used to collect data for this study. This chapter will conclude the dissertation by briefly reviewing the research purpose of this study and the methods applied to gather data, provide a brief summary of the major findings from the study, briefly discuss the application of the conceptual framework (indicated in chapter 1) to the study, suggest possible contributions to the existing theory of garment sizing and fit research, make recommendations to assist the retail industry, identify the limitations of the study and propose future studies. This addresses the objectives and sub-objectives as indicated in Chapter 1 and 4 of this dissertation.

Whilst other authors such as Desmet *et al.*, (2001) and Desmet (2003) have focused on the methods individuals used to appraise or evaluate a situation, these studies have not focused on the individuals’ emotional response as a result of an ill-fitting garment, appraised in comparison to the personal values which they have set for themselves. The role of personal values in determining garment fit preferences may suggest that female consumers often evaluate and select the fit of the garment based on their personal values (Ellsworth & Scherer, 2003:584). These subjective interpretations do not address the question of the underlying concern for example “looking good” which may accompany the emotional state of “frustration”. Therefore, the driving force behind this study was to explore the emotions female consumers experience at a psychological level as a result of the participants’ perceptions of garment fit in relation to their personal values.

Therefore, in order to understand the perceptions of garment fit which may affect the personal values female consumer seek through clothing, this study undertook to determine how body shape, garment sizing and garment size label communication contributed to garment fit problems that female consumers experiences when purchasing ready-to-wear garments. Previous studies by Howarton and Lee (2010), Pisut and Connel (2007) and Alexander *et al.* (2005) on garment fit problems, with regard to ready-to-wear garments from the consumer's perspective, have mostly been conducted in developed countries with little or no focus on the South African consumer.

Furthermore, female consumers have different needs when it comes to purchasing garments, as a result they use store attributes as evaluating criteria in their decision making process concerning clothing retail patronage (Visser *et al.*, 2006:49). Thus, garment fit preferences of consumers differ greatly and are mostly influenced by what is considered important to the wearer at a particular moment or stage in their lives (Yu, 2004:32). Moreover, garments are meant to fit the body, it is also necessary to profile perceived self-reported body shapes of the participants.

Owing to the nature of the investigation, which is concerned with the emotions resulting from the perceptions of garment fit and how this reflects in the personal values, an exploratory research design was used whereby data collection and analysis adopted both qualitative and quantitative methods. Means-ends chain theory through the hard laddering interviews provided data for the emotions relating to the underlying personal values with regard to body shapes and garment sizing. This data was content analyzed and the Mecalyst V 9.1 software program constructed the hierarchical value map (HVM) which presented the findings. Data on the comprehensive picture of how body shape, garment sizing and garment size labels contribute to garment fit problems, affect the South African female purchasing decision and the possible solutions to garment fit problems were presented using open-ended questions. The data were content analyzed and further categorized into themes and categories and the discussions were supported by verbal statements from the participants. The closed-ended questions provided data for the demographic (ethnicity and age) and the psychographic profile (most frequently patronized clothing retailer, garment fit preferences and perceived self-reported body shapes) of the participants. In order to determine the reason behind the most frequently patronized clothing retailers and garment fit preferences, open-ended questions were used to collect the required data.

In the following paragraphs, a summary of the demographic profile of the participants is presented.

6.2 DEMOGRAPHIC PROFILE OF THE PARTICIPANTS

A purposeful and convenient chosen sample of 62 females took part in this study, which was comprised of 52% Whites and 49% blacks. The sample was drawn from the two learning institutions of the University of South Africa (UNISA) – Florida Campus and King David High School – Victory Park in Johannesburg representing a working group of female consumers who buy ready-to-wear garments. This means these women had a constant income of which they could spend purchasing ready-to-wear garments. The ages of participants ranged from 18 to 56, with 52% of the participants between 26 – 45 years of age. The balance of the participants ranged between the ages of 18 – 25 and 46 – 55 age groups were each represented by 18% of the participants, while a limited number of participants were 56 years and older (13%) which provided a good distribution in terms of the younger and older female consumers' retail bought ready-to-wear garment choices. However, the comparison of participants' age with garment choices and fit, was beyond the scope of this study. Due to the limited sample size, the findings of this study cannot be generalized to a greater South African population and are limited to the sample used in this study and the location in which the study was conducted.

The key conclusions of this study, addresses the research Objectives found in Chapter 1 of this dissertation and are as follows:

6.3 CLOTHING RETAILERS' ROLE IN THE PERCEPTIONS OF GARMENT FIT (Research Objective 1)

The first research Objective of this study was to determine the role that clothing retailers play in the perceptions of garment fit in terms of the frequency of patronization of the clothing retailers and stocking of the merchandize in terms of the preference of garment fit. This section summarizes the findings of research Objective 1 by first discussing the most frequently patronized clothing retailers by the participants followed by garment fit preferences.

6.3.1 The most frequently patronized clothing retailers by the participants

Female consumers have different needs when purchasing garments. As a result the store attributes are used as an evaluating criterion in their decision making processes concerning clothing retail patronage (Visser *et al.*, 2006:49). The results in this study indicated that the majority of females in this study (n=56; 39%) indicated that they frequently patronize

Woolworths clothing retailer for the purchasing of garment, followed by Mr Price (20%), Edgars (14%) and Truworths (7%). Foschini, Donna Claire, and Jet were each frequently patronized by only 4%, while Queens Park, Ackermans and Milady were the least patronized, with each 2% of the participants. The study also revealed that some participants (4%) frequently patronize “other” clothing retailers, without specifying the names of the shops. This clearly shows that the South African female consumers definitely have retailer preferences when it comes to the purchasing of garments and Woolworths appears to meet most of the expectations of what the majority of these consumers seek out when it comes to the purchasing of garments. Furthermore, the content analysis for the reasons for their most frequently patronized clothing retailer reflected that female consumers in this study most frequently patronized clothing retailers that offer specific attributes that they seek in clothing such as *quality garments, comfortable and fashionable styles, availability of sizes, variety of merchandize and affordable prices*. Some participants also regarded *good customer services, presentation of garments in store and location of the retailer* to be important.

The attributes highlighted as reasons for most frequently patronized clothing retailer in this study supports research conducted by Chen-Yu *et al.* (2010:131) who stated that the decision to patronize a store usually starts with consumer’s images of stores based on their perceptions of the characteristics or the attributes of the store that the consumer consider important.

6.3.2 Garment fit preferences of the participants

The overall sample’s garment fit preferences indicated that the majority of the participants in this study preferred semi-fitting pants, a blouse and garments in general which is the silhouette that shows the shape of the body but without completely hugging or showing contours of the body shape. However, a reasonable number of the participants also preferred tight-fitting pants (31%), while some participants preferred loose-fitting pants, a blouse and garments in general. The findings indicated that there is some variability in the market of female consumers, which can be the result of some garment manufacturing factors that requires further investigation.

Given the reasons behind the participants’ garment fit preferences, the findings indicated that *comfortability* was consistently regarded as an important reason among most of the participants who preferred semi-fitting pants, a blouse and garments in general. *Comfortability* was also regarded the primary reason for some participants who preferred tight-fitting and a few who preferred loose-fitting garments across the garments categories studied. According to Otieno *et al.* (2005:299), comfort in garment fit includes several dimensions such as physical comfort; which include mechanical properties such as elasticity, flexibility, weight of the garment and

psychological comfort includes good feelings and well-being experiences of the garment such as femininity or sophistication of the garment and social comfort which include appropriateness of the garment to the occasion, or satisfaction with the impression made on others (Otieno *et al.*, 2005:299). The comfortable feeling associated with the different fit preferences mentioned by the participants can also be regarded as personal and subjective, in terms of what the consumer wants to achieve or project through a well fitting garment.

A substantial portion of the participants indicated that the *slimming effect* was the main reason that they preferred tight-fitting pants, a blouse and garments in general. The preference of tight-fitting, specifically for the pants could be a reflection of the current fashion trends for pants in the market place. This could suggest that some females could be expressing some sort of personal value for instance, “belonging” which they need to achieve through garment fit when they follow the current fashion trends. Wearing tight-fitting pants, a blouse and garments in general was also preferred by some participants because according to them this fit also *compliments the body shape*. This is supported by studies conducted by (Pisuit & Connell, 2007:376; Alexander *et al.*, 2005:59) whose results showed that a significant relationship exists for body shape and garment fit preferences in relation to body cathexis. This means individuals who are more positive with their body shape have no problems to reveal their bodies through fitted garments (Pisuit & Connell, 2007:373). In this study, the reasoning that tight-fitting garments *compliment body shape* to some extent seems to suggest that these women are confident and comfortable with their body shapes and that the fitted garments conform to their bodies and flatter their body shapes. Hence they are not afraid to show them off in the projection to others.

A few participants who indicated the preference for loose-fitting garments seemed to be concerned about their perceived body shapes. They mostly preferred loose-fitting garments in order *to cover-up* and to *correct* perceived body shapes. Chattaraman and Rudd (2006) reported that respondents of a larger size tended to prefer garments with greater body coverage and looser silhouettes. However, this study did not measure the garment sizes of the participants and compare the reasons for their garment fit preferences. Therefore, it can be assumed that the reasons for the preference of loose-fitting garments highlighted in this study could partly suggest that these women do not like to reveal their body shapes and they use the garments to compensate for their perceived figure flaws.

The findings of this research on the garment fit preferences for pants, a blouse and garments in general, clearly indicated that the female consumers selected their garment fit preference options for either functionality, or expressive reasons which could be related to their personal values that the fit levels provides such as modesty or comfort.

6.4 SELF-REPORTED BODY SHAPES (Research Objective 2)

The second research objective was to identify the perceived self-reported body shape of the female participants.

The results of this study indicated that the majority of the females (42%) perceived themselves to be triangular shaped. Studies by Lee (2005:25) and Barona McRoberts (2005:27) conducted in the United States of America have shown that female consumers were becoming larger and more triangular shaped. This finding seems to suggest that South African females' body shapes are more like their counterparts in the developed countries such as United States of America. Clothing manufacturers and designers should specifically target and cater for this body shape as a niche market by incorporating the styles which are suitable for the triangular body shape.

6.5 FEMALE CONSUMERS' PERSONAL VALUES AND EMOTIONS THROUGH GARMENT FIT (Research Objective 3)

The third objective was aimed at exploring and determining female consumers' personal values depicted through garment fit and the subsequent emotions contributed by body shape garment sizing and garment size labels communication (Sub-objective 1 to 3).

According to Nelissen *et al.* (2007: 902), most current theories on emotions, state that an emotional state is characterized by a motivation to attain a particular goal or personal value. This means that if a consumer is able to maintain what she aspires to achieve (personal value) through garment fit, positive emotions may be expressed. On the other hand, substantial negative emotions may be elicited if personal values are affected because of the perceptions of an ill-garment fit.

In this study, the personal values and the subsequent emotions related to body shape and garment sizing were explored and determined through hard laddering exercises. Open-ended questions were used to identify the emotions related to garment size label communication.

6.5.1 Personal values and emotions related to body shapes (Sub-objective 1)

Sub-objective 1 was to identify the personal values and emotions related to body shape in terms of the criteria important to female consumers when choosing ready-to-wear garments and the problems that female consumers encounter when purchasing ready-to-wear

garments considering their body shape(s). The following paragraphs summarize the findings of Sub-objective 1 by first discussing the important criteria that the women in this study use for choosing ready-to-wear garment considering their own body shape followed by the problems that they encounter when purchasing ready-to-wear garments.

6.5.1.1 Criteria for choosing ready-to-wear garments

Garments that individuals wear greatly influence the way they think, feel and behave (Rasband & Liechty, 2006:3), as such the criteria for choosing ready-to-wear garments could be considered an important step in the achievement of what the consumer aspires to achieve through clothing. The results indicated that participants in this study considered the “fit” (36%) of the garment which represents the fit preference option of either tight, semi or loose fitting, to be the most important criteria when choosing ready-to-wear garments, closely followed by the “styles” (34%) of the garments. Female consumers in this study also considered the “lengths” (15%) of the garments which represents the lengths of pants, skirts, dresses and sleeves to be important criteria for choosing ready-to-wear garments. Through the criteria “fit” participants hoped to achieve personal value expressed as a positive emotion “confidence”. Participants also considered the “styles” of the garments for the attainment of the same personal value “confidence” and also for the fulfillment of the personal value and a positive emotional connection of “look good”. “Styles” of the garments were again considered for the achievement of the personal value also and emotional expression of “freedom”. While through the “lengths” of the garments, participants were seeking personal value of “presentable” as well as to “cover up” some body parts.

According to Gutman (1982), the Means-ends chain theory builds upon the assumption that consumers are oriented to problem-solving, meaning that they seek to solve their daily life problems by engaging in various actions to fulfil their personal values. The theory also assumes that when consumers buy a product, it is usually one or more desirable consequences, or the avoidance of undesirable ones that they are choosing which are related to the achievement of their fundamental personal values. Since through garments the body becomes a form of self expression of personal values to others (Kaiser, 1998:146), in this light, the study suggests that the criteria for choosing ready-to-wear garments rests upon whether the garment provides desirable consequences contributing to the achievement of the personal values also expressed as positive emotions.

6.5.1.2 Problems mostly encountered when purchasing ready-to-wear garments

The process of establishing a good fit is a difficult process as the perception of fit should be understood from the consumer (subject), aside from the expert's point of view. The consumer's perception of fit is defined by the fashion trends, function of the garment and the subjective preferences including comfort, appearance and personal choice in evaluating fit (Pisut & Connell, 2007:368). However, a garment should be well fitting to bring out the desired relationship between the body and the garment, which is not an easy task (Ashdown & O'Connell, 2006:137) considering the various body shapes. The results indicated that "tight-fitting" (40%) and "loose-fitting" (23%) of garments in certain parts of the body, the "length of the pants" (21%), which did not correspond to the various heights of the consumers the "length of tops" (8%) which did not cover the bottoms and inappropriate "styles" (3%) of the garments for the various body shapes were the problems which female consumers in this study mostly encountered when purchasing ready-to-wear garments.

The various problems encountered with ready-to-wear garments by the participants all pointed to the same focal point of the negative consequence of "improper fit". For the female consumers in this study, this negative consequences were the bridge connecting to various expressed negative emotions (negative instrumental personal values) by the participants. Although the problems encountered by the participants were all harmful to the attainment of the personal values, somehow some participants saw some of the problems as challenges. That is, if worked on, they might achieve their desired fit. For example "loose-fitting" garments and "lengths" of the garments could be altered to fit their body shapes.

Female consumers seek out certain personal values through garment fit, however, the personal values that these participants aspire to achieve through clothing seems be affected by the above mentioned problems. As already stated in Chapter 5 Section 5.4.2, emotions and personal values are closely related in that the emotions hide a concern which is important to the consumer. In this regard, personal value is the concern which is also the terminal personal value that gives the situation (for instance improper fitting garment) its emotional meaning. This study, therefore, suggests that the expressed negative instrumental personal values (emotions) pointed to the unnamed concern or a terminal personal value which is hindered by the problems the participants in this study have identified.

6.5.2 Personal values and emotions related to garment sizing (Sub-objective 2)

Sub-objective 2 was to identify the personal values and emotions related to garment sizing in terms of the thoughts that come to mind when considering garment sizing in South Africa and the problems that female consumers experience with garment sizing in general. This section summarizes the findings of Sub-objective 2 by first discussing the thoughts that come to mind when considering garment sizing followed by the problems encountered with garment sizing.

6.5.2.1 Thoughts about garment sizing in South Africa

Since fit is the first aspect the consumer uses to evaluate a garment (Ashdown & O'Connell, 2006:137), the consumers' perceptions of fit are important when trying to improve the sizing system and hence the fit of a garment. The results indicated that most female consumers thought of garment sizing in South Africa as "inconsistent" (21%). Some participants were of the opinion that garment sizing was "unreliable" and that clothing retailers carried "limited stock" (both 16%), fewer thought garment sizing was "inaccurate" (8%). However, some participants thought garment sizing in South Africa was "reasonable" (15%).

While female consumers in this study evaluated the thoughts concerning garment sizing, mostly negative instrumental personal values were expressed as negative emotions by the participants. However, some participants who thought that garment sizing was "reasonable" revealed positive instrumental personal values expressed as positive emotions. According to these participants, sizes were available if only they invested more time in shopping around.

The central assumption of the cognitive appraisal theory of emotions is that different people may respond with dissimilar emotions to the same situation depending on how each one of them evaluates the situation (Siemer *et al.*, 2007:592; Roseman *et al.*, 1990:899). The findings of this study, therefore, suggest that the evaluations of garment sizing resulted into some participants regarding it as beneficial (positive) while most of the participants thought of garment sizing as harmful (negative) to the attainment of their personal values. Hence both positive and negative emotions were expressed by the participants when they thought of garment sizing in South Africa.

6.5.2.2 Problems experienced with garment sizing in general

Ashdown (1998:325) states that the goal of any sizing system is to choose the size groups (similar body measurements) in such a way that a limited number of sizes will provide garments that fit most individuals in the specific target population. The results indicated that “inconsistency” (45%) was by far the major problem with garment sizing in South Africa. The other problems revealed were that sizing was “unsuitable for various body shapes” and is “unreliable” (both 13%), followed by that it is “inaccurate” (11%) and that retailers carried “limited stock” (8%). Through these problems mentioned by the participants, the findings showed only negative instrumental personal values expressed as negative emotions were elicited. The findings once again seem to indicate that the expressed negative emotions by the female consumers in this study clearly suggest the presence of an underlying concern or the unnamed terminal personal value affected by the problems of garment sizing.

6.5.3 Emotions related to the problems of garment size label communication (Sub-objective 3)

Sub-Objective 3 was to identify the emotions elicited because of the problems of garment size label communication.

The findings clearly indicated that the problem of garment size label communication directly affected the feelings of female consumers. The majority of them expressed negative emotions such as “disappointed”, “frustrated” among others when they were faced with difficulties to identify the correct fitting garment because of the wrong or lack of the useful information on the size label. These findings show that negative emotions were elicited when female consumers failed to achieve the desired fit because of the wrong information they were presented with on the size label. It can once again be suggested that the emotions elicited are the results of the evaluation of the problems of garment size label communication in relation to the personal values that they want to achieve through garment fit.

However, the findings also showed that some although very few female consumers felt uninvolved with the problems of garment size labels communication. They did not regard it as a real problem, which means communication of size labels was regarded as irrelevant to their achievement of their personal values through garment fit. As a result no emotions were expressed by these participants.

It is apparent from the conclusions of the study on the female consumers' personal values depicted through garment fit and the subsequent emotions that female consumers in this study had expectations of how their garments ought to fit and conform to their bodies. As noted in the study, these expectations seem to be shaped by personal values that they aspired to address through garment fit. The study, therefore, suggests that the personal values also expressed as emotions are what directed their criteria when choosing ready-to wear garments. The expressed negative emotions as a result of the problems encountered because of their body shape, the thoughts and problems with garment sizing as well as problems with garment size labels communication seemed to be pointing to the certain concern or the affected personal value that female consumers needed to address through clothing.

6.6 CONTRIBUTION OF BODY SHAPE, GARMENT SIZING AND GARMENT SIZE LABEL COMMUNICATION TO GARMENT FIT PROBLEMS (Research Objective 4)

The fourth research objective of this study was aimed at identifying the roles that body shape(s), garment sizing and garment size labels communication play in garment fit problems. This section summarizes the findings of research Objective 4 by first discussing the effects of body shapes on garment fit. The section will proceed with the summary on the effects of garment sizing on garment fit followed by a summary on the effects of garment size labels communication on garment fit.

