

**ATTRIBUTES INFLUENCING CONSUMER PERCEPTION OF APPAREL
QUALITY WITH SPECIAL FOCUS ON CARE-LABELS, A CASE OF
NAIROBI, KENYA**

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**A RESEARCH THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE
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SCIENCE (TEXTILE SCIENCE AND DESIGN) IN THE SCHOOL OF
APPLIED HUMAN SCIENCES, KENYATTA UNIVERSITY.**

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DECLARATION

This thesis is my original work and has not been presented for a degree in any other University.



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DEDICATION

To my dear parents, my mum Matilda and late father Jairus Owino, my wife Helen and children for aspiring me to work hard and remain focused.

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ABBREVIATIONS AND ACRONYMS

C.I.N.....	Consumer Information Network
COFEK	Kenya Consumer Federation
F.T.C.A	Federal Trade Commission Act
F.T.C	Federal Trade Commission
I.S.O	International Organisation for Standardisation
K.C.O	Kenya Consumer Organisation
K.C.N	Kenya Consumer Network
KEBS	Kenya Bureau of Standards
K.U.C	Kenya Utalii College
K.U.	Kenyatta University.
NGO	Non-Government Organization
SPSS	Statistical Package for Social Sciences
T.F.P.I.A	Textile Fibre Products Identification Act

ABSTRACT

Apparel consumers use different criteria, including textile attributes and social environment when evaluating apparel quality. The apparel attributes consumers use are grouped into two, namely intrinsic attributes, including, garment style, color, fiber content, etc and extrinsic attributes such as price, country of origin, packaging, among others. Care-labels is also a critical attribute that influence perceptions of apparel quality, since it is associated with different fibres, texture, garment constructions, fabric finishes, among others, as well as time and money required in the care of apparel. The purpose of this study was to assess the attributes influencing perceptions of apparel quality, with special focus on care-labels. The major objectives of this study were to; determine the awareness of care-labels; investigate the existence of care-labels on the locally made and imported apparel products; compare the awareness of care-labels between the academic and non-academic staff and to compare the intrinsic and extrinsic apparel attributes in influencing perceptions of apparel quality. The study adopted a descriptive survey research approach. The target population was 3364, comprising 3000 from Kenyatta University (KU) and 364 from Kenya Utalii College (KUC) staff communities. The sample size was 10% of the target population, i.e. 336, which was worked out to reflect the proportions in KU and KUC, i.e. 300 and 36, respectively. The data were collected using questionnaires which were researcher-administered as well as "drop and pick" self-administered, in cases where the respondents were not available to give the information. The pre-test was used to test the validity of the research instrument and Cronbach's Coefficient Alpha was used to test the reliability of the instrument. The raw data were analyzed using the Statistical Package for Social Sciences (SPSS) software. Descriptive statistics and inferential statistics were used to analyse data. The null hypothesis was tested at $p \leq 0.05$. An ANOVA was conducted to compare the consumer's education level in relation to the awareness of the individual care-label symbols. In addition, a post hoc test was also used to find out the effect of consumers' education level on the awareness of individual care-label symbols. Descriptive statistics revealed that the awareness of care-label symbols was low among consumers. The results also revealed that majority of consumers never find care-labels on the locally produced apparel compared to the imported ones. The t-test yielded a p-value of 0.000, implying that there was a relatively more awareness of care-labels among academic staff. The ANOVA results revealed that education level determines the awareness of the symbols 1to7. The findings from the post hoc test further confirmed that respondents with higher education had more awareness of care-label symbols and vice- a- versa. Descriptive statistics analysis indicated that intrinsic and extrinsic apparel attributes had mean scores of 4 and above, i.e. 4.034 and 4.5562, respectively, implying that both of them influenced consumer perceptions of product quality. However, extrinsic attributes had more influence on the apparel quality, since it had a higher mean score of 4.5562. The study recommends, among others, that apparel producers and retailers should promote the awareness of care-labels symbols and their interpretations. The teaching of Home Science in schools should be emphasized to enhance textile properties' knowledge at the basic level. It is also recommended that the textile and apparel producers be compelled using the relevant government legislation to put genuine and comprehensive care-labels instructions on their textile goods before dispatching them to the market. The legislation should include care-labels instructions as a mandatory feature and one of the quality indicators of apparel to be used to assess the quality of apparel. The study further recommends that KEBS increase its efforts at ensuring that all apparel and other textile products bear care-label instructions.

CHAPTER ONE

INTRODUCTION

1.1 Background Information

Consumers of apparel products seem to be concerned with quality than ever before and are more likely to purchase products they perceive to be of good quality (Birtwistle, *et al*, 1998; Kadolph, 1998). Different consumers use different criteria when evaluating apparel product quality and they are all summed up into two forms, namely intrinsic and extrinsic attributes. The intrinsic attributes are part of the product and cannot be altered without changing the product itself. They include, garment style, color, fiber content, fabric construction, etc. The extrinsic attributes, on the other hand, are those that are not component parts of the physical product, but are applied by the producer or retailer to influence purchasing (Olson and Jacoby (1972). They include, price, country of origin, packaging, etc. It is noted that although consumers seem to use these textile attributes to determine product quality, some do not seem to have enough knowledge of textiles to make accurate judgments on their quality particularly, at the point of purchase.

Consumers' perception of apparel quality is multi-dimensional as they use a variety of informational cues as well as their expectations when assessing quality (Hines and O'Neal, 1995; Swinker and Hines, 2006). According to Abraham-Murali and Littrell, (1995), important attributes of apparel are categorized as fibres, fabric and garment construction; care instructions, value and style; and product and service. Martin, (1971) and Davis, (1987), also found that the product information consumers seek when making a clothing purchase in a retail store are style, price, color, fiber content, garment care, fit, and brand/store name.

In addition, care-label instructions is also considered as a critical attribute that influences perceptions of the apparel consumers on product quality because different care instructions are associated with different fibres, fabric texture, garment constructions and finishes applied to the fabrics during their manufacturing (Workman & Johnson, 1991). Some apparel consumers check the care-label instructions for both economic and convenience in terms of how much time and effort the garment might require to maintain (Cotton Incorporated, 2007). Some consumers also view garment care instructions as an indicator of quality of the product (Cotton Incorporated, 1999).

Care-label instructions play a significant role in restoring and maintaining the desirable and functional attributes of a garment. The care-label instructions may therefore affect perceptions of garment quality; predict a garment's future performance, estimate retail price and a customer's likelihood of purchasing a garment (Wentz, 2007: Workman & Johnson, 1991).

According to Njagi, (1996), some apparel consumers, who take their clothing to professional launderers' and dry-cleaners', lack knowledge on textiles and general care of the textile articles requiring cleaning. Such information is usually provided to the consumer by care-labels on textile articles, unfortunately, in our Kenyan situation, some of the locally produced textile household articles do not bear care-labels. This is confirmed by fabric-care industry's complaints that many clothes they received from customers, did not bear care-labels to indicate the type of care a garment required. Otieno (1990), reported that customers are not satisfied with the limited information presented on clothing care-labels. It was cited that some labels, for instance, only bear

the brand name and size of the clothing item and give no further information on such details as, fibre composition or care instructions.

Since consumer behaviour is influenced by different factors, including social environment, Kenyan consumers may therefore have other factors or apparel attributes that influence their perceptions of quality