6.6.1 The effects of body shape(s) on garment fit

The literature (Pisut & Connell, 2007:368; Schofield *et al.*, 2006:148; Simmons *et al.*, 2004:1) indicates that Variations in body shapes and sizes are repeatedly mentioned as the reason why clothing manufactures are failing to produce proper fitting garments. The findings indicated that the majority of the participants thought their perceived body shapes affected the choice of the garment and limited them in what they can wear. They were concerned that *design features of the garments* which did not accommodate the various body shapes of the women affected the choice of garments. This may imply that some female consumers were unable to purchase particular garment designs which are on the market because of their body shapes. They also complained that they were limited to purchasing garment designs which are suitable for their body shapes as their body shapes cannot fit into some garment designs they were interested in. Most garment manufacturers still base their body measurements on an hourglass or slightly

pear shaped figures when manufacturing or designing garments for female consumers (Connell *et al.*, 2003:1). These body shapes have a proportionately smaller waist when compared to the hip/bust measurement ratio. This type of practice does not accommodate the diversity of female body shapes that currently exists in South Africa, specifically the oval perceived body shape which is also prevalent in this country (Pandaram, 2010). This clearly indicates that female consumers who do not have the body shape that meets the ready-to-wear sizing system, may have problems with garment fit (Park *et al.*, 2009:374).

The findings also indicated that body shapes affected the choice of the ready-to-wear garments where the female consumers placed importance on the *comfortability* of the garment. These participants seem to acknowledge that they cannot fit comfortably and be presentable in certain garment designs or style because of their body shapes. As a result they would avoid purchasing garments which were uncomfortable because of their body shape. However, a few participants had no problems with the choice of garments nor felt limited in what they can wear because their body shape suited the ready-to-wear designs available in clothing retailers in Johannesburg.

The revelation of only a few participants experienced no problems with the choice of their garments and were not limited in what they can wear because of their body shape, gave an indication that most female participants in this study might be experiencing garment fit problems because of their body shapes.

6.6.2 The effects of garment sizing on garment fit

A wide range of female body variations in the population all over the world, including South Africa, raises the need for body and garment sizing in the ready-to-wear garment industry (Petrova, 2007:57). Garment sizing, according to Branson and Nam (2007:264), is developed to create a set of garments that would provide acceptable fitting garments for a targeted group of people. In other words, the sizing systems used in the ready-to-wear garments are generally based on a selection of dimensions from an anthropometric study of the population for which the sizing system is designed for (Ashdown, 1998:325). In this case the aim of anthropometric studies is to collect data from populations of sizes and body shapes.

The findings revealed that garment sizing has caused great confusion among consumers and that they feel they are being misled. They find it hard to purchase anything without trying on. It is also alarming to note that some consumers do not bother to go shopping when they are pressed with time for fear of purchasing the wrong sized garment which will

not fit properly. This finding implies that because of unreliability of garment sizing, some female consumers can purchase a poor fitting garment if they did not try-on the selected ready-to-wear garment before purchasing.

The study further indicated that the participants frequently did not find their garment sizes in their size categories, hence, the incorrect fit. Participants also complained that fashionable styles were limited to the smaller sizes while the larger size only had plain loose fitting styles and that variations of body shapes were not considered in the sizing of the garments. Ashdown (1998:325) points out that most sizing system are based on one or two body dimensions such as bust, hip and waist measurements. This system does not accommodate all specific measurements for the large variations of female body shapes and proportions in the population. As a result a large numbers of female consumers do not fit well into the garment sizes. Moreover, the study also showed that few participants found it particularly hard to find the suitable size with the styles and designs that are currently on the market. Suitability could possibly imply the way the garment fits the body, how the garment fits the body and whether the garment suits the personality of the wearer. This indicates that it is impossible for other body shapes and proportions to achieve a desirable fit if the design was not meant for their body shape in the first place.

The summary of the findings on the effects of garment size labels communication will be presented after establishing the problems in general with the information currently communicated on garment size labels.

6.6.3 General problems with information communicated on the garment size labels

The findings revealed that female consumers in this study find the information on the garment size label to be rather confusing. The number and letters used for size codes often did not reflect the body measurements they were supposed to fit and when there seems to be no relationship between the size label and the measurements of the garment. Inconsistency across and within the shop was also considered the problem with the information communicated on the size labels which may be due to vanity sizing. This practice is used as a marketing tool to enable the clothing manufacturers to benefit from store patronage (Apegyei, 2008:4). However, in this study, such practices seem to only confuse the female consumers. The findings clearly indicate that the information communicated on the garment size label has little meaning to the female consumers in this study.

A significant problem also noted in this study was that a few participants complained of the *labels in garment's features*. They expressed that the labels in garment's features were problematic, in that it irritated their skin and with time and washing the information faded away. The problem of fading away of information could be that some female consumers needed to refer to information on the labels in garment feature, probably when they need to purchase another garment of a similar fit.

6.6.4 The effects of garment size label communication on garment fit

The findings showed that the majority of female consumers did not trust the information communicated on the garment size label to guide them into choosing the correct garment size. Participants indicated that the information was *inconsistent* and *unreliable*. Variation in measurements across shops and within the shop for a given size has created a situation where female consumers can hardly identify the best fitting garment without trying-on the garments. Moreover, they also had difficulties understanding size labels which did not correspond to body measurements. This study clearly suggests that the females in this study need more information about the actual intended fit of the garment than the information currently communicated on the size label of numbers or letters that do not represent body measurements or body shape the garment is designed to fit, which makes the communicated information on the size label invaluable, ambiguous and wrong. These problems are a great challenge to the clothing manufacturers and designers.

Considering the findings above, it can be concluded that it is apparent that the majority of the female consumers in this study think that body shapes, garment sizing and garment size labels communication do contribute to garment fit problems female consumers are currently facing with ready-to-wear garments.

6.7 PURCHASING BEHAVIOUR (Research Objective 5)

The fifth objective was to explore and describe the effect of body shape(s), garment sizing and garment size label communication on purchasing decisions for ready-to-wear garments.

The findings in this study revealed that the *fit* of the garment is an important determinant of making a purchase. Where participants showed an interest in purchasing, while aware of some fit problems they used exceptional conditions which would make them to purchase the selected garment. The possibility of *altering* the garments that fitted badly, *design features*

such as colours that would conceal what they perceive to be “figure flaws, made it easier for some participants in this study to decide to purchase. The study also revealed that some participants only purchased their ready-to-wear garment at *certain shops* where their needs were better catered for. Knowing that garment sizing is usually a problem, some women indicated that they preferred to shop and make a purchase only when they had *enough time*. Stated differently, they avoided making the wrong choice by trying-on the garment they intend to purchase, a process which needs time.

Where participants indicated they would not purchase, they revealed that they copied the designs of the garments in the clothing retailers and had a dressmaker reproduce it for them. This practice may have bad consequences on the clothing retailers who need these female consumers to purchase their garments. The study also showed that some female consumers refused to purchase a garment whose size label is larger than their usual garment size. This may suggest that correct sizing appears to have more value to some consumers and they seem to associate the information on the size label with their perceived actual body size.

6.8 POSSIBLE SOLUTIONS TO GARMENT FIT PROBLEMS (Research Objective 6)

The final research objective was aimed at providing clothing industries with possible solutions to the garment fit problems contributed by body shapes, garment sizing and garment size label communication from the participants' point of view.

The findings indicated that standardization of garment sizing would help solve the problem of garment fit caused by garment sizing. Clothing manufacturers should communicate to one another and adhere to one system of sizing. Participants also suggested the inclusion of different body shapes within the same size range for example size 16-petite, 16-tall and 16 comfort and to including in-between sizes. They also suggested that clothing retailers should carry more stock, especially of the popular sizes, which seem to run out quickly as well as fashionable styles of all sizes. It would, therefore, be helpful if clothing retailers can be aware of supply demand and the need of their target market.

The findings also highlighted the need for customer care services such as tailoring to alter the garments in store as well as personalized fitting sessions and record keeping, probably to track the returns rates and consumer needs. This will help manufacturers understand the preferences and needs of their target markets better. Another salient concern raised by the

participants was that manufacturers should focus on upgrading the sizing system all the time in order to obtain realistic body measurements of the growing and changing South African population.

The findings also suggested standardization of the labelling system can help with the irregularities of garment size label communication. This would make it less confusing if clothing manufacturers agree and follow the same system of labeling garments as there is a need for more and visible information on the size label. Participants needed information specifics such as fitted, comfort, or loose and height information on the size label. Such information would probably be helpful when considering garment fit preferences. It was also discovered that some female consumers seem to dislike alphabetical (S, M, L) size code as they do not make sense to the participants and there is a need for the information on the garment size label to correspond to the measurements of the garment.

With the conclusion of the study in mind, it is now necessary to understand how the cognitive appraisal theory of emotions contributed to the main purpose of this study, which was an exploration of emotions and personal values associated with the perceptions of garment fit.

6.9 THE CONTRIBUTION OF THE COGNITIVE APPRAISAL THEORY OF EMOTIONS TO THE MAIN PURPOSE OF THIS STUDY

The cognitive appraisal theory of emotions, according to Lazarus (2001:55), is defined as a quick evaluation of a situation with respect to one's wellbeing. The answers to the evaluations are what cause the emotions. This means that an ill-fitting garment does not produce emotions, but what the consumer may have evaluated is at stake is what may give rise to particular emotions. These can be personal values an individual seeks through clothing which may be challenged because of the fit of the garment (Desmet *et al.*, 2001:32). Moreover, positive emotions result from an evaluation of anything or a situation which is seen as beneficial, and each negative emotion results from an evaluation of anything or a situation which is seen as harmful. Thus the cognitive appraisal theory of emotions plays a major role in how a person reacts in different situations or the same situation depending on how they evaluate the situation for example a well or ill-fitting garment.

The other central assumption to the cognitive appraisal theory of emotions is that individuals may respond with dissimilar emotions to the same situation depending on how each one of them evaluates or appraises the situation. In the case of products, garments included, an evaluation has three outcomes, for example a female consumer may evaluate a situation

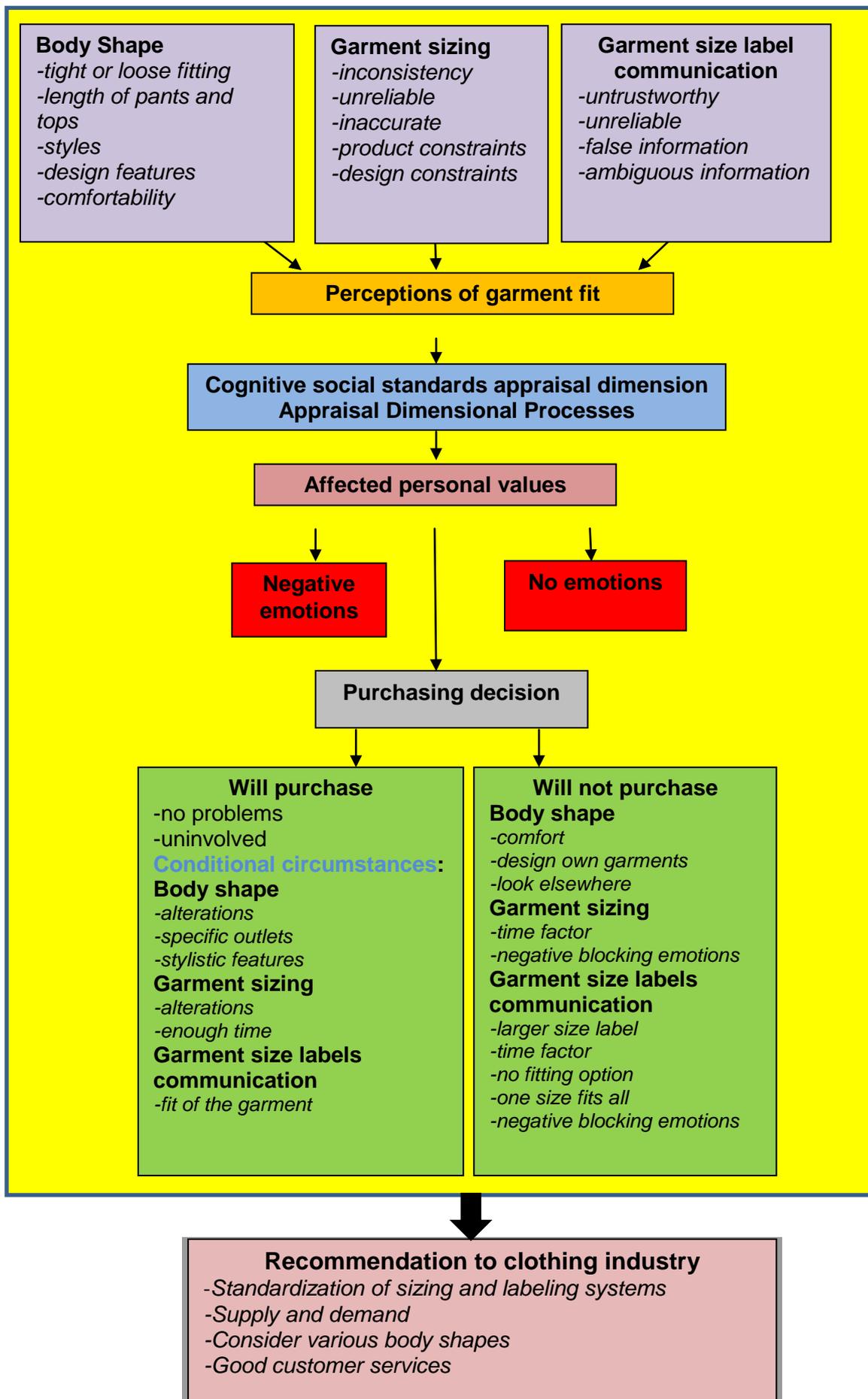
such as garment sizing as beneficial, harmful (affects) to personal value or is not relevant for personal wellbeing (Demir *et al.*, 2009:3) These three outcomes result in a positive emotion, negative emotion or an absence of emotion respectively. It was clear in this study that these outcomes of cognitive appraisals were observed among the participants who took part in this study, when considering whether body shape or garment sizing contribute to garment fit problems were concerned.

When a female consumer experiences garment fit problems caused by body shape, garment sizing or garment size label communication, several aspects relating to the situation may be evaluated. The emotions elicited for each evaluation depends on the answer given to the evaluative question. The different evaluative questions are referred to as appraisal dimensions. That is, appraisal dimensions explain that a situation can bring about different emotions, depending on the evaluation of different component or dimension of a situation. Since clothing can be used to express personal values to others (Kaiser, 1998:146), social standards appraisal dimension was the relevant evaluative component on which this study focused. This appraisal dimension evaluates whether the situation, in this case the negative experience of an ill-fitting garment affects what the consumer aspires to achieve socially through garment fit.

Hence, participants evaluated the situation such as the garment fit problem along the social standards appraisal dimension, the dimension which evaluates how the situation affects their life socially. The expressed emotions by the participants were hiding or pointing towards the concern or the personal values the participants expected to achieve through garment fit.

The conclusion of this study can now be related to the conceptual framework proposed for this study (**Figure 6.1**).

FIGURE 6.1 APPLICATION OF THE CONCEPTUAL FRAMEWORK TO THE STUDY



6.10 APPLICATION OF THE CONCEPTUAL FRAMEWORK TO THE STUDY

The model (Figure 6.1) suggests that there are particular elements which cause body shapes, garment sizing and garment size label communication to contribute to the perceptions of garment fit. These elements are cognitively evaluated by the participants through the social standard appraisal dimension in relation to personal value. The evaluation of the perceptions of garment fit can yield negative emotions if the evaluation indicates that the personal value is affected. On the other hand no emotion is yielded when the elements that contribute to garment fit problems are irrelevant to the personal values.

The model further suggests that when the personal values are affected two purchasing intentions are observed. Those who would purchase are those who regard the elements that contribute to garment fit problems were irrelevant to their personal values, however, the model also suggest another group would purchase but rather on conditional circumstances. On the other hand some of the participants would not purchase a garment due to some other internal or external factors that affects their purchasing decision.

Lastly, consumers who experiences garment fit problems contributed by body shape(s), garment sizing and garment size label communication provided an input to the clothing manufacturers and retailers to help improve the problem of garment fit in this study.

6.11 CONTRIBUTION OF THE STUDY TO GARMENT SIZING AND FIT RESEARCH

The significance of this research is its contribution to the theory and methodology within the field of the perceptions of garment fit and the emotions related to personal value research. Theoretically, this study has shown that the emotions which female consumers express when they encounter garment fit problems are related to the personal values that they wish to achieve through garment fit. Positive emotions are elicited when their personal values that they aspire to achieve through clothing are maintained, whilst on the other hand, negative emotions are expressed when their personal values are affected. Hence the expressed emotions are an indication of the hidden concern or a personal value which is important to the consumer.

This study also provided an advancement to the methodology of studying emotions related to personal values. In this study female consumers' personal values and the resulting emotions were identified by applying the Means-end chain theory using the laddering exercises. The laddering interviews were based on understanding the female consumers' underlying personal values for garment fit choices and the resulting emotions by eliciting the attribute-

consequences-value associations that they have with respect to the perceptions of garment fit. In this way, the study not only advances the understanding of female consumers perceptions of garment fit and the emotions resulting from their personal values, but also furthers the methods used to evaluate the emotions and the personal values.

This study was undertaken to establish qualitatively the garment fit problems faced by female consumers in South Africa specifically those residing in Johannesburg and the resulting emotions that are elicited when the consumer is encountered by an ill-fitting garment. This study will contribute to the limited amount of published studies on “garment fit” based particularly on the Means-end chain theory and once completed, the data will be available to students, manufacturers and retailers in South Africa.

6.12 RECOMMENDATIONS

Garment fit problems related to ready-to-wear clothing has highlighted that there are several significant steps which clothing manufacturers and retailers need to take in order to produce garments which will satisfy the needs of female consumers. Based on the findings of this study, clothing manufacturers and designers should focus on producing garments that show the body shape without hugging it (semi-fitting) in order to reach the majority of the consumers. However, a substantial portion of the participants indicated their preference for tight-fitting pants. Clothing manufacturers and designers should accommodate these variations by understanding the unique needs of their target market.

Another important finding of this study revealed that mostly negative emotions are elicited by female consumers when they experience garment fit problems contributed by body shape, garment sizing and garment size labels communication. Clothing manufacturers and designers need additional information such as the styling of the garments which can accommodate various body shapes that exists in the market, use of design features such as colour which can camouflage the “perceived body shapes or stretch materials which accommodate body sizes in order to satisfy the needs expressed by the female consumers in this study. Additionally, it is worthwhile for clothing manufacturers and designers to manufacture to specific target market bearing in mind the various body shapes of the purchasing South African consumers. When the target market is too wide, it is difficult to adapt the fashionable designs to meet various body shapes.

In order to meet some garment sizing needs of the female consumers, this study also recommends that clothing manufacturers should adhere to the same sizing system, which can

help with the confusion of the garment sizing. It is understandable that it is not easy to adapt fashionable design meant for smaller size into a larger size. However, clothing manufacturers and designer must strategize to satisfy the needs of the consumers who are currently having problems with garment sizing by understanding their needs through research of their target market and specifically to develop fashionable designs for the larger sized consumers instead of offering them dull, boring and unfashionable ready-to-wear garment styles to purchase from. This study also recommends that it is also worthwhile for designers to focus on the needs of mature consumers by offering trendy garments and up-to-date styles that fit their body shapes well. Therefore, a clear identification of which the style of the garment is intended for is necessary to enable choosing age appropriate fitting garments.

This study also revealed useful information concerning the information communicated on the garment size labels in South Africa. Participants explained that because of the inconsistency and unreliability of garment sizing and labelling, they find it unavoidable to purchase ready-to-wear garments without trying on. It is advisable for clothing manufacturers and designers to adopt one sizing and labelling system for the benefit of both customers and the clothing retailers. This study also noted that some participants refused purchasing garments with larger size labels. It is, therefore, also important that international clothing which indicates larger size labels than usual, should be converted or translated into the labelling systems South African consumers are used to in order to target these consumers as well. Consumers would take less time shopping, and purchase well fitting garments irrespective of the shop, styles or brand and clothing retailers would gain profit by reducing damages through returns or fitting. It is also recommended that clothing retailers should offer special alteration services as alterations seems to play a significant role of correcting the ill-fitting garment for the consumers to achieve the desired fit. Hence female consumers may frequently patronize the clothing retailers that cater for their needs.

6.13 LIMITATIONS OF THE STUDY

In this study, three limitations can be identified in terms of the sample and the measuring instrument. The most obvious limitation is that a relatively small number of participants took part in the study, which means that caution must be exercised in generalizing the results to the broader South African population. The second limitation was that the purposefully and convenient sample came from UNISA – Florida Campus and King David High School – Victory Park which are both educational institutions from Johannesburg (Gauteng). It would have been preferred to also include females from other fields, sectors and regions as well to

get the reflection of the entire female consumers; however the sample in this study addressed the purpose of the study.

With regard to the measuring instrument, participants were asked to self-report their body shapes. The consumers perception about their body shape may not reflect their actual body shape as can be defined by anthropometric measurements or the 3D body scanner. However, this was an appropriate measure for this study as the perceived self-reported body shapes addressed the psychographic profile purposes, as no further comparisons were made or implied.

Furthermore, it is again necessary to clarify that the Means-end chain theory aims at unveiling terminal values where possible. The hard laddering interviews for this study were limited to the unveiling of instrumental values which in this regard are the emotions associated with the perceptions of garment fit. Although in Exercise 1a of the laddering exercise terminal values were uncovered naturally.

6.14 FURTHER STUDIES

Garment sizing and fit is a very broad topic and there is tremendous potential for future studies in this area in South Africa. The depth of the conceptual framework has not been fully uncovered, future studies may consider studying each concept identified in the conceptual framework as factors that contribute to the perceptions of garment fit separately.

It is clear from the findings that perceived body shapes among other factors affect garment fit. Further studies should explore actual body shapes of the participants probably using a 3D-body scanner which is now available at UNISA – at the Department of Life and Consumer Sciences instead of self-reported perceived own body shapes and then identify their fit problems as well as to determine fit preferences.

This study used hard laddering interviews to uncover the criteria for choosing ready-to-wear and the problems of fit contributed by body shapes and garment sizing as well as thoughts on garment sizing in South Africa. The emotions were expressed through the psychosocial consequences and instrumental values which were pointing towards a concern or a terminal value. Further study may want to use soft laddering interviews instead. This method may serve to identify the terminal personal values that female consumer regard as important in their lives when they consider garment fit problems.

REFERENCE LIST

- ACKERMANS. (2012). *About us*. Available at www.ackermans.co.za [Accessed 17 July 2012)
- ALDRICH, W. (2007). History of sizing systems and ready-to-wear garments. In S.P ASHDOWN (Ed). *Sizing in clothing: developing effective sizing systems for ready-to-wear clothing*, chap. 1. England: Woodhead Publishing Limited.
- ALKAN, N. (2004). *Cognitive appraisals, emotion, and coping: A structural equation analysis of the interactional model of stress and coping*. Doctoral thesis. Middle East: Technical University.
- ALEXANDER, M., L.J., CONNELL and A.B. PRESLEY. (2005). Clothing fit preferences of young female adult consumers. *International Journal of Clothing Science and Technology*, vol. 17, no. 1, pp.52-64.
- APEAGYEI, P.R. (2008). Significance of body image among UK female fashion consumers: The cult of size zero, the skinny trend. *International Journal of Fashion Design, Technology and Education*, vol. 1, no. 1, pp.3-11, March.
- ASHDOWN, S.P. (1998). An investigation of the structure if sizing systems: a comparison of three multidimensional optimized sizing systems generated from anthropometric data with the ASTM standard D5585-94. *International Journal of Clothing Science and Technology*, vol. 10, no. 5, pp.324-341.
- ASHDOWN, S.P. (Ed). (2007). *Sizing in clothing: developing effective sizing systems for ready-to-wear clothing*. England: Woodhead Publishing Limited.
- ASHDOWN, S.P. and M. DELONG. (1995). Perception testing of apparel ease variation. *Applied Ergonomics*, vol. 26, no. 1, pp.47-54.
- ASHDOWN, S., S. LOKER and M. RUCKER. (2007). Improved apparel sizing: fit and anthropometric 3D scan data. *National Textile Center Research Briefs*, pp.1-3, June.
- ASHDOWN, S., S. LOKER, C. ADELSON, E. CARNRITE, L. LYMAN-CLARK and A. PETROVA. (2005). Improve apparel sizing: Fit and anthropometric 3D scan data. *National Textile Center Annual Report*, pp.1-8, November.
- ASHDOWN, S.P., L.M. LYMAN-CLARKE, J. SMITH and S. LOKER. (2007). Production systems, garment specification and sizing. In S.P. ASHDOWN (Ed). *Sizing in clothing:*

developing effective sizing systems for ready-to-wear clothing, chap. 13. England: Woodhead Publishing Limited.

ASHDOWN, S.P., S. LOKER, K. SCHOENFELDER and L. LYMAN-CLARKE. (2004). Using 3D scans for fit analysis. *Journal of Textile and Apparel, Technology and Management*, vol. 4, no. 1, pp.1-12, Summer.

ASHDOWN, S.P. and E. O'CONNELL. (2006). Comparison of test protocols for judging the fit of mature women's apparel. *Clothing and Textiles Research Journal*, vol. 24, no. 2, pp.137-146.

AUERBACH, C.F. and L.B. SILVERSTEIN. (2003) *Qualitative data*. New York University Press: New York.

BABBIE, E. (2010). *The practice of social research*. 12th ed. Australia: Wadsworth.

BABBIE, E. and J. MOUTON. (2005). *The practice of social research*. 4th ed. Cape Town: Oxford University Press.

BABBIE, E. and J. MOUTON. (2007). *The practice of social research*. 7th ed. Cape Town: Oxford University Press.

BJERRE, S and J.OVERBY. (2012). *Differentiation of organic chicken through enhanced quality perception – an analysis of how Danish consumers' quality perception of organic chicken can be enhanced with the purpose of attaining a greater differentiation*. Masters thesis. Denmark: Aarhus University.

BAKER, S., K.E. THOMPSON, J. ENGELKEN and K. HUNTLEY. (2004). Mapping the values driving organic food choice. *European Journal of Marketing*, vol. 38, no. 8, pp.995-112.

BARONA-MCROBERTS, L. (2005). *Petite women: fit and body shape analysis*. Masters thesis. Louisiana: Louisiana State University.

BLESS, C. and C. HIGSON-SMITH. (1995). *Fundamentals of social research methods: an African perspective*. 2nd ed. Cape Town: Juta and Co, Ltd.

BLESS, C. and C. HIGSON-SMITH. (2000). *Fundamentals of social research methods*. 3rd ed. Cape Town: Creda Communications.

- BOUGOURD, J. (2007). Sizing systems, fit models and target markets. In S.P. ASHDOWN (Ed). *Sizing in clothing: developing effective sizing systems for ready-to-wear clothing*, chap. 4. England: Woodhead Publishing Limited.
- BOULTON, D and M. HAMMERSLEY. (1996). Analysis of unstructured data. In R. SAPSFORD and V. JUPP. (Eds). *Data collection and analysis*. London: Sage.
- BRANSON, D. and J. NAM. (2007). Materials and sizing. In S.P. ASHDOWN. (Ed), *Sizing in clothing: Developing effective sizing systems for ready-to-wear clothing*, chap. 9. England: Woodhead Publishing Limited.
- BYE, E. and K. LABAT. (2005). An analysis of apparel industry fit sessions. *Journal of Textile and apparel, Technology and Management*, vol. 4, no. 3, pp.1-5.
- CHATTARAMAN, V. and N.A. RUDD. (2006). Preferences for aesthetic attributes in clothing as a function of body image, body cathexis and body size. *Clothing and Textiles Research Journal*, vol. 24, no. 1, pp.46-61.
- CHEMA, K., L. MARKS, J. PARCELL and M. BREDAHL. (2004). Marketing of biotech functional foods in the US. *AAEA Annual Meeting*, August.
- CHEN, C.M. (2007). Fit evaluation within the made-to-measure process. *International Journal of Clothing Science and Technology*, vol. 19, no. 2, pp.131-144.
- CHEN-YU, J.H., K.H. HONG and Y.K. SEOCK. (2010). Adolescents' clothing motives and store selection criteria: A comparison between South Korea and the United States. *Journal of Fashion Marketing and Management*, vol. 14, no. 1, pp.127-144.
- CHUN, J. (2007). Communication of sizing and fit. In S.P. ASHDOWN (Ed). *Sizing in clothing: developing effective sizing systems for ready-to-wear clothing*, chap. 7. England: Woodhead Publishing Limited.
- CHUN-YOON, J. and C.R. JASPER. (1995). Consumer preferences for size description systems of men's and women's apparel. *Journal of Consumer Affairs*, vol. 29
- CRESSWELL, J.W. (1994). *Research design: qualitative and quantitative approaches*. London: Sage Publications.
- CONNELL, L.J., E.L. BRANNON, P.V. ULRICH, A.B. PRESLEY, M. GRASSO, H.E. JUDSON and S.GREY. (2001). Understanding fitting preferences of female consumers; development of an expert system to enhance accurate sizing selection. *National Textile Center Research Briefs – Intergrated Enterprise Systems Competency*, pp.73-74.

- CONNELL, L.J., P.V. ULRICH, E.L. BRANNON, M. ALEXANDER and A.B. PRESLEY. (2006). Body shape assessment scale: instrument development for analyzing female figures. *Clothing and Textiles Research Journal*, vol. 24, no. 2, pp.80-95.
- CONNELL, L.J., P. ULRICH, A. KNOX, G. HUTTON, D. BRUNER and S. ASHDOWN. (2003). Body scan analysis for fit models based on body shape and posture analysis. *National Textile Center Annual Report*, pp.1-10, November.
- COSTA, A.I.A., M. DEKKER and W.M.F. JONGEN. (2004). An overview of means-end theory: potential application in consumer-oriented food product design. *Trends in Food Science and Technology*, vol.15, pp.403-415.
- DAANEN, H. and P.A. REFFELTRATH. (2007). Function, fit and sizing. In S.P. ASHDOWN (Ed). *Sizing in clothing: developing effective sizing systems for ready-to-wear clothing*, chap. 6. London: Woodhead Publishing Limited.
- DAS, A. and R. ALAGIRUSAMY. (2010). *Science in clothing comfort*. New Delhi: Woodhead Publishing India PVT LTD.
- DELPORT, C.S.L. (2007). Quantitative data-collection methods. In A.S.DE VOS, H. STRYSOM, C.B. FOUCHÉ and C.S.L. DELPORT (Eds). *Research at grassroots: for the social sciences and human service professions*. 3rd ed. chap. 12. Pretoria: Van Schaik.
- DELPORT, C.S.L. and A.S DE VOS. (2007). Professional research and professional practice. In A.S.DE VOS, H. STRYSOM, C.B. FOUCHÉ and C.S.L. DELPORT (Eds). *Research at grassroots: for the social sciences and human service professions*. 3rd ed. chap. 12. Pretoria: Van Schaik.
- DE SOUZA LEO, A.L.M. and S.C. BENICIO DE MELLO. (2007). The means-end approach to understand customer values of a on-line newspaper. *Brazilian Administration Review*, pp.1-20, January/April.
- DEMIR, E., P.M.A. DESMET and P. HEKKERT. (2009). Appraisal patterns of emotions in human-product interaction. *International Journal of Design*, vol. 3, no. 2, pp.41-51.
- DESMARTEAU, K. (2000). *Let the fit revolution begin*. *Bobbin*, Available at: http://findarticles.com/p/articles/mi_m3638/is_2_42/ai_66936829/ [Accessed 19 May 2010].
- DESMET, P.M.A. (2003). A multilayered model of product emotions. *The Design Journal* . In Press: pp.1-12.

DESMET, P.M.A., P. HEKKERT and M. HILLEN. (2002). Values and emotions; an empirical investigation in the relationship between emotional responses to products and human values. *Proceedings of the fifth European academy of design conference*, Barcelona, Spain. pp.1-13.

DESMET, P.M.A., C.J. OVERBEEKE and S.J.E.T. TAX. (2001). Designing products with added emotional value: development and application of an approach for research through design. *The Design Journal*, vol. 4, no. 1, pp.32-47.

DE VOS, A.S. (2007). Qualitative data analysis and interpretation. In A.S. DE VOS, H. STRYDOM, C.B. FOUCHÉ and C.S.L. DELPORT (Eds). *Research at Grassroots: for the social sciences and human service professions*, 3rd ed. chap. 23. Pretoria: Van Schaik.

DONNA CLAIRE (2012) *Fashion to celebrate your curves*. Available at www.tfg.co.za/retail/foschini/donna.asp. [Accessed 17 July 2012].

DOSHI, G. (2006). Size and fit problem with readymade garment. Available at www.size-and-fit-problem-with-readymade-garment&id=339778. [Accessed 7 May 2012].

DUBĚ, L. and K. MENON. (2000). Multiple roles of consumption emotions in post-purchase satisfaction with extended service transactions. *International Journal of Service Industry Management*, vol. 11, no. 3, pp. 287-304.

DURVASULA, S., S. LYSONSKI and A.D. MADHAVI. (2011). Beyond service attributes: do personal values matter?. *Journal of Services Marketing*, vol. 25, no. 1, pp.33-46.

EDCON. (2012). *Jet*. Available at www.edcon.co.za/Divisions/Jet.aspx. [Accessed 17 July 2012].

EDGARS. (2012). *Edgars*. Available at www.edcon.co.za/Divisions/Edgars.aspx. [Accessed 17 July 2012].

EDGARS. (2013). *House brand*. Available at <http://cdn.bizcommunity.com>. [Accessed 24 April 2013].

ELLSWORTH, P.C. (1991). Some implications of cognitive appraisal theories of emotion. In Strongman, KT. (Ed). *International Review of Studies on Emotion*, England: John Wiley & Sons Limited.

ELLSWORTH, P.C. and K.R. SCHERER. (2003). Appraisal processes in emotion. In Davidson, R.J., Goldsmith, H. & Scherer, KR. (Eds.), *Handbook of the Affective Sciences*, New York: Oxford University Press.

FAN, J. (2004). Subjective assessment of clothing appearance. In J. FAN, W. YU and L. HUNTER (Eds). *Clothing Appearance and Fit: Science and Technology*, chap. 2. England: Woodhead Publishing Limited.

FAUST, M.E., S. CARRIER and P. BAPTISTE. (2006). Variations in Canadian women's ready-to-wear standard sizes. *Journal of Fashion Marketing and Management*, vol. 10, no. 1, pp.71-83.

FAUST, M.E. and S. CARRIER. (2010). Women's wear sizing: a new labeling system. *Journal of Fashion Marketing and Management*, vol. 14, no. 1, pp.88-126.

FLICK, U. (1999). *An introduction to qualitative research*. London: Sage Publications.

FOSCHINI. (2012). *About us*. Available at www.foschini.co.za/foschini/content/en/foschini/foschini-fast-facts. [Accessed on 17 July 2012].

GARCIA-PRIETO, P. and K.R. SCHERER. (2006). Connecting social identity theory and cognitive appraisal theory of emotions. In BROWN, R. and D. CAPOZZA (Eds). *Social identities, motivational, emotional, cultural influences*, chap. Hove: Psychology Press.

GREEF, M. (2007). Information collection: interviewing. In A.S. DE VOS, H. STRYDOM, C.B. FOUCHÉ and C.S.L. DELPORT (Eds). *Research at Grassroots: for the social sciences and human service professions*, 3rd ed. chap. 20. Pretoria: Van Schaik.

GUTMAN, J. (1982). A means-end chain model based on consumer categorization process. *Journal of Marketing*, vol. 46, no. 2, pp.60-72.

GUTMAN, J. (1984). Analyzing consumer orientations toward beverages through means-end chain analysis. *Psychology and Marketing*, vol. 1, no. 3, pp.23-43.

HANNULA, M.S. (2002). Attitude towards mathematics: emotions, expectations and values. *Educational Studies in Mathematics*, vol. 49, pp.25-46.

HAYDEN, K. (2008). *Why tag size matters, clothing sizing affect some women negatively*. Available at: http://middlehighschool.suite101.com/article.cfm/why_tag_size_matters [Accessed 6 May 2010].

HENN, M., M. WEINSTEIN and N. FOARD. (2009). *A critical introduction to social research*. 2nd ed. Los Angeles: Sage.

- HERRMAN, A. and F. HUBER. (2000). Value-oriented brand positioning. *International Review of Retail, Distribution and Consumer Research*, vol. 10, no. 1, pp.95-112.
- HOLE, D., L. ZHONG and J. SCHWARTZ. (2010). Talking about whose generation? Why western generational models can't account for a global workforce. *Deloitte Review*, vol. 6, pp.84-97.
- HOLMLUND, M., A. HAGMAN and P. POLSA. (2011). An exploration of how mature women buy clothing: empirical insights and a model. *Journal of Fashion Marketing and Management*, vol. 15, no. 1, pp.108-122.
- HOWARTON, R. and B. LEE. (2010). Market analysis of fit preferences of female boomers. *Journal of Fashion Marketing and Management*, vol. 14, no. 2, pp.219-229.
- ISO TC133 WG3 MEETING. (2012). Sizing systems and designations for clothes – measurement indicators. Seoul: September.
- JENSEN, T.B. (2005). *Nurses' perception of an EPR implementation process based on a means-end chain approach*. Doctoral thesis. Denmark: Aarhus School of Business.
- JOHNS, L. 'It says it's large, but it's medium'. *Cape Argus*, 8 December 2007, p.
- JOHNSON-HILLERY, J., J. KANG and W.J. TUAN. (1997). The difference between elderly consumers' satisfaction levels and retail sales personnel's perceptions. *International Journal of Retail and Distribution Management*, vol. 25, no. 4, pp.126-137.
- JONES, M.R. and V.L. GIDDINGS. (2010). Tall women's satisfaction with the fit and style of tall women's clothing. *Journal of Fashion Marketing and Management*, vol. 14, no. 1, pp.58-71.
- JONES, P.M.R. and M. RIOUX. (1997). Three-dimensional surface anthropometry: applications to the human body. *Optics and Laser Engineering*, vol. 28, pp.89-117.
- JOUBERT, J.P.R. and M.D. MABUNDA. ('n.d.'). The decision to visit a wilderness area. *Southern African Business Review*, vol. 11, no. 2, pp.39-55
- KAHN, T. Survey will get the measure of us all, so we can dress comfortably. *Business Day*, 4 February 2008, p.
- KAISER, S.B. (1998). *The social psychology of clothing: symbolic appearances in context*. 2nd ed. New York: Fairchild.

- KARVE, V. (2011). Instrumental values and terminal values – the two types of values. Available at: <http://karvediat.blog.com/2011/12/instrumental-values-and-terminal-values.html>. [Accessed 15 Jan. 2013].
- KIM, J.O., S. FORSYTHE, Q. GU and S.J. MOON. (2002). Cross-cultural consumer values, needs and purchase behaviour. *Journal of Consumer Marketing*, vol. 19, no. 6, pp.481-502.
- KENNEDY, K. (2008). *What size am I: decoding women's clothing size*. Available at: <http://www.unaaustralia.com/electronicpdf/Unkennedy.pdf>. [Accessed 1 Aug. 2008].
- KINLEY, T.R. (2010). Fit and shopping preferences by clothing benefits sought. *Journal of Fashion Marketing and Management*, vol. 14, no. 3, pp.397-411.
- KOO, D.M., J.J. KIM and S.H. Lee. (2008). Personal values as underlying motives of shopping online. *Asia Pacific Journal of Marketing and Logistics*, vol. 20, no. 2, pp.156-173.
- KREFTING, L. (1991). Rigor in Qualitative research: the assessment of trustworthiness. *The American Journal of Occupational Therapy*, vol. 45, no. 3, pp. 214-221.
- KRUGER, D.J., A.S. DE VOS, C.B. FOUCHÉ and L. VENTER. (2007). Quantitative data analysis and interpretation. In A.S. DE VOS, H. STRYDOM, C.B. FOUCHÉ and C.S.L. DELPORT (Eds). *Research at grassroots: for the social sciences and human service professions*, 3rd ed. chap. 15. Pretoria: Van Schaik.
- LABAT, K.L. (2007). Sizing standardization. In S.P. ASHDOWN (Ed). *Sizing in clothing: developing effective sizing systems for ready-to-wear clothing*, chap. 3. England: Woodhead Publishing Limited.
- LAITALA, K., I.G. KLEPP and B. HAUGE. (2011). Materialised ideals: sizes and beauty. *Journal of Current Cultural Research*, vol. 3, pp.19-41.
- LAZARUS, R.S. (1984). On the primacy of cognition. *American Psychologist*, pp.125-129, February.
- LAZARUS, R.S. (1991). *Emotion and adaptation*. New York: Oxford University Press.
- LAZARUS, R.S. (2001). Relational meaning and discrete emotions. In K.R. SCHERER, A. SCHORR and T. JOHNSTONE (Eds). *Appraisal processes in emotion: theory, methods, research*, chap. 3. New York: Oxford University Press.
- LEE, B. (2005). *Clothing and fit preferences of female baby boomers*. Masters thesis. Wisconsin-Stout: University of Wisconsin-Stout.

- LEE, J.Y., C.L. ISTOOK, Y.J. NAM and S.M. PARK. (2007). Comparison of body shape between USA and Korean women. *International Journal of Clothing Science and Technology*, vol. 19, no. 5, pp.374-391.
- LEWIS, M., M.W. SULLIVAN, and L. MICHALSON. (1982). The cognitive-emotional fugue. *Rutgers Medical School*, pp.1-24, July.
- LIDDELOW, J. (2011). *What's your body shape?* Available at www.style-makeover-hq.com/bodyshape.html. [Accessed 10 March 2011].
- LINCOLN, Y.S. and E.G. GUBA. (1985). *Naturalistic inquiry*. Beverly Hill: Sage publication.
- LOKER, S. (2007). Mass customization and sizing. In S.P. ASHDOWN (Ed). *Sizing in clothing: developing effective sizing systems for ready-to-wear clothing*, chap. 8. England: Woodhead Publishing Limited.
- LOKER, S., S. ASHDOWN and K. SCHOENFELDER. (2005). Size-specific analysis of body scan data to improve apparel fit. *Journal of Textile and Apparel, Technology and Management*, vol. 4, no. 3, pp.1-15, Spring.
- LUCE, M.F., J.R. BETTMAN and J.W. PAYNE. (1997). Choice processing in emotionally difficult decisions. *Journal of Experimental Psychology*, vol. 23, no. 2, pp.384-405.
- MANSTEAD, A.S.R. and A.H. FISCHER. (2001). Social appraisal: the social world as object of and influence on appraisal processes. In K.R. SCHERER, A. SCHORR and T. JOHNSTONE (Eds). *Appraisal processes in emotion: theory, methods, research*, chap. 12. New York: Oxford University Press.
- MARTIN, D., M. O'NEILL, S. HUBBARD and A. PALMER. (2008). The role of emotion in explaining consumer satisfaction and future behavioural intent. *Journal of Services Marketing*, vol. 22, no. 3, pp.224-236.
- MCMANUS, P., C. STANDING AND R. ZANOLI. (2009). A preliminary laddering analysis on mobile services usage. *17th European Conference on Information Systems*, pp.3-13.
- MIELE, M. and V. PARISI. (2000). Consumer concerns about animal welfare and food choice. *Italian Report on laddering interviews*, pp.1-39.
- MILADYS. (2012). *About us*. Available at www.miladys.co.za/About us/History/miladys.aspx. [Accessed 17 July 2012].

MILLER, R.L and J.D. BREWER. (Eds). (2003). *The A – Z of social research*. London: Sage publications.

MILLER, N.J., J.R. CAMPBELL, M.A. LITTRELL and D. TRAVNICEK. (2005). Instrument development and evaluation for measuring USA apparel product design attributes. *Journal of Fashion Marketing and Management*, vol. 9, no. 1, pp.54-70.

MOODY, W., P. KINDERMAN and P. SINHA. (2010). An exploratory study: relationships between trying on clothing, mood, emotion, personality and clothing preference. *Journal of Fashion Marketing and Management*, vol. 14, no. 1, pp.161-179.

MOUTON, J. (2002). *Understanding social research*. 3rd ed. Pretoria: Van Schaik.

MOYE, L.N. (1998). *Relationship between age, store attributes, shopping orientations, and approach-avoidance behavior of elderly apparel consumers*. Masters thesis. Virginia: Virginia Polytechnic Institute and State University.

MPAMBA, M.L., P.N. AZARIADIS and N.S. SAPIDIS. (2010). A new methodology for the development of sizing systems for the mass customization of garments. *International Journal of clothing Science and Technology*, vol. 22, no. 1, pp.49-68.

MR PRICE. (2012). *About us*. Available at www.mrpricegroup.com/Corporate Profile/About us.aspx. [Accessed 17 July 2012].

NIELSEN, M. (2012). *Design development: the everyday wear-ability test*. Available at www.blog.megannielsen.com/2012/12design-development-the-every-day-wearability-test/. [Accessed 29 Aug. 2013].

NELISSEN, R.M.A., A.J.M. DIJKER and N.K. DE VRIES. (2007). Emotions and goals: assessing relations between values and emotions. *Psychology Press*, vol. 21, no. 4, pp.902-911.

NEUMAN, W.L. (2000). *Social research methods: qualitative and quantitative approaches*. 4th ed. Boston: Allyn and Bacon.

NEWCOMB, E.A. (2009). *Apparel product development considerations for US Hispanic women: a study of evaluative criteria and fit preferences of 18 – 25 year-old females*. Doctoral dissertation. Raleigh: North Carolina State University.

NEWCOMB, E. and C. ISTOOK. (2011). Confronting stereotypes: apparel fit preferences of Mexican-American women. *Journal of Fashion Marketing and Management*, vol. 15, no. 4, pp.389-411.

NEWBURGH, L.H. and M. HARRIS. (1945). *Clothing test methods*. Michigan: Edwards Brothers, Inc.

NORTH, E.J., R.B. DE VOS and T. KOTZĚ. (2003). The importance of apparel product attributes for female buyers. *Journal of Family Ecology and Consumer Sciences*, vol. 31, pp.41-51.

NURKKA, P. ('n.d.'). User experience evaluation based on values and emotions. *The unit of Human-centered Technology*, pp.1-5

OATLEY, K., D. KELTNER and J.M. JENKINS. (2006). *Understanding emotions*. 2nd ed. Oxford: Austraria.

O'CASS, A. (2000). An assessment of consumers product, purchase decision, advertising and consumption involvement in fashion clothing. *Journal of Economic Psychology*, vol. 21, pp.545-576.

OMDAHL, B.L. (1995). *Cognitive appraisal, emotion, and empathy*. New Jersey: Lawrence Erlbaum Associates.

OTIENO, R. (2008). Approaches in researching human measurement: MMU model of utilizing anthropometric data to create size charts. *EuroMed Journal of Business*, vol. 3, no. 1, pp.63-82.

OTIENO, R., C. HARROW and G. LEA-GREENWOOD. (2005). The unhappy shopper, a retail experience: exploring fashion, fit and affordability. *International Journal of Retail and Distribution Management*, vol. 33, no. 4, pp.298-309.

OXFORD DICTIONARY. (1998). London: Dorling Kindersley Limited and Oxford University Press.

PANDARUM, R. (2010) *South African female body shapes*. Unisa Lecturer, in conversation.

PARK, H.H. and P. SULLIVAN. (2009). Market segmentation with respect to university students' clothing benefits sought: shopping orientation, clothing attribute evaluation, and brand repatronage. *International Journal of Retail & Distribution Management*, vol. 37, no. 2, pp.182-201.

PARK, J., Y. NAM, K. CHOI, Y. LEE and K.H. LEE. (2009). Apparel consumers' type and their shopping characteristics. *Journal of Fashion Marketing and Management*, vol. 13, no. 3, pp.372-393.

- PARKINSON, B. (2001). Putting appraisal in context. In K.R. SCHERER, A. SCHORR and T. JOHNSTONE (Eds). *Appraisal processes in emotion: theory, methods, research*, chap. 9. New York: Oxford University Press.
- PAWLOWSKI, P. and C.B. THOMSEN. (2011). *Parents to disabled children's purchasing motives when buying toys*. Masters thesis. Denmark: Aarhus University.
- PECHOUX, B.L. and T.K. GHOSH. (2002). Apparel sizing and fit. *Textile Progress*, vol. 32, no. 1, pp.1-60.
- PETER, J.P and J.C. OLSON. (1999). *Consumer Behaviour and marketing strategy*. 5th ed. London: Irwin Mcgraw-Hill.
- PETROVA, A. (2007). Creating sizing systems. In S.P. ASHDOWN (Ed). *Sizing in clothing: developing effective sizing systems for ready-to-wear clothing*, chap. 2. England: Woodhead Publishing Limited.
- PIAMPHONGSANT, T. and R. MANDHACHITARA. (2008). Psychological antecedents of career women's fashion clothing conformity. *Journal of Fashion Marketing and Management*, vol. 12, no. 4, pp.438-455.
- PISUT, G. and L.J. CONNELL. (2007). Fit preferences of female consumers in the USA. *Journal of Fashion Marketing and Management*, vol. 11, no. 3, pp.366-379.
- PLUTCHIK, R. (2001). The nature of emotions. *American Scientist*, vol. 89, pp.344-350.
- PUYBARAUD, M. (2010). Generation Y in South Africa - how would they like to work in 2010? *Oxygenz Country Report: South Africa*, pp.1-23.
- PUNCH, K.F. (2011). *An introduction to social research: Quantitative and qualitative approaches*. 2nd ed. Los Angeles: Sage.
- QUEENS PARK.. (2012). *Welcome to Queens Park*. Available at www.queenspark.com/. [Accessed 17 July 2012].
- RAGHUNATH, R. and M.T. PHAM. (1999). All negative moods are not equal: motivational influences of anxiety and sadness on decision making. *Organizational Behaviour and Human Decision Processes*, vol. 79, no. 1, pp.56-77.
- RAJAGOPAL. (2010). Consumer culture and purchase intentions towards fashion apparel. *Working paper, Monterrey Institute of Technology and Higher Education*. pp.1-39, March.

RASBAND, J.A and E.L.G. LIECHTY. (2006). *Fabulous fit*. 2nd ed. New York: Fairchild Publications.

REYNOLDS, T.J. and J. GUTMAN. (1988). Laddering theory, method, analysis, and interpretation. *Journal of Advertising Research*, vol. 2, pp.11-31, February/March.

ROININEN, K., A. ARVOLA and ÄHTENMÄKI. (2006). Exploring consumers' perceptions of local food with two different qualitative techniques: laddering and word association. *Food Quality and Preference*, vol. 17, pp.20-30.

ROSS, S.M. (2010). *Style preference and benefits sought by women for customized swimwear based on body shape, age, and dress size*. Masters thesis. Alabama: Auburn University.

ROSEMAN, I.J., M.S. SPINDLE and P.E. JOSE. (1990). Appraisals of emotion-eliciting events: testing a theory of discrete emotions. *Journal of Personality and Social Psychology*, vol. 59, no. 5, pp.899-915.

ROSEMAN, I.J. and C.A. SMITH. (2001). Overview, assumptions, varieties, controversies. In K.R. SCHERER, A. SCHORR and T. JOHNSTONE (Eds). *Appraisal processes in emotion: theory, methods, research*, chap. 1. New York: Oxford University Press.

SAAKA, A., C. SIDON and B.F. BLAKE. ('n.d.'). Laddering: a "how to do it" manual – with a note of caution. *Research reports in consumer behavior*, pp. 1-34.

SCHERER, K.R. (1999). Appraisal theory. In T. DALGLESH and M. POWER (Eds). *Handbook of Cognition and Emotion*, chap. 30. Geneva: John Wiley and Sons Ltd.

SCHERER, K.R. (2001). Appraisal considered as a process of multilevel sequential checking: In K.R. SCHERER, A. SCHORR and T. JOHNSTONE (Eds). *Appraisal processes in emotion: theory, methods, research*, chap. 5. New York: Oxford University Press.

SCHIFFMAN, L.G. and L.L. KANUK. (2010). *Consumer Behaviour*, 10th ed. Boston: Pearson Prentice Hall.

SCHOFIELD, N.A., S.P. ASHDOWN, J. HETHORN, K. LABAT and C.J. SALUSSO. (2006). Improving pant fit for women 55 and older through an exploration of two pant shapes. *Clothing and Textiles Research Journal*, vol. 24, no. 2, pp.147-160.

SCHORR, A. (2001). Appraisal: the evolution of an idea. In K.R. SCHERER, A. SCHORR and T. JOHNSTONE (Eds). *Appraisal processes in emotion: theory, methods, research*, chap. 2. New York: Oxford University Press.

SELF IMPROVEMENT MENTOR.COM. (2011). *List of human emotions we can experience*. Available at www.self-improvement-mentor.com/list-of-human-emotions.html. [Accessed 5 April 2011].

SHELDON, W., S.S. STEVENS and W.B. TUCKER. (1970). *The Varieties of Human Physique – An introduction to constitutional psychology*. 2nd ed. Darien, Conn: Hafner Publishing Company, Inc.

SHENTON, A.K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, vol. 22, pp. 63-75.

SIEMER, M., J.J. GROSS and I. MAUSS. (2007). Same situation – different emotions: how appraisals shape our emotions. *American Psychological Association*, vol. 7, no. 3, pp.592-600.

SCHIFFMAN, L.G. and L.L. KANUK. (2007). *Consumer Behaviour*. 3rd ed. New Jersey: Pearson Prentice Hall.

SIMMONS, K.P. (2002). *Body shape analysis: using Three-Dimensional body scanning technology*. Doctoral dissertation. Raleigh: North Carolina State University.

SIMMONS, K., C.L. ISTOOK and P. DEVARAJAN. (2004a). Female figure identification technique (FFIT) for apparel. Part I: describing female shapes. *Journal of Textile and Apparel, Technology and Management*, vol. 4, no. 1, pp.1-16.

SIMMONS, K., C.L. ISTOOK and P. DEVARAJAN. (2004b). Female figure identification technique (FFIT) for apparel. Part II: development of shape sorting software. *Journal of Textile and Apparel, Technology and Management*, vol. 4, no. 1, pp.1-15.

SINGLETON, R.A. (JR). and B.C. STRAITS. (2010). *Approaches to social research*. 5th ed. New York: Oxford University Press.

SINDICICH, D. and C. BLACK. (2011). An assessment of fit and sizing of men's business clothing. *Journal of Fashion Marketing and Management*, vol. 15, no. 4, pp. 446-463.

SMITH, C.A. (1989). Dimensions of appraisal and physiological response in emotion. *Journal of Personality and Social Psychology*, vol. 56, no. 3, pp.339-353.

SMITH, C.A. and L.D. KIRBY. (2001). Toward delivering on the promise of appraisal theory. In K.R. SCHERER, A. SCHORR and T. JOHNSTONE (Eds). *Appraisal processes in emotion: theory, methods, research*, chap. 6. New York: Oxford University Press.

- SMITH, C.A., K.N. HAYNES, R.S. LAZARUS and L.K. POPE. (1993). In search of the “hot” cognitions: attributions, appraisals and their relation to emotion. *Journal of Personality and Social Psychology*, vol. 65, no. 5, pp.916-929.
- SONG, H.K., S.P. ASHDOWN. (2011). Categorization of lower body shapes for adult females based on multiple view analysis. *Textile Research Journal*, vol. 81, no. 9, pp.914-931.
- STAMPER, A.A., S.H. SHARP and L.B. DONNELL. (2005). *Evaluating Apparel Quality*. 2nd ed. New York: Fairchild Fashion Group.
- STEENKAMP, W. (2001). Girls in uniform made to measure – team sizes up soldiers of the fairer sex in a quest for the perfect fit. *Sunday Times*, 27 May 2001, p. 8.
- STEEVES, A. (2008). *Go against the grain*. Available at www.threadsmagazine.com/items/5024/go-against-the-grain. [Accessed 16 Oct. 2012].
- STRYDOM, H. (2007). The pilot study. In A.S. DE VOS, H. STRYDOM, C.B. FOUCHÉ and C.S.L. DELPORT (Eds). *Research at grassroots: for the social sciences and human service professions*, 3rd ed. chap. 14. Pretoria: Van Schaik.
- STRYDOM, M. and H.M. DE KLERK. (2006). The South African clothing industry: problems experienced with body measurements. *Journal of Family Ecology and Consumer Science*, vol. 34, pp.80-89.
- SUBOTZY, G. (2008). *Employment equity profile of UNISA staff*. Available at www.docstoc.com/docs/111349032/The-University-of-South-Africa. [Accessed 5 Oct. 2012].
- TAYLOR, P. (1990). *Computers in the Fashion Industry*. London: Heinemann Professional Publishing.
- ([TC]², 2012) *Turning research into reality*. Available at www.tc2.com. [Accessed 16 Aug. 2012].
- THOMAS, J.B. and C.L.O. PETERS. (2009). Silver seniors: exploring the self-concept, lifestyles, and apparel consumption of women over age 65. *International Journal of Retail & Distribution Management*, vol. 37, no. 12, pp.1018-1040.
- TRACY, J.L. and R.W. ROBINS. ('n.d.'). The self in self-conscious emotions: a cognitive appraisal approach. To appear in J.L. Tracy, R.W. Robins and J.P. Tangney (Eds). *The self-conscious emotions: theory and research*. New York: Guilford.

- TRUWORTHS, (2012). *About us*. Available at www.truworths.co.za/about-us. [Accessed 17 July 2012].
- TOLBIZE, A. (2008). Generational differences in the workplace. *Research and Training Center on Community Living*. pp.1-21.
- TONGUE, M.A., A. OTIENO and T.D. CASSIDY. (2010). Evaluation of sizing provision among high street retailers and consumer buying practices of the children's clothing in the UK. *Journal of Marketing and Management*, vol. 14, no. 3, pp.429-450.
- VAN AARDT, C.J. (2008). Determining the predictors of living standards in South Africa: a real world econometric approach. *Southern African Business Review*, vol. 12, no. 1, pp.1-17.
- VELUDO-DE-OLIVEIRA, T.M., A.A. IKEDA and M.C. CAMPOMAR. (2006). Discussing laddering application by the means-end chain theory. *The qualitative Report*, vol. 11, no. 4, pp.626:642.
- VISSER, E.M., R. DU PREEZ, and H.S.J. VAN NOORDWYK. (2006). Importance of apparel store image attributes: perceptions of female consumers. *SA Journal of Industrial Psychology*, vol. 32, no. 3, pp.49-62.
- VURUSKAN, A. and E. BULGUN. (2011). Identification of female body shapes based on numerical evaluations. *International Journal of Clothing Science and Technology*, vol. 23, no. 1, pp.46-60.
- WATSON, L. and M.T. SPENCE. (2007). Causes and consequences of emotions on consumer behavior, a review and integrative cognitive appraisal theory. *European Journal of Marketing*, vol. 41, no. 5/6, pp.487-511.
- WEIDNER, N.L. (2010). *Vanity sizing, body image, and purchase behavior: a closer look at the effects of inaccurate garment labeling*. Masters thesis. Michigan: Eastern Michigan University.
- WILLIAMS, T. (2012). *Perks of working in higher education*. Available at www.quintcareers.com/working-higher-education.html. [Accessed 22 Oct.2012].
- WILKINSON, D. and P. BIRMINGHAM. (2003). *Using research instruments: a guide for researchers*. London: RoutledgeFalmer.
- WINKS, J. (1997). *Clothing sizes: international standards*. Manchester: Redwood Books.

WOOLWORTHS. (2012). *Our products*. Available at www.woolworths.co.za/Home/Our-Products. [Accessed 17 July 2012].

WOODALL, G. (2013) *Understanding consumer decision making with means-end research*. Available at www.rockresearch.com/understanding-consumer-decision-making-with-means-end-research. [Accessed 3 April 2013].

WONG, A.S.W., Y. Li and K.W. YEUNG. (2002). Statistical simulation of psychological perception of clothing sensory comfort. *The Journal of the Textile Institute*, vol. 1, no. 1, pp.108-119.

XU, B., Y. HUANG, W. Yu and T. CHEN. (2002). Body scanning and modeling for custom fit garments. *Journal of Textile and Apparel, Technology and Management*, vol. 2, no. 2, pp.1-11, Spring.

YOU, J.M., J.M. WANG, X.N. LUO, Y. LI and X. ZHANG. (2002). Garment's pressure sensation (1): subjective assessment and predictability for the sensation. *International Journal of Clothing Science and Technology*, vol. 14, no. 5, pp.307-316.

YU, W. (2004). Subjective assessment of clothing fit. In J. FAN, W. YU and L. HUNTER (Eds). *Clothing Appearance and Fit: Science and Technology*, chap. 3. England: Woodhead Publishing Limited.

ZANOLI, R. and S. NASPETTI. (2002). Consumer motivations in the purchase of organic food – a means-end approach. *British Food Journal*, vol. 104, no. 8, pp.643-653.

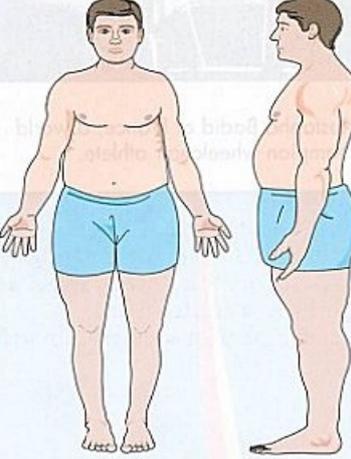
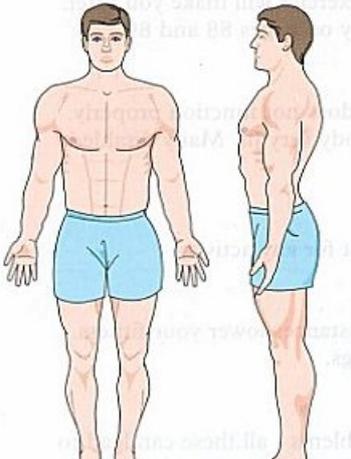
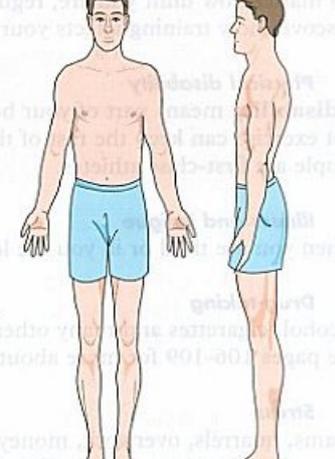
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ZWANE, P.E. and N.A. MAGAGULA. (2007). Pattern design for women with disproportionate figures: a case study for Swaziland. *International Journal of Consumer Studies*, vol. 31, pp.283-287.

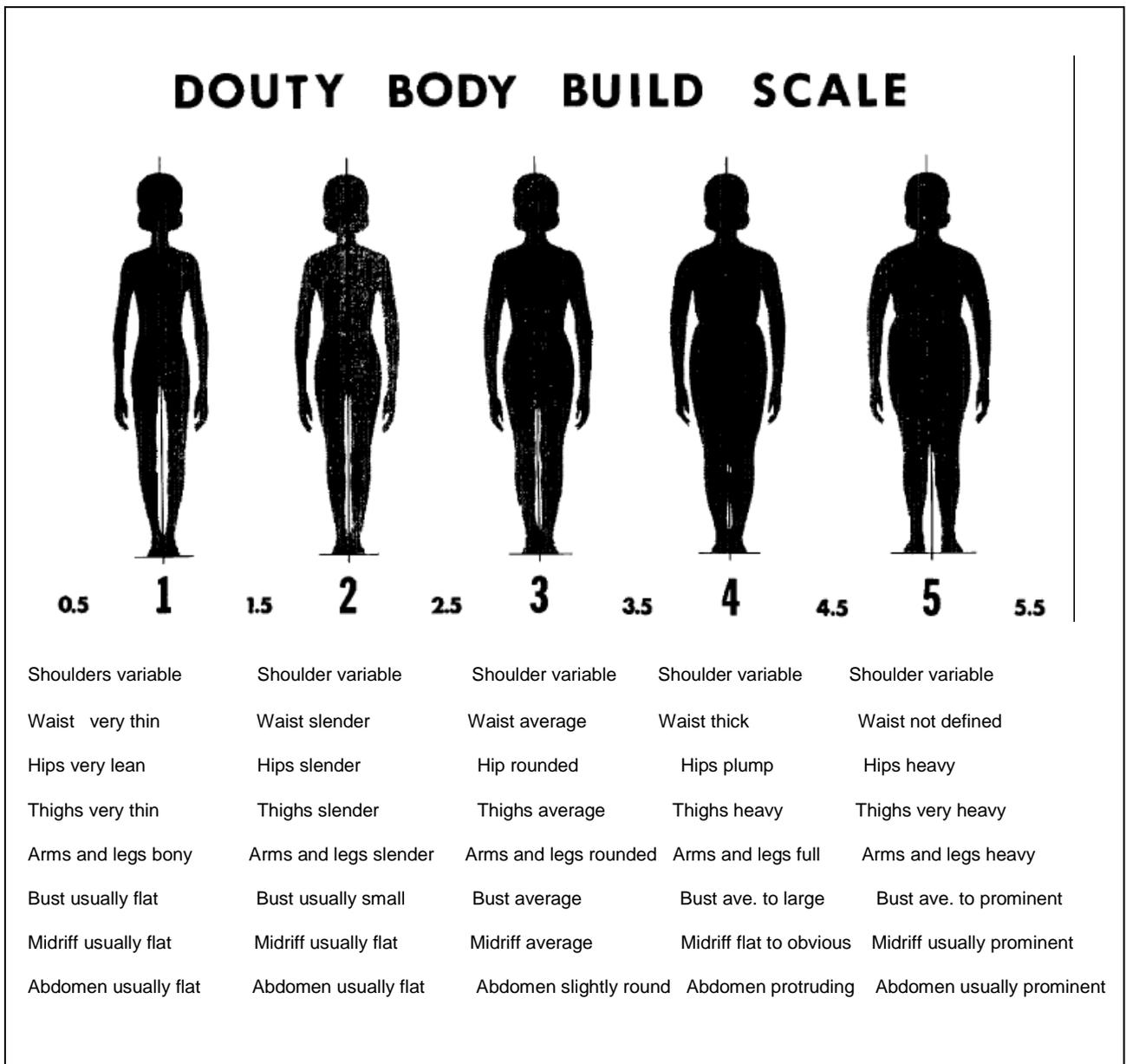
APPENDIX A

Profiles of Human Body shapes

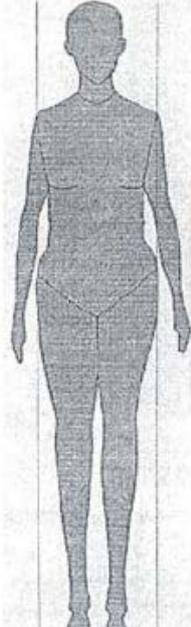
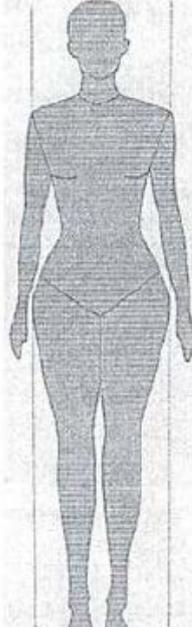
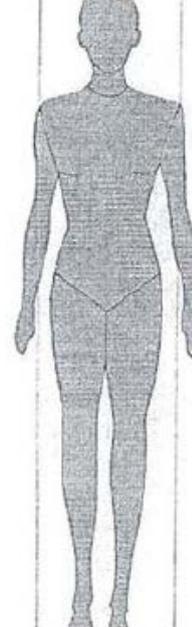
Appendix A1: Three Main Somatotypes (Sheldon et al. 1970)

Extreme endomorph	Extreme mesomorph	Extreme ectomorph
		
<ul style="list-style-type: none">• wide hips and narrow shoulders (pear-shaped)• a lot of fat on the body• a lot of fat on the upper arms and thighs• quite slim wrists and ankles	<ul style="list-style-type: none">• broad shoulders and narrow hips (wedge-shaped)• a large head• a muscular body• strong forearms and thighs• very little body fat	<ul style="list-style-type: none">• narrow shoulders and hips• a thin face and high forehead• a thin narrow chest and abdomen• thin legs and arms• very little muscle or body fat
Somatotype rating: 7 1 1.	Somatotype rating: 1 7 1.	Somatotype rating: 1 1 7.

Appendix A2: Douty Body-Build Scale (Douty 1968a:28) cited in Simmons (2002:47)



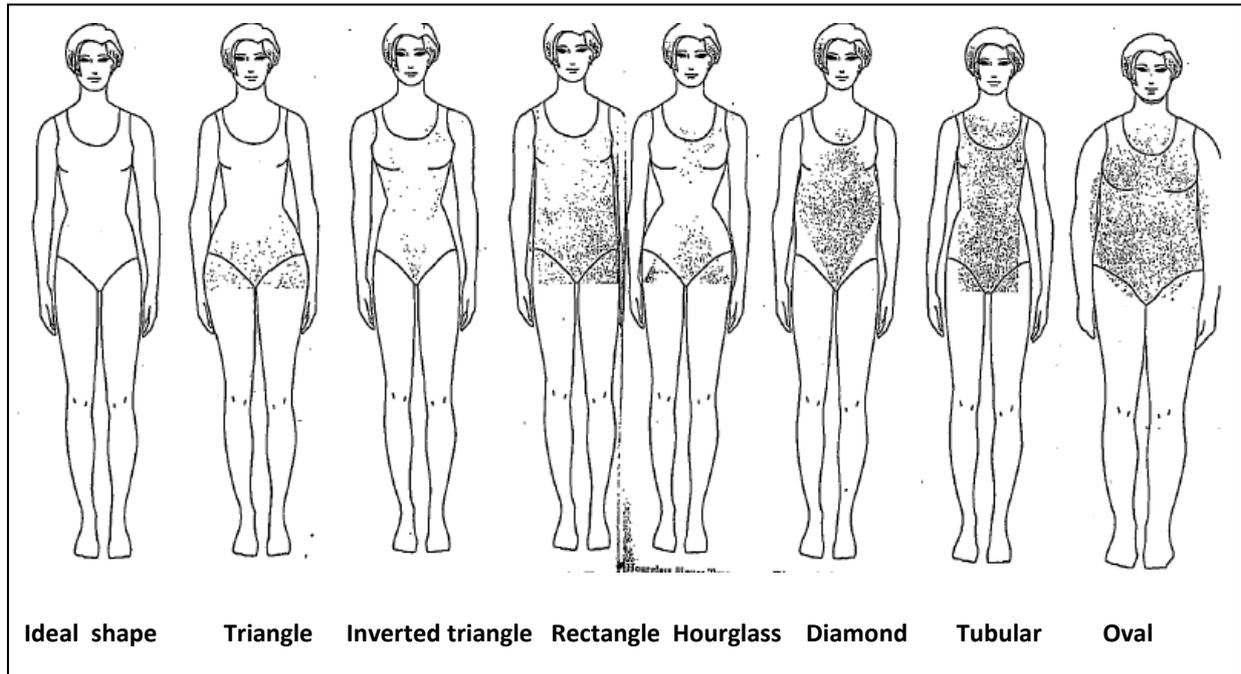
Appendix A3: Body Shape Assessment Scale (BSAS) (Connell et al. 2006)

LABEL	R (RECTANGULAR)	H (HOURLASS)	P (PEAR)	I (INVERTED TRIANGLE)
DESCRIPTION	SHOULDER AND HIP WIDTH ARE BALANCED WITH LITTLE TO NO WAIST DEFINITION	SHOULDER AND HIP WIDTH ARE BALANCED WITH CLEARLY DEFINED TO VERY SMALL WAIST IN RELATION TO SHOULDER AND HIP WIDTH.	HIP AND/OR THIGH WIDTH IS VISUALLY GREATER THAN SHOULDER WIDTH.	SHOULDER WIDTH IS VISUALLY GREATER THAN FULLEST WIDTH AT HIP OR THIGHS
STIMULI				

Appendix A4: Female Figure Identification Technique (FFIT) for apparel (Simmons 2002)

Figure Types	Classification according to:			Illustration	Description of body shape
	Shape & objects	Letters & numbers	Fruit & vegetables		
Hourglass	Hourglass	Figure 8 or "X"			There is a small difference in the comparison of the bust and hip circumferences. The bust-to-waist and hip-to-waist ratios are about equal.
	Bottom hourglass				The hip circumference is bigger than the bust circumference. The bust-to-waist and hip-to-waist ratios are significant enough to produce a definite waistline.
	Top hourglass				The bust circumference is bigger than the hip circumference. The bust-to-waist and hip-to-waist ratios are significant enough to produce a definite waistline.
Rectangular	Rectangle or ruler	"H"			The bust and hip measurements are fairly equal. The bust-to-waist and hip-to-waist ratios are low. There is no clearly defined waistline.
Rounded	Oval or circle	"O"	Apple		The average of the stomach, waist and abdomen measurements is less than the bust measurement.
	Diamond				The stomach, waist and abdomen measurements are more than the bust. There are several large rolls of flesh in the midsection protruding away from the body.
Triangular	Triangle or Christmas tree	"A"	Pear		The hip circumference is bigger than the bust circumference. The hip-to-waist ratio is small. The hips appear larger than the bust without a definite waistline.
	Spoon				There is a larger circumferential difference in the hips and bust. The bust-to-waist ratio is lower than the hourglass shape and the hip-to-waist is higher.
	Inverted triangle or cone	"V"			The bust circumference is larger than the hips. There is a small bust-to-waist ratio.

Appendix A5: Body Shape Variations (Rasband & Liechty 2006:28)



Rasband and Liechty (2006: 24) describe the body shapes as follows.

- Ideal body shape – is a shape which is similar in width in the shoulders and hips, with medium bust, small waist, flat to slightly curved abdomen, moderately curved buttock and slim thighs. The ideal body is well balanced with no exaggerated area is present. The shape is made up of proportional areas that are harmonious or pleasing to look at in length and width.
- The tubular body shape – is described as a body shape similar to the rectangular body shape, only thinner because weight is considerably below the “ideal range” “Ideal weight” refers to the range in which you are likely to be the healthiest (Rasband & Liechty 2006:21). This body shape appears more nearly straight up and down with comparatively narrow shoulders and hips; small bust, waist and buttocks; and thin arms and legs.
- Triangular body shape – appears smaller or narrower above the waist and larger or wider below the waist.
- Inverted triangular body shape – according to Rasband and appears larger or wider above the waist and smaller or narrower below the waist.

- Rectangular body shape – appears to be nearly the same width at shoulders, waist and hips. Hourglass body shape appears larger or full-rounded in the bust area and hip area, but appears proportionally very small in the waist.
- Diamond body shape – is typified by comparatively narrow shoulders and hips in combination with a wide midriff and waist.
- Oval or round body shape – appears full-round all over. Typically, the upper back and upper arms are larger and rounding.

APPENDIX B

LIST OF HUMAN EMOTIONS

Positive Human Emotions

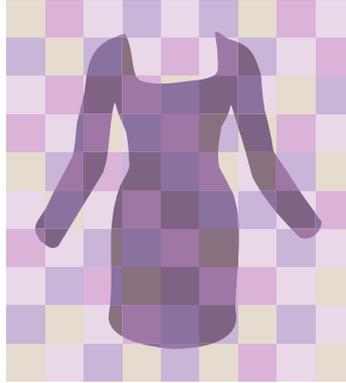
Adequate	Awe	Assured	Able
Capable	Certain	Charmed	Cheerful
Comfortable	Compassion	Courageous	Confidence
Determined	Delighted	Eager	Energetic
Enthusiastic	Excited	Exhilarated	Expectant
Elation	Empathy	Excellent	Fascinated
Glad	Good	Great	Grateful
Glorious	Glamorous	Graceful	Happy
Hopeful	Humorous	Inspired	Interested
Joyful	Magnificent	Lust	Love
Pleasure	Playfulness	Peaceful	Pleasant
Powerful	Pride	Positive	Relaxed
Relieved	Satisfied	Surprised	Sympathy
Stable	Sublime	Superior	Thrilled

Negative human emotions

Annoyed	Anxious	Apprehensive	Agonize
Anger	Anxiety	Apathy	Bored
Burdened	Cautious	Competitive	Concerned
Confused	Contempt	Depressed	Destructive
Disgusted	Distracted	Doubtful	Disappointed
Exasperated	Exhausted	Embarrassment	Envy
Frustrated	Fear	Guilty	Greed
Grief	Harassed	Hesitant	Hostile
Ignored	Impatient	Indifferent	Intimidated
Isolated	Irritated	Jealous	Jumpy
Lonely	Mad	Manipulated	Miserable
Obnoxious	Overwhelmed	Panic	Pressured
Remorse	Revenge	Shame	Sad
Scared	Shocked	Suspicious	

APPENDIX C

INSTRUMENT FOR THE STUDY



An exploration of female consumers' perceptions of garment fit and the effect of personal values on emotions

Dear Participant

Thank you for taking the time to take part in this research. Please know that your responses are highly valued and that there are no right or wrong answers. You may freely give your opinion when discussions are opened. The instruments that you will complete are also anonymous and will not reveal your identity in any way.

SECTION A

Tell us more about yourself by completing the following questions and placing a tick ✓ next to the correct option:

1. Age in years

18 - 25	
26 - 35	
36 - 45	
46 - 55	
56 +	

2. To which Ethnic group do you belong?

Asian	
Black	
Coloured	
White	
Other	

3. Which of the following 3 stores do you shop at the most? Rank order the 3 stores you shop at the most, by placing a 1 next to the most frequently patronised store, a 2 next to the next store that you shop at and a 3 next to the last store.

Foschini	
Donna Claire	
Truworths	
Woolworths	
Edgars	
Queens Park	
Jet	
Jeep	
Mr Price	
Ackermans	
Milady	
Other	

3.1 Why do you shop most often at the store you ranked 1 in question 3.

4. When purchasing your pants, what is your preferred fit?

Tight-fit or fitted	
Semi-fitted	
Loose-fit	

4.1 Please explain why you prefer that fit in question 4.

5. When purchasing a blouse, what is your preferred fit?

Tight-fit or fitted	
Semi-fitted	
Loose-fit	

5.1 Please explain why you prefer that fit in question 5.

6. When you are purchasing your garments in general, how do you generally prefer your clothes to fit your body?

Tight-fit or fitted	
Semi-fit	
Loose-fit	

6.1 Please explain why you generally prefer that fit in question 6.

End of Section A

SECTION B

Identifying perceived self-reported body shape

In this part of the study please refer to the six illustrations of body shapes below (**see illustration 1-6**). Then mark with an **X** in the box next the body shape which you perceive to be closest to your own body shape. Description of each body shape is provided to explain what characteristics the body shape may include. If you cannot identify your perceived body shape with the given body shapes, please sketch what you think your body shape is like on the figure at the end of this exercise. (**turn to page 11**). Then write down the characteristics of your personally drawn body shape on page 12.

Body shapes

Illustration 1:

Hourglass shape



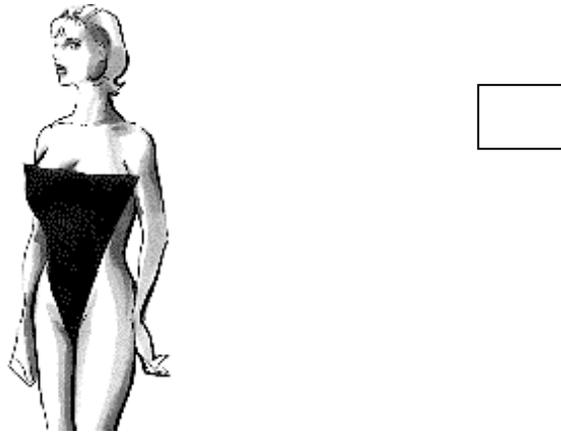
This is known as the perfect body shape. You have an hourglass figure if...

- Your full hip-line and your full bust-line are the same width and your waist is well defined
- You most likely have a balanced body vertical body shape
- Your weight is evenly distributed on top and bottom

NB: If you have chosen this body shape, tear the page out and place in front of you.

Illustration 2:

Inverted triangle shape



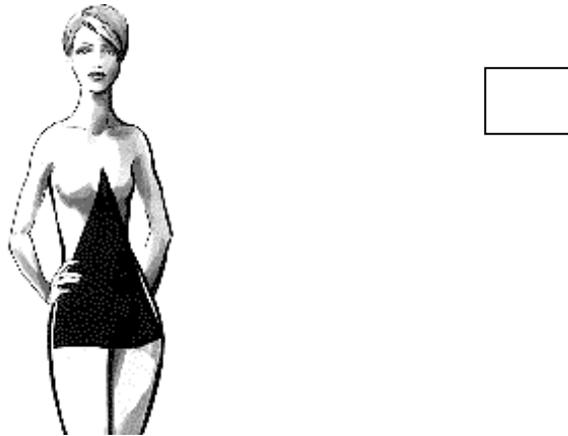
This is the second best female shape. You have an inverted triangle body shape if...

- You have a proportionally large bust, or you have broad shoulders, or both
- You have narrow hips with a well-defined waist
- You most likely are a long legged vertical body shape with proportionally slim legs
- You may also have a flat bottom
- Your weight is carried in the upper body.

NB: If you have chosen this body shape, tear the page out and place in front of you.

Illustration 3:

Triangle or Pear shape



The triangle body type is often also referred to as pear-shaped. You have this shape if...

- Your full bust-line is proportionally narrower than your full hip-line and you have a well-defined waist
- You typically have narrow shoulders
- You most likely have a balanced body or short legged vertical body shape
- Your thighs are typically full
- You may also have a full rounded bottom

NB: If you have chosen this body shape, tear the page out and place in front of you.

Illustration 4:

Rectangle shape



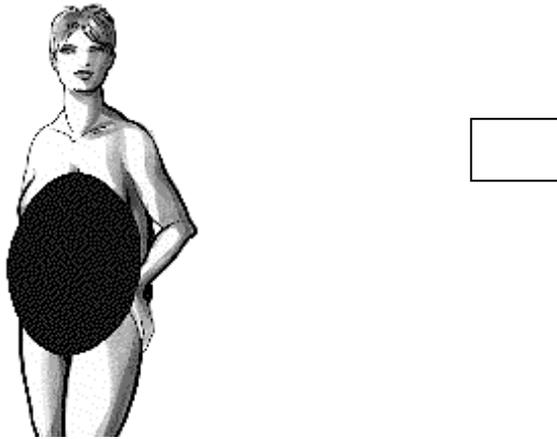
You have a rectangle body if...

- Your full bust-line and full hip-line are about the same width and you have little waist definition
- Your legs and arms will typically be proportionally slender
- You have a small to medium bust
- You most likely have a balanced body or long legged vertical body shape
- You may also have a flat bottom
- You may have had an hourglass figure when you were younger or slimmer
- You may look shorter and heavier than you really are

NB: If you have chosen this body shape, tear the page out and place in front of you.

Illustration 5:

Oval shape



This body shape is also often referred to as an apple shape. You have an oval horizontal body if...

- You have the overall appearance of being round especially around the waist-line
- Your waistline is undefined
- You have a large, low stomach
- You may have "love handles"
- Your hips are wide
- Your upper thighs are full
- You may also have a full bottom or a flat bottom

NB: If you have chosen this body shape, tear the page out and place in front of you.

Illustration 6:

Diamond shape



This body shape is also referred to as an apple shape. You have this body shape if...

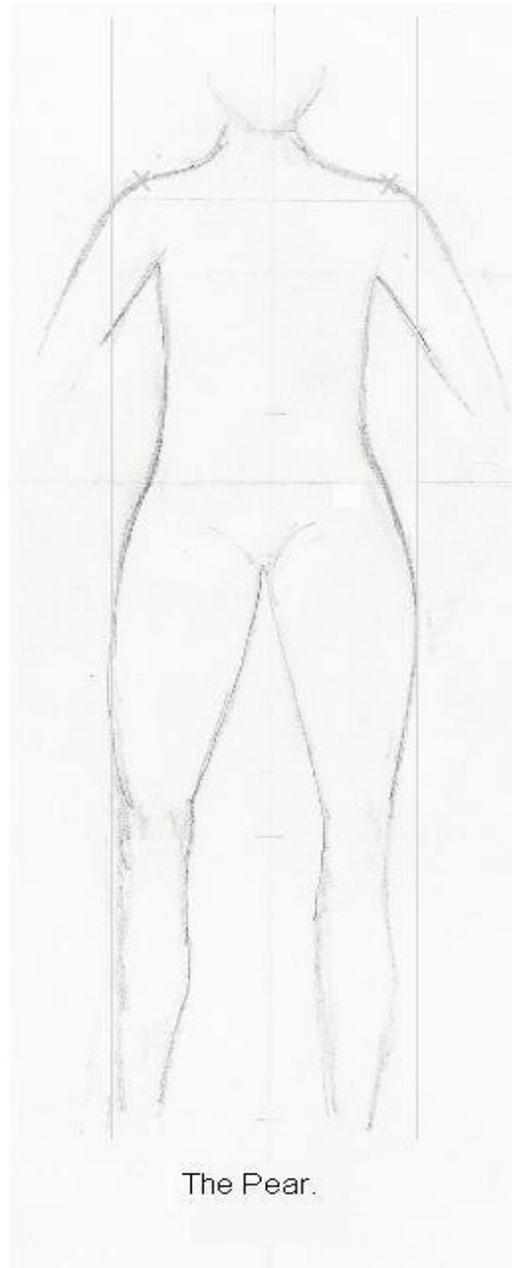
- Your waist is undefined
- You have a large, high stomach
- You may have "love handles"
- You may also have a full bottom or a flat bottom

NB: If you have chosen this body shape, tear the page out and place in front of you.

(Source: Liddelow 2011)

On this figure please draw what you perceive your body shape looks like if you cannot identify yourself with the body shapes above. On the next page (page 12) you can write the characteristics of your body shape.

Illustration 7: NB: If you have sketched your body shape on this figure, tear the page out and place in front of you.

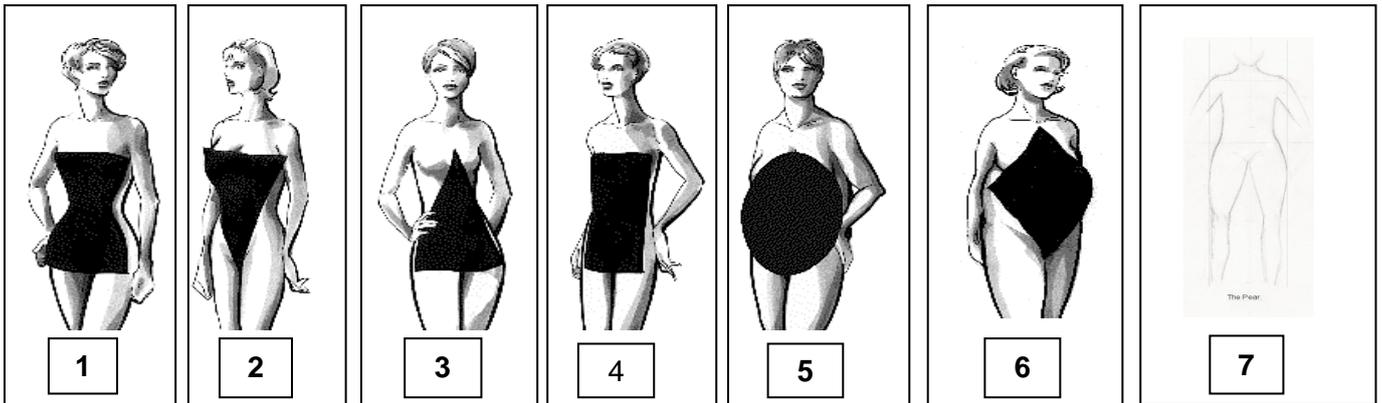


SECTION C

LADDER EXERCISE

Exercise 1a

To refresh: Indicate the shape you chose in section B by marking an X in the correct shape below. If you have marked illustration 7, please transfer roughly your body shape drawing.



General characteristics or attributes of body shape in relation to garment fit

Considering your figure or body shape, as indicated in the previous exercise, please write down the **three most important criteria** you always consider when choosing any of the ready-to-wear clothing items in store. Write a different criterion in each of the blocks below. Please be as specific as possible. If you don't have one word to describe what your idea is you can give a brief explanation.

1

Criteria 1

2

Criteria 2

3

Criteria 3

Now I would like to explore why you have indicated **criteria 1** to be important to you by providing a reason. Think carefully about **criteria 1** you wrote down. Can you now please explain why **criteria 1** is so significant to you by writing your reason in the block below?

1

Reason for criteria 1

Now please explain **why the reason above** is important to you by writing your answer in the block below. If you have a particular feeling you would like to express when considering the importance of the reason you have just given, you may express your reason as how it makes you feel. Consider the list of terms provided.

1

Importance of the reason above

End of Exercise 1a

Exercise 1b

When **considering your figure or body shape**, what are the **three (3) main problems** you mostly encounter when buying ready-to-wear clothing? Write a different problem in each of the box below. Please be as specific as possible. If you don't have one word to describe what your idea is you can give a brief explanation.

1

Problem 1

2

Problem 2

3

Problem 3

Now I would like to explore why you have indicated **problem 1** by providing a reason. Think carefully about **problem 1** you wrote down. Can you now please explain why **problem 1** is **problematic** for you by writing your reason in the block below?

1

Reason for problem 1

Now please explain **why the reason above** is important to you by writing your answer in the block below. If you have a particular feeling you would like to express when you experience problem 1 you may write that down as well. In other words how does it make you feel when you face problem 1. Consider the list of terms provided.

1

Importance of the reason above

End of Exercise 1b

Open-ended Questions on Body shapes

In this part of the study, please write your answers in the spaces provided

1. When you experience garment fit problems because of your body shape, how does it affect your decision to purchase ready-to-wear garments?

2. Does your body shape affect the choice of clothing you buy?

3. Do you feel limited of what you can wear because of your body shape?

4. What do you think should be done to help solve the problem of garment fit caused by body shape?

Exercise 2a

General characteristics or attributes of garment sizing in relation to garment fit

In this part of the study I am interested in finding out **three (3) main important thoughts** that come to your mind when considering garment sizing in ready to wear clothing in South Africa. Write down what you consider most important in the block provided. Please be as specific as possible. If you don't have one word to describe what your idea is, you can give a brief explanation.

1

Thought 1

2

Thought 2

3

Thought 3

Now I would like to explore why you have indicated **thought 1** to be important to you by providing a reason. Think carefully about **thought 1** you wrote down. Can you now please explain why **thought 1** is significant to you by writing your reason in the block below?

1

Reason for thought 1

Now please explain **why the reason above** is important to you by writing your answer in the block below. If you have a particular feeling you would like to express when considering the importance of the reason you have just given, you may express your reason as how it makes you feel. Consider the list of terms provided.

1

Importance of the reason above

End of Exercise 2a

Exercise 2b

When shopping for clothing, what are the three **(3) main problems** you have experienced in South Africa with garment sizing in general? Write down the three problems you consider most important to you in the block provided. Please be as specific as possible. If you don't have one word to describe what your idea is you can give a brief explanation.

1

Problem 1

2

Problem 2

3

Problem 3

Now I would like to explore why you have indicated problem 1 to be important to you by providing a reason. Think carefully about **problem 1** you wrote down. Can you now please explain why **problem 1** is problematic you by writing your reason in the block below?

1

Reason for problem 1

Now please explain **why the reason above** is important to you by writing your answer in the block below. If you have a particular feeling you would like to express when you experience problem 1 you may write that down as well. In other words how does it make you feel when you face problem 1. Consider the list of terms provided.

1

Importance of the reason above

End of Exercise 2b

Open-ended Questions on Garment Sizing

In this part of the study, please write your answers in the spaces provided

1. How does garment sizing influence your decision to purchase ready to wear garments?

2. How do you think garment sizing affect garment fit?

3. What do you think clothing manufacturers should do to reduce garment fit problems contributed by garment sizing?

SECTION D

GARMENT SIZE LABEL COMMUNICATION

In this part of the study, please write your answers in the spaces provided.

-
1. What are some of the main problems you have with the current garment size label communication on ready-to-wear clothing in South Africa?

2. When purchasing ready-to-wear garments, do you trust the information on the garment size label to guide you in your choice of what to buy? Please explain

3. Does the garment size label provide you with valuable information? Please explain

4. Do you think garment size label communication contribute to garment fit problems you are currently facing? Please explain.

5. How does it make you feel when you experience garment fit problems because of the information communicated on the garment size label?

6. How do garment size label communication problems influence your purchasing decision of the ready-to-wear garments?

7. What do you think has to be done to improve garment fit problems contributed by garment size label communication in South Africa?

End of Section D

Thank you for participating in this study

APPENDIX D

Invitation e-mails to take part in the study

Version 1

From: Kempen, Elizabeth
Sent: 21 April 2011 12:10 PM
To:
Subject: Sizing and fit study

Dear Colleague

Last year you assisted us in the intimate apparel study Ms Reena Pandarum and I ran, and hope you enjoyed this experience with us. I am now inviting you to assist a student of mine who is doing a Masters in Consumer Science, Ms Josephine Kasambala. Her study looks at the emotions and personal values of female consumers when faced with clothing fit and sizing problems. This study will use the same type of instruments you complete for us, and will it not be unfamiliar to you. We had such lively discussions around the instruments and the information you provided us with was really of great value to us.

The study will take up roughly 45 minutes of your time. During this time we will ask you to complete demographic information after which the main study will commence. We will complete value ladders (just like last time) on clothing fit and clothing sizing. A discussion will commence on clothing size labeling where you can highlight some of your concerns. There is no right or wrong answers. Your opinion is what matters to us.

The study will run on the following days and in the following venue from **10:00 – 11:00** on each of the days:

Date	Venue	Date	Venue
Wednesday 4 May 2011	Council Chambers, A Block, 2 nd floor	Friday 6 May 2011	Council Chambers, A Block, 2 nd floor
Wednesday 11 May 2011	Council Chambers, A Block, 2 nd floor	Friday 13 May 2011	Room A226, A Block, 2 nd floor
		Friday 20 May 2011	Council Chambers, A Block, 2 nd floor
Wednesday 25 May 2011	Council Chambers, A Block, 2 nd floor	Friday 27 May 2011	Council Chambers, A Block, 2 nd floor

Please choose a date that will fit into your busy program and e-mail Prof Elizabeth Kempen to let me know which date you choose to take part in the study.

I would really appreciate your assistance in making this study another successful research experience. Please remember that participation is voluntary. We also do not require any personal information that will identify you in the dissertation as it is not the purpose of the study to do so. You will remain anonymous throughout the data analysis procedures. However, if you can bring a friend along it will make the experience even more exciting.

If you have any concerns about the study please contact me, Prof Elizabeth Kempen, at kempeel@unisa.ac.za, as I am the supervisor of this student's study.

Kind Regards and hope you will be able to join us in this exciting study.

Prof Elizabeth Kempen
Post graduate research coordinator
Department Life and Consumer Sciences
Unisa
Florida campus
Tel: 011 471 2241
Cell: 083 302 7059
Fax: 011 471 2796

Version 2

From: Kempen, Elizabeth
Sent: 09 May 2011 12:12 PM
To:
Subject: Sizing and fit study

Dear Colleague

Would you please consider assisting in the study aimed at **Determining the emotions and personal values of female consumers when faced with clothing fit and sizing problems in South Africa.**

The study is part of the Masters Dissertation in Consumer Science of Ms Josephine Kasambala who is supervised by me, Prof Elizabeth Kempen. My previous e-mail set out the requirements of the study. However, we are looking for as many volunteers to share their opinions with us. Please consider helping us to understand the sizing and fit problems you may experience when purchasing clothing.

I would appreciate it if you could let me know if any of these dates will suit you.

The study will run on the following days and in the following venue from **10:00 – 11:00** on each of the days:

Date	Venue	Date	Venue
Wednesday 11 May 2011	Council Chambers, A Block, 2nd floor	Friday 13 May 2011	Room A226, A Block, 2nd floor
		Friday 20 May 2011	Council Chambers, A Block, 2nd floor
Wednesday 25 May 2011	Council Chambers, A Block, 2nd floor	Friday 27 May 2011	Council Chambers, A Block, 2nd floor

If you have any concerns about the study please contact me, Prof Elizabeth Kempen, at kempeel@unisa.ac.za, as I am the supervisor of this student's study.

Kind Regards and hope you will be able to join us in this exciting study.

Prof Elizabeth Kempen
Post graduate research coordinator
Department Life and Consumer Sciences
Unisa
Florida campus
Tel: 011 471 2241
Cell: 083 302 7059
Fax: 011 471 2796

APPENDIX E

Letter of Appreciation

Date: _____

Dear Participant

We wish to thank you for participating in this study. The data will be analyzed and included in the final report of the research project.

Please ensure that you include your e-mail address or phone number so that we are able to contact you for a small token of appreciation

Kind regards

Professor E. Kempen and Josephine Kasambala

APPENDIX F

ETHICAL CLEARANCE



Dr Antje Higgs
Chair: Ethics Review Committee, CAES

Tel: (011) 471 2984
Fax: (086) 642 7379
abartkow@unisa.ac.za

15 November 2010

To: Prof E Kempen
kempeel@unisa.ac.za

Dear Prof Kempen,

Request for Ethical approval / Research project involving humans, animals, other living organisms or gmo's as submitted for student Kasambala in October 2010

Your application for ethical clearance in respect of above mentioned study has been received and was considered by the CAES Research Ethics Review Committee.

The committee is pleased to inform you that ethical clearance has been granted for this study as set out in your application for ethical clearance as well as in the documents attached to your application.

Please be advised that the committee needs to be informed should your sampling method, interviews or other data sampling tools be adjusted after your pilot trial. In this case, a new application for the amendments needs to be submitted.

We trust that sampling and processing of the relevant data will be undertaken in a manner that is respectful of the rights and integrity of participants, as stipulated in the UNISA Research Ethics policy.

Congratulations on an interesting and relevant study. We would like to wish you well in this research undertaking.

Kind regards,

A handwritten signature in black ink, appearing to read "Dr A Higgs".

Dr A Higgs



University of South Africa
Pretorius Street, Muckleneuk Ridge, City of Tshwane
PO Box 392 UNISA, 0003 South Africa
Telephone: +27 12 429 3111 Facsimile: +27 12 429 4150
www.unisa.ac.za

APPENDIX G

QUALITATIVE DATA ON MOST FREQUENTLY PATRONIZED CLOTHING RETAILERS

CLOTHING RETAILER	CATEGORIES	PARTICIPANTS' QUOTES
Woolworths	Quality	<ol style="list-style-type: none"> 1. "because of quality clothes" 2. "you get quality" 3. "you are sure to get quality"
	Availability of sizes	<ol style="list-style-type: none"> 1. "they have bigger sizes" 2. "I find long pants which fits me" 3. "I get my size"
	Variety	<ol style="list-style-type: none"> 1. "they have a good range of clothes"
	Affordability	<ol style="list-style-type: none"> 1. "you get good value for money"
	Various of styles	<ol style="list-style-type: none"> 1. "they have lots of good styles"

CLOTHING RETAILER	CATEGORIES	PARTICIPANTS' QUOTES
	Customer services Presentation Conveniently available	1. "they have good customer services" 1. "presentation of good" 2. "they are organized" 3. "you easily find what you are looking for" 1. "Woolworths is conveniently located"
Mr Price	Affordability Quality Availability of sizes Fashionable styles Conveniently available	1. "prices are affordable" 2. "prices are reasonable" 3. "I can afford their prices for cash" 1. "they have quality" 1. "I fit into their sizes" 1. "I like their fashionable styles" 1. "available at malls"

CLOTHING RETAILER	CATEGORIES	PARTICIPANTS' QUOTES
Edgars	Availability of various sizes Variety Quality Conveniently located	<ol style="list-style-type: none"> 1. "I am small, they have petite sizes which I don't need to alter" 2. "they have the tall range" 3. "because of sizes" <ol style="list-style-type: none"> 1. "they have variety which makes shopping easier" <ol style="list-style-type: none"> 1. "they have quality" <ol style="list-style-type: none"> 1. "it is easy to find the shop"
Truworths	Quality Good styles	<ol style="list-style-type: none"> 1. "they have quality" 2. "the material is of quality" 3. "I like the quality" <ol style="list-style-type: none"> 1. "I like their styles" 2. "they have comfortable styles"
Foschini	Elegant styles Quality	<ol style="list-style-type: none"> 1. "I like their styles" <ol style="list-style-type: none"> 1. "they have quality goods"

CLOTHING RETAILER	CATEGORIES	PARTICIPANTS' QUOTES
Donna Claire	Size availability Comfortable styles	1. "I find the bigger sizes" 2. "they have my size" 1. "their clothes are comfortable"
Jet	Affordability Size availability	1. "their prices are affordable" 1. "I find my size"
Queens Park	Smart clothing	1. "I find smart and good fitting clothes"
Ackermans	Prices	1. "prices are reasonable"
Milady	Classic styles	1. "their styles fit my body"
"Other"	Unusual styles Affordability	1. "I look for unusual styles" 1. "their prices are cheaper"

APPENDIX H

QUALITATIVE DATA ON PREFERRED FIT FOR PANTS, BLOUSE AND GARMENTS IN GENERAL

Preferred fit for pants

Semi-fitting preference for pants

CATEGORIES	CONCEPTS	PARTICIPANTS' QUOTES
Body shape concerns		1. "because of my waist I don't like clinging clothes"
Accommodate body shape	accommodate	1. "to accommodate my round figure"
Comfortability	comfortable	1. "it is comfortable all working hours" 2. "I want to be comfortable when I walk" 3. "I prefer comfort than tight"
Presentability	modesty presentable	1. "I don't want to show traces of my underwear" 2. "I don't want to show off curves and structure" 3. "I want to be presentable than expose my body"
Age appropriate		1. "it is age appropriate"
Flattering		1. "it helps to give your body a bit of shape than loose" 2. "it suits me best"

Loose-fitting preference for pants

CATEGORIES	CONCEPTS	PARTICIPANTS' QUOTES
Body shape concerns		<ol style="list-style-type: none"> 1. "I don't want to show my big thighs, buttocks and hips" 2. "I have large legs"
Corrects faults		<ol style="list-style-type: none"> 1. "it corrects body shape faults"
Appropriateness		<ol style="list-style-type: none"> 1. "I am older, I need to hide" 2. "it suits me best because of my weight"
Comfortability	comfortable	<ol style="list-style-type: none"> 1. "it is more comfortable" 2. "my body moves easily"

Tight-fitting preference for pants

CATEGORIES	CONCEPTS	PARTICIPANTS' QUOTES
Compliments body shape	shapes	<ol style="list-style-type: none"> 1. "it goes with body structure" 2. "it shows off my body, hips, and waist" 3. "it fit and shapes the body nicely"
Comfortability	comfortable	<ol style="list-style-type: none"> 1. "it feels most comfortable" 2. "I feel comfortable"
Smart look		<ol style="list-style-type: none"> 1. "it looks smart" 2. "it looks neat"
Slimming effect	look slim	<ol style="list-style-type: none"> 1. "it makes me look slim" 2. "I look thinner"

Preferred fit for blouse

Semi-fitting preference for blouse

CATEGORIES	CONCEPTS	PARTICIPANTS' QUOTES
Comfortability	comfortable	<ol style="list-style-type: none"> 1. "it makes me feel comfortable" 2. "it is the most comfortable" 3. "I have enough room to breathe" 4. "I prefer free than tight"
Suitability	suitable	<ol style="list-style-type: none"> 1. "it is suitable for my body shape" 2. "you can add extra tops underneath in winter" 3. "it suits me, I have smaller upper body"
Presentability	presentable	<ol style="list-style-type: none"> 1. "it looks presentable" 2. "it looks good, no showing"
Smart look	smart	<ol style="list-style-type: none"> 1. "it looks smart"
	tailored look	<ol style="list-style-type: none"> 1. "it gives a tailored look"
Body shape concerns	body size	<ol style="list-style-type: none"> 1. "because of my size" 2. "I can't wear tight, I have a round figure"

Loose-fitting preference for blouse

CATEGORIES	CONCEPTS	PARTICIPANTS' QUOTES
Modesty		<ol style="list-style-type: none"> 1. I don't want to expose breasts and stomach" 2. "it is tidy, it doesn't show bulges"
Comfortability	comfortable	<ol style="list-style-type: none"> 1. "I like to be comfortable" 2. "it is comfortable during workings hours" 3. "I like feeling comfortable"
Flexibility	flexible	<ol style="list-style-type: none"> 1. "to be flexible" 2. "I don't like tight clothes"
Cover up		<ol style="list-style-type: none"> 1. "you hide some bulges" 2. "I need to cover big body" 3. "I don't want to show extra meat"

Tight-fitting preference for blouse

CATEGORIES	CONCEPTS	PARTICIPANTS' QUOTES
Slimming effect	slim look	<ol style="list-style-type: none"> 1. "it makes me look slimmer" 2. "it makes me look smaller"
Compliments body shape	shapes	<ol style="list-style-type: none"> 1. "it lines my body nicely" 2. "it shapes my body well" 3. "to shape my body"
Presentability	decent look	<ol style="list-style-type: none"> 1. "it looks decent" 2. "it looks good on me"
Comfortability	comfortable	<ol style="list-style-type: none"> 1. "I feel comfortable"

Preferred fit for garments in general

Semi-fitting preference for garments in general

CATEGORIES	CONCEPTS	PARTICIPANTS' QUOTES
Comfortability	comfortable	<ol style="list-style-type: none"> 1. "I feel comfortable" 2. "I prefer comfort" 3. "it gives room for movement"
Confidence		<ol style="list-style-type: none"> 1. "it gives me confidence"
Compliments body shape	body shape enhancement	<ol style="list-style-type: none"> 1. "it enhances my body shape"
Accommodates body shape		<ol style="list-style-type: none"> 1. "allowance for bulgy stomach" 2. "I will still fit even if I gain weight" 3. "I have a round figure"
Modesty		<ol style="list-style-type: none"> 1. "I don't want to show my body" 2. "I don't like clinging clothes"
Good appearance	Professional Tailored look	<ol style="list-style-type: none"> 1. "looking professional" 1. "it gives a tailored look"
Flatters		<ol style="list-style-type: none"> 1. "I find it most flattering"

Loose-fitting preference for garments in general

CATEGORIES	CONCEPTS	PARTICIPANTS' QUOTES
Comfortability	comfort/ease	<ol style="list-style-type: none"> 1. "for ease and comfort especially around my waist" 2. "it gives room for movement" 3. "I feel comfortable"
Body shape concerns		<ol style="list-style-type: none"> 1. "I don't like to show my curves" 2. "I have a curvy body" 3. "it hides problems areas"
Modesty		<ol style="list-style-type: none"> 1. "it doesn't show bulges" 2. "I don't want to show extra"
Presentability	presentable	<ol style="list-style-type: none"> 1. "it looks presentable" 2. "it looks better"
Freedom		<ol style="list-style-type: none"> 1. "I can move freely" 2. "loose feel better"

Tight-fitting preference for garments in general

CATEGORIES	CONCEPTS	PARTICIPANTS' QUOTES
Good feeling	feel good	<ol style="list-style-type: none"> 1. "it makes me feel good" 2. "I always like fitted clothes"
Slimming effect	slim look	<ol style="list-style-type: none"> 1. "I look thinner" 2. "to look slimmer" 3. "you feel smaller"
Compliments body shape	shapes appealing sexy	<ol style="list-style-type: none"> 1. "it shapes my body well" 1. "it looks appealing to me" 1. "you look sexy"
Comfortability	comfortable	<ol style="list-style-type: none"> 1. "I am comfortable in fitted clothes" 2. "I feel comfortable"

APPENDIX I

CLOTHING RETAILERS RANKED NUMBER TWO AND THREE BY THE PARTICIPANTS

Retailer ranked number two

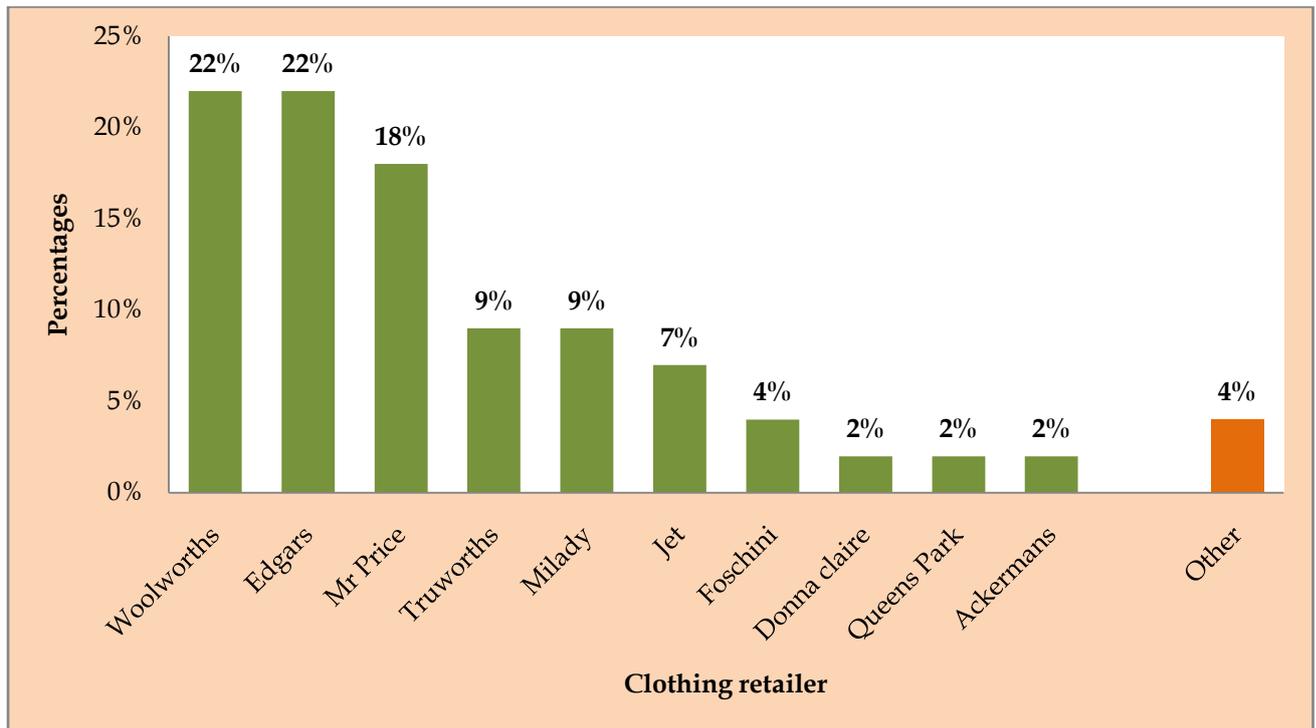
Table 5.2 presents detailed analysis of frequencies and percentages for the clothing retailer ranked number (2) by the participants. Of 56 participants who ranked clothing retailers, one response was discarded for not ranking clothing retailer number two and clothing retailer number three, yielding a total of 55 frequencies of responses.

Table 5.3 Frequencies and percentages of clothing retailer ranked number 2

Name of the retailer	Frequency (n = 55)	Percentage (%)
Woolworths	12	22%
Edgars	12	22%
Mr Price	10	18%
Truworths	5	9%
Milady	5	9%
Jet	4	7%
Foschini	2	4%
Donna Claire	1	2%
Queens Park	1	2%
Ackermans	1	2%
Other	2	4%

Graphical presentation of the clothing retailer ranked number (2) by the participants is indicated in Figure 5.3.

Figure 5.3 Graphic presentation of retailer ranked number 2



Frequency (n = 55)

Majority of the participants (n=24; 44%) were split in half ranking Woolworths and Edgars as their second preferred clothing retailer placing both retailers at number one position, while Mr Price followed closely with (n=10; 18%) of the participants. It is interesting to see that these three retailers were again the top three in the above section. However Mr Price lost its strength to Edgars which is now competing with Woolworths at number 1 position. Truworths, (n=5; 9%) is still placed at fourth position together with Milady which has moved up considerably, with Jet (n=4; 7%) following closely. The rest had either one or two participants mentioning them. Participants who had ranked number 1 against “other” without naming the clothing retailer were analyzed and placed in its own category at the end of the table.

Clothing retailer ranked number three

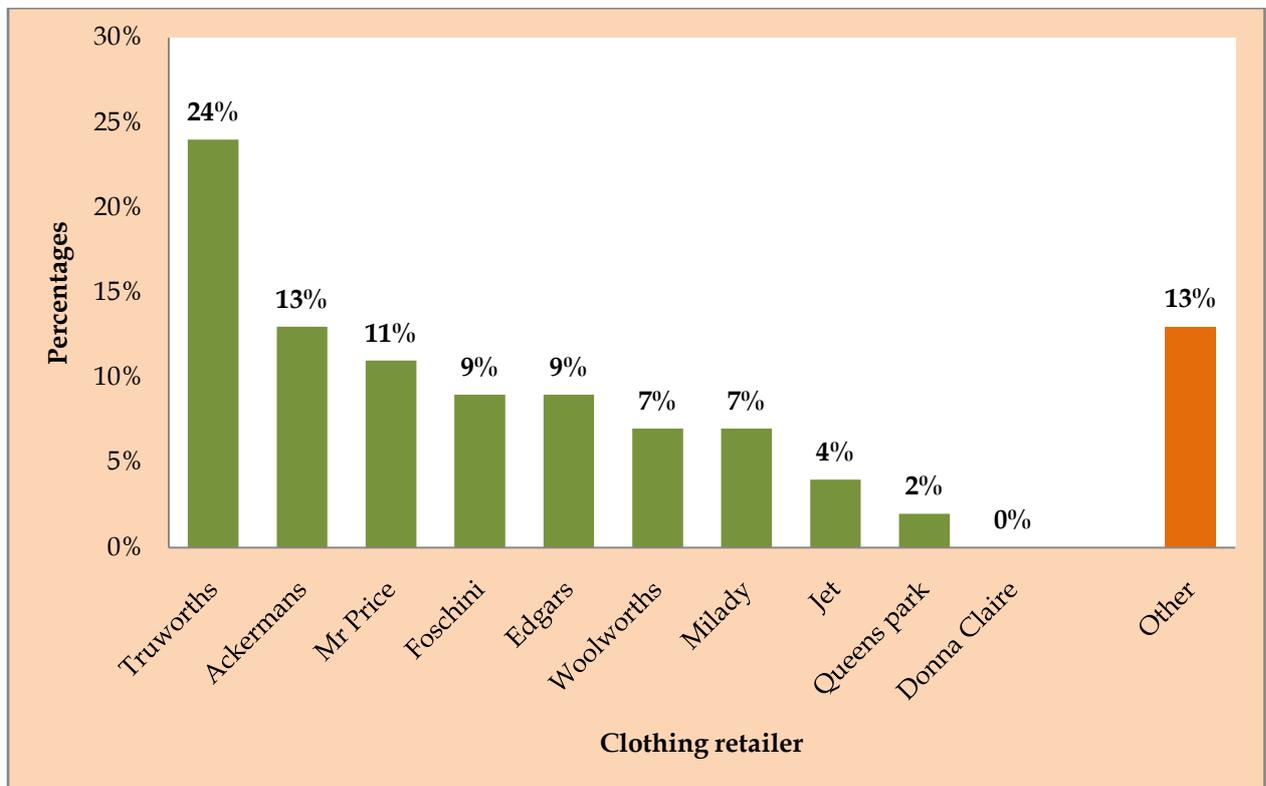
Table 5.4 presents detailed analysis of frequencies and percentages for clothing retailer ranked number (3) by the participants. Of the 55 participants, one response was not analyzed for not indicating clothing retailer number three, yielding a total of 54 frequencies.

Table 5.4 Frequencies and percentages of clothing retailer ranked number 3

Name of the retailer	Frequency (n = 54)	Percentage (%)
Truworths	13	24%
Ackermans	7	13%
Mr Price	6	11%
Foschini	5	9%
Edgars	5	9%
Woolworths	4	7%
Milady	4	7%
Jet	2	4%
Queens Park	1	2%
Donna Claire	0	0%
Other	7	13%

Graphical presentation of the clothing retailer ranked number (3) by the participants is indicated in Figure 5.4.

Figure 5.4 Graphic presentation of retailer ranked number 3



Frequency (n = 54)

Most of the participants ranked Truworths as their third preferred clothing retailer (n=13; 24%), placing it at number one position, followed by Ackermans (n= 7; 13%), while Mr Price (n=6; 11%) is placed at third position. It is interesting to see that the three retailers (Woolworths, Edgars and Mr Price) which had dominated the top position in the previous sections, only Mr Price still features at third position. The rest have move down the ranking. It is also interesting to see a number of participants preferring “other” clothing retailers as their third option (n=7; 13%) in this study. Probably suggesting a significant number of female consumers also prefer to shop for their garments at “other” clothing retailers besides the most familiar ones. Participants who ranked number (3) against “other” without naming the clothing retailer were analyzed and placed in its own category at the end of the table.

APPENDIX J

QUALITATIVE DATA ON BODY SHAPE, GARMENT SIZING AND GARMENT SIZE LABEL COMMUNICATION

Body shape and purchase decision

THEME	CATEGORY	PARTICIPANTS' QUOTES
Would purchase	Alterations	<ol style="list-style-type: none"> 1. <i>I buy and take for alterations where possible</i> 2. <i>If not too bad, I buy and alter a little</i> 3. <i>I only buy where there is alteration services</i>
	Specific retail outlets	<ol style="list-style-type: none"> 1. <i>I buy at a particular shop</i> 2. <i>I don't buy at other shops</i> 3. <i>I only go to certain shops which caters for my needs</i>
	Stylistic features	<ol style="list-style-type: none"> 1. <i>I prefer colour, to camouflage my body shape</i> 2. <i>I still buy if I like the design, only to wear at certain times</i>
Would not purchase	Comfortability	<ol style="list-style-type: none"> 1. <i>I want comfort in what I wear</i> 2. <i>Comfort matters, there is no use buying something you are not comfortable in</i> 3. <i>Unless comfortable otherwise I don't buy</i>

Effect of body shape on choice of clothing

CATEGORIES	CONCEPTS	PARTICIPANTS' QUOTES
Design features	<p>Body shape inconsideration</p> <p>Styles limitations</p>	<p>1. <i>I cannot buy some jeans and some tops</i></p> <p>2. <i>Most items are made for the hourglass body shape</i></p> <p>1. <i>I can't wear some styles</i></p> <p>2. <i>I only buy semi fitted or loose</i></p>
Comfortability	<p>Suitability</p> <p>Comfort</p>	<p>1. <i>I want styles to suit my age</i></p> <p>2. <i>I want only flattering clothes</i></p> <p>3. <i>I need to feel good and pretty</i></p> <p>4. <i>The garment has to look good</i></p> <p>5. <i>I want to dress according to my shape</i></p> <p>1. <i>I need comfort not distracted of how my clothes make me look</i></p> <p>2. <i>I don't go for tight clothes</i></p> <p>3. <i>Comfort and good fit for my body</i></p>

Body shape limitations

CATEGORIES	CONCEPTS	PARTICIPANTS' QUOTES
Body shape imperfections	Accommodate body shape	<ol style="list-style-type: none"> 1. <i>I love tight tops, but because of my stomach then I buy loose</i> 2. <i>I only buy elasticated skirts or pants</i> 3. <i>Not everything looks good on me</i> 4. <i>I don't have a standard body</i> 5. <i>My figure is not perfect</i>
	Unavailability of garments for my body shape	<ol style="list-style-type: none"> 1. <i>It is hard to find clothes that fit my body shape</i> 2. <i>Few fit properly</i>
Garment designs	Styles	<ul style="list-style-type: none"> • <i>My taste not available</i> • <i>Sometimes fashionable does not suit me</i> • <i>I cannot wear what I like</i> • <i>I cannot wear other styles</i>
	Comfort	<ul style="list-style-type: none"> • <i>I do not feel comfortable in some styles</i> • <i>Skirts are always too short for me</i> • <i>I feel uncomfortable in sleeveless</i>

CATEGORIES	CONCEPTS	PARTICIPANTS' QUOTES
Indifferent	No problem	<ol style="list-style-type: none"> 1. <i>I don't have a problem I can wear everything</i> 2. <i>I look until I find</i> 3. <i>Not applicable to me</i>

Solutions to body shape and garment fit problems

CATEGORIES	CONCEPTS	PARTICIPANTS' QUOTES
Consideration of body shapes	Different body shapes	<ol style="list-style-type: none"> 1. <i>Accommodate ethnic groups and different shapes</i> 2. <i>Produce styles for different body shapes</i> 3. <i>Design for different body shapes</i> 4. <i>Consider different body shape</i> 5. <i>Provision for different body shape</i>
Design features	Design elements (colour/material) Variety	<ol style="list-style-type: none"> 1. <i>More colour options, bright colours to hide body shape flaws</i> 2. <i>We need more stretch clothes to accommodate our shapes</i> <ol style="list-style-type: none"> 1. <i>Make variety for all body shapes</i> 2. <i>Make different lengths of trousers</i>

		<ol style="list-style-type: none"> 3. <i>Consider lengths of the pants</i> 4. <i>Introduce new clothes designs</i> 5. <i>We need more flexibility with designs</i> 6. <i>Make beautiful bigger sized clothes</i> 7. <i>Waist of jeans should be higher</i> 8. <i>Bigger sizes should include sleeves</i>
<p>Female empowerment</p>		<ol style="list-style-type: none"> 1. <i>Don't choose garments that don't fit well on your body</i> 2. <i>Try to make your own garments</i> 3. <i>Look after your body by diet, exercising, if necessary plastic surgery, liposuction</i>

CATEGORIES	CONCEPTS	PARTICIPANTS' QUOTES
Target market knowledge	Research Standardize	<ol style="list-style-type: none"> 1. <i>Research what makes people comfortable</i> 2. <i>Focus on real woman not model bodies</i> 3. <i>Research and census on body shapes</i> <ol style="list-style-type: none"> 1. <i>Have set standards</i>
In-store assistance	Consumer services Provide advice	<ol style="list-style-type: none"> 1. <i>Indicate which body shape can wear that type of style</i> 2. <i>In-store alter per customer</i> <ol style="list-style-type: none"> 1. <i>Advise to lose weight</i>
Consideration of body shapes		<ol style="list-style-type: none"> 6. <i>Accommodate ethnic groups and different shapes</i> 7. <i>Produce styles for different body shapes</i> 8. <i>Design for different body shapes</i> 9. <i>Consider different body shape</i> 10. <i>Provision for different body shape</i>

Garment sizing and purchase decision

THEME	CATEGORIES	PARTICIPANTS' QUOTES
<p>Would purchase</p>	<p>Alterations</p> <p>Time factor</p> <p>Not a problem</p>	<p>1. <i>if I really like it I buy and alter</i></p> <p>1. <i>I should have enough time to try-on.</i></p> <p>2. <i>No time no buying</i></p> <p>1. <i>I usually find my size so I enjoy shopping, I buy</i></p> <p>2. <i>not a problem at all</i></p>

THEME	CATEGORIES	PARTICIPANTS' QUOTES
	Not considered a problem	<ol style="list-style-type: none"> 1. <i>It does not influence my decision to purchase</i> 2. <i>Not a problem at all</i> 3. <i>Not really, I get them altered</i> 4. <i>It doesn't influence, I just look around</i> 5. <i>I usually find my sizes, so I enjoy shopping, I buy</i>
Would not purchase	Limited time Negative blocking emotions	<ol style="list-style-type: none"> 1. <i>If pressured of time I don't buy</i> 2. <i>Until I have time I don't buy</i> 1. <i>I get bored when size changes, I don't like to shop</i> 2. <i>If tired of fitting, I get frustrated and go home</i> 3. <i>It is irritating when you don't find size, I end up leaving</i> 4. <i>It is frustrating, I give up</i> 5. <i>It is stressful and confusing, I end up not buying</i> 6. <i>When disappointed I don't buy</i>

Effect of garment sizing on garment fit

CATEGORIES	CONCEPTS	PARTICIPANTS' QUOTES
<p>Unreliable</p>	<p>Misleading</p>	<ol style="list-style-type: none"> 1. <i>misleading to buying wrong size</i> 2. <i>if wrong sizing, you choose wrong item which doesn't fit properly</i> 3. <i>not true size of the garment</i>
	<p>Untrustworthy</p>	<ol style="list-style-type: none"> 1. <i>I don't rely on the size, mostly it is not true size of the garment</i> 2. <i>your size might not fit properly</i> 3. <i>cannot buy in a hurry, you buy wrong size</i> 4. <i>small size fits too tight and bigger sizes too loose</i> 5. <i>same size has different measurements on other garments</i>
	<p>Try-on</p>	<ol style="list-style-type: none"> 1. <i>not trusting to know your size</i> 2. <i>make sure you try-on or you buy bigger size</i> 3. <i>you think you are smaller as the size is wrong</i> 4. <i>you choose wrong, either too long or too big the waist</i> 5. <i>you have to try-on to be sure</i>

CATEGORIES	CONCEPTS	PARTICIPANTS' QUOTES
Product constraints	<p>Sizes limitations</p> <p>Settling/compromising</p> <p>Alteration difficulty</p>	<ol style="list-style-type: none"> 1. <i>after hours of fitting maybe only one fits</i> 2. <i>if your size is smaller, you take a bigger size which doesn't fit well</i> 3. <i>without finding your size</i> 4. <i>you buy what you don't want if there is no size</i> 5. <i>you end up buying wrong size, look messed up</i> <ol style="list-style-type: none"> 1. <i>wrong size is time consuming to take back, so you settle</i> 2. <i>compromising if you don't find your size by buying different size</i> <ol style="list-style-type: none"> 1. <i>sizes are not increased proportionally</i> 2. <i>alterations makes garment to lose shape</i>
Design constraints	Sizing limitations/body shape	<ol style="list-style-type: none"> 1. <i>sizes do not include various body shape, that's why others feel tight at the bottom or loose at the bust</i> 2. <i>no sizing according to body shape</i> 3. <i>body shape is not considered in the cut of the clothes</i> 4. <i>shapes are not considered in sizing</i>

Solutions to garment sizing and garment fit problems

CATEGORIES	CONCEPTS	PARTICIPANTS' QUOTES
Standardizing	<p>Standards</p> <p>Communicate</p>	<ol style="list-style-type: none"> 1. <i>we need a standard survey of the population</i> 2. <i>standardize variation in lengths</i> 3. <i>all manufacturers must adhere to the same standards</i> 4. <i>use one system of sizing</i> 5. <i>standardize internationally</i> 6. <i>standardization would help</i> <ol style="list-style-type: none"> 1. <i>manufacturers must communicate with each other</i> 2. <i>research South African population</i>
Various sizes	<p>Size range</p> <p>More stock</p>	<ol style="list-style-type: none"> 1. <i>introduce in-between sizes</i> 2. <i>introduce more sizes e.g. 16 – petite, 16 – tall, 16 - comfort</i> 3. <i>include in-between sizes</i> <ol style="list-style-type: none"> 1. <i>have enough stock for popular sizes</i> 2. <i>introduce more and different sizes from abroad</i> 3. <i>more sizes for all shapes</i> 4. <i>include all sizes in all designs</i>

CATEGORIES	CONCEPTS	PARTICIPANTS' QUOTES
	Body shapes	<ol style="list-style-type: none"> 1. <i>different body shapes should be included in one size</i> 2. <i>cater for all people</i> 3. <i>consider ethnicity, shapes and bone structures</i> 4. <i>consider different heights</i> 5. <i>design suitable clothes for bigger sizes</i>
Customer care	In-store services Records	<ol style="list-style-type: none"> 1. <i>have tailors available to adjust</i> 2. <i>introduce personalized fitting sessions</i> 1. <i>take records of people</i> 2. <i>keep record of sales</i>
Realistic sizing	Models Research	<ol style="list-style-type: none"> 1. <i>use "correct" models to assess sizing and fit</i> 2. <i>use different models</i> 3. <i>use "real women" not catwalk models</i> 1. <i>research on how to improve sizes, sizes for every one</i> 2. <i>look at the market</i>

Main problems with communication of size labels

THEMES	CATEGORIES	PARTICIPANTS' QUOTES
<p>Confusing</p>	<p>Don't make sense</p>	<ol style="list-style-type: none"> 1. <i>size labels of L or XL don't make sense</i> 2. <i>S,M,L,XL size labels no definite idea</i> 3. <i>no reflection of the real size</i>
	<p>Wrong</p>	<ol style="list-style-type: none"> 1. <i>some size labels are wrong, too small for the garment measures</i> 2. <i>size label and the size of the garment sometimes too big or too small</i> 3. <i>size label and centimeters are different</i> 4. <i>size on the label appear twice your garment size</i> 5. <i>wrong size label</i>
	<p>Inconsistency</p>	<ol style="list-style-type: none"> 1. <i>inconsistency, labels of the same garment measurements differ in different shops</i> 2. <i>varied sizes in different shops</i> 3. <i>inconsistency across shop</i> 4. <i>uniform size labels from store to store have different fit</i>

Trust in size labels to guide in the choice of which garment to purchase

THEMES	CATEGORIES	PARTICIPANTS' QUOTES
<p>Do not trust</p>	<p>False information</p>	<ol style="list-style-type: none"> 1. <i>the garment might be small than what is labelled</i> 2. <i>it does not correspond</i> 3. <i>always have to fit to make sure</i>
	<p>Misleading</p>	<ol style="list-style-type: none"> 1. <i>they are misleading, numerical sizing mostly cut small and alphabetical sizing tend to be big</i> 2. <i>M becomes smaller after washing, I tend to buy XL even if I wear medium</i> 3. <i>they don't reflect the exact size</i>
	<p>Limited information</p>	<ol style="list-style-type: none"> 1. <i>on labels M,L don't have explanations, you need to try on</i> 2. <i>I struggle with alphabetical labels</i>
	<p>Inconsistency</p>	<ol style="list-style-type: none"> 1. <i>there is inconsistency from shop to shop</i>

THEMES	CATEGORIES	PARTICIPANTS' QUOTES
	<p>Familiarity</p> <p>Confidence</p> <p>Guidance</p>	<p>3. <i>they are always accurate</i></p> <p>1. <i>it depends on the shop if I am familiar</i></p> <p>1. <i>I am confident with numerical labels</i> 2. <i>they always fit the way I want</i></p> <p>1. <i>they guide me what to choose</i> 2. <i>to guide to choose correct size</i></p>

Provision of valuable information by size label

THEMES	CATEGORIES	PARTICIPANTS' QUOTES
Disagree	Insufficient information	<ol style="list-style-type: none"> 1. <i>it is just basic indication, no details</i> 2. <i>only an indication of size not fit</i> 3. <i>sometimes it only indicates waist, hip, or bust size</i> 4. <i>information is not enough</i> 5. <i>nothing relating to body shape</i> 6. <i>only size, nothing else</i> 7. <i>more information is needed</i>
	False information	<ol style="list-style-type: none"> 1. <i>false information most of the time</i> 2. <i>the information is wrong</i> 3. <i>sizes are different (inconsistency)</i> 4. <i>you have to fit first</i>

THEMES	CATEGORIES	PARTICIPANTS' QUOTES
Agree	<p>Guides</p> <p>Provides idea</p> <p>Indicates</p> <p>Accuracy</p>	<ol style="list-style-type: none"> 1. <i>it guides where to start</i> 2. <i>I am able to choose my size</i> 3. <i>it generally guides, that is good</i> 4. <i>it provides basic guidelines</i> <ol style="list-style-type: none"> 1. <i>it gives an idea of how close to finding my size</i> 2. <i>gives the idea of the size</i> <ol style="list-style-type: none"> 1. <i>it indicates my size</i> 2. <i>Woolworths indicates slim or wider in jeans</i> 3. <i>it is important to know the size I am wearing</i> 4. <i>it shows the size I am looking for</i> 5. <i>it indicates where to start</i> <ol style="list-style-type: none"> 1. <i>usually it is accurate</i>
Conditional agreement	Correct	<ol style="list-style-type: none"> 1. <i>only if it is accurate and correct then it is</i> 2. <i>if that size fit you</i>

Contribution of size labels to garment fit problems

THEMES	CATEGORIES	PARTICIPANTS' QUOTES
<p>Contributes</p>	<p>Inconsistency</p>	<ol style="list-style-type: none"> 1. <i>inconsistency in different stores</i> 2. <i>different sizes at different shop</i> 3. <i>you find different size labels at different shops</i> 4. <i>numerical labels fit differently than alphabetical labels</i>
	<p>Unreliable</p>	<ol style="list-style-type: none"> 1. <i>if you did not try and believed to be your size and it doesn't fit</i> 2. <i>you pick what doesn't fit if you don't fit</i> 3. <i>no guarantees it will fit, shop by fitting</i> 4. <i>there will be a problem if you did not fit.</i> 5. <i>they put incorrect size</i> 6. <i>it is hard to determine the correct size</i> 7. <i>there is something wrong size</i> 8. <i>size labels are not standardized what you think is your size might not fit</i>

THEMES	C ATEGORIES	PARTICIPANTS' QUOTES
	Ambiguous Information	<ol style="list-style-type: none"> 1. <i>wrong labels makes you buy wrong size then it doesn't fit properly</i> 2. <i>the information is wrong</i> 3. <i>It doesn't fit as the size says</i> 4. <i>there is not enough information</i> 5. <i>it is confusing when they don't mention body shape</i> 6. <i>there is no indication of measurements</i>
Does not contribute	More time	<ol style="list-style-type: none"> 1. <i>you just have to look carefully</i> 2. <i>fit until you find what fits</i>

Emotions resulting from information provided on size labels

1	CATEGORIES	PARTICIPANTS' QUOTES
<p>Negative emotions</p>	<p>Frustration</p>	<ol style="list-style-type: none"> 1. <i>I get frustrated and demotivated to consider trying more</i> 2. <i>it is frustrating, it is a waste of time fitting</i> 3. <i>frustrated because they are misleading</i> 4. <i>frustrated and feel despondent</i>
	<p>Doubtful</p>	<ol style="list-style-type: none"> 1. <i>doubtful of myself</i>
	<p>Discouraged</p>	<ol style="list-style-type: none"> 1. <i>I get discouraged and I worry going shopping</i> 2. <i>It lowers my self-esteem</i>
	<p>Disappointed</p>	<ol style="list-style-type: none"> 1. <i>I get disappointed</i> 2. <i>it is revolting, fat, not worth spending money on new clothes</i> 3. <i>it is upsetting, especially at Edgars</i>
	<p>Revolting</p>	<ol style="list-style-type: none"> 1. <i>bigger sizes make me depressed</i>
	<p>Depressed</p>	<ol style="list-style-type: none"> 2. <i>I feel bad when they don't fit</i>

THEMES	CATEGORIES	PARTICIPANTS' QUOTES
Would not purchase	<p>Larger size labels</p> <p>Time factor</p> <p>No fitting option</p> <p>One size fits all</p> <p>Negative blocking emotions</p>	<p>1. <i>if the size on the label is big I will not buy</i></p> <p>2. <i>if size is larger than 20 I won't buy, I can get size 16/18 in other shops</i></p> <p>1. <i>if in a hurry I will not buy</i></p> <p>2. <i>if I don't have time to fit I don't buy</i></p> <p>1. <i>if there is no fitting option I don't buy</i></p> <p>1. <i>I don't buy the label "one size fits all"</i></p> <p>2. <i>I don't buy "one size fits all" unless I fit first or I go to another shop</i></p> <p>3. <i>I don't believe "one size fit all" it is simply not true</i></p> <p>1. <i>I lose patience, I don't buy after frustration</i></p> <p>2. <i>if I doubt, I don't purchase</i></p>

Solutions to communication of size label and garment fit

CATEGORIES	CONCEPTS	PARTICIPANTS' QUOTES
Standardization	Standards	<ol style="list-style-type: none"> 1. <i>standardization could help</i> 2. <i>standardize labeling system</i> 3. <i>standardize to be sure everywhere</i> 4. <i>manufacturers must agree on one standard</i> 5. <i>decide on sizing convention for South Africa, survey</i>
Target market knowledge	Research	<ol style="list-style-type: none"> 1. <i>research on South African body shapes</i> 2. <i>survey consumer preference</i> 3. <i>consider Afrikaner shapes</i> 4. <i>import should fit South African shapes</i>
Information availability	Relevant information	<ol style="list-style-type: none"> 1. <i>include all important, relevant information</i> 2. <i>include centimeters</i> 3. <i>information such as comfort, fitted, loose</i> 4. <i>include height</i> 5. <i>include in-between sizes</i> 6. <i>provide more information</i>

CATEGORIES	CONCEPTS	PARTICIPANTS' QUOTES
	Specific/clear information	<ol style="list-style-type: none"> 1. <i>specify for those who don't understand</i> 2. <i>specify age</i> 3. <i>information should be clear and visible</i> 4. <i>don't use S, M, L or XL rather use numerical such as 6 – 16 size codes</i> 5. <i>specify in-between sizes</i>
Consistency		<ol style="list-style-type: none"> 1. <i>all stores must have consistency in the labels</i> 2. <i>size labels must correspond to the garment size</i> 3. <i>accuracy and consistency is needed</i> 4. <i>distinguish import labels with correct garments</i>
Uninvolved	<p>No problem</p> <p>No recommendation</p> <p>Don't know</p>	<ol style="list-style-type: none"> 1. <i>not applicable to me</i> 2. <i>no problem for me</i> 1. <i>I have no recommendation</i> 1. <i>I don't know</i>

CATEGORIES	CONCEPTS	PARTICIPANTS' QUOTES
	Struggle	<ol style="list-style-type: none"> 2. <i>it is a struggle to find what fits in labels L or XL</i>
Ambiguous information	<p>Guidelines limitations</p> <p>Not clear</p>	<ol style="list-style-type: none"> 5. <i>there are no guidelines to show 34 equals L or XL</i> 6. <i>with numerical sizes, it is trial and error</i> 7. <i>they only refer to the measurements of bust, waist and hips, arms are not included</i> 8. <i>dimensions are not indicated</i> 3. <i>the meaning of the information not clear</i> 4. <i>most people are ignorant with information</i>
Swing tag features	<p>Irritating</p> <p>Fades</p>	<ol style="list-style-type: none"> 4. <i>it is irritating on the neck</i> 5. <i>it scratches</i> 6. <i>it irritates the skin</i> 2. <i>washes out over time</i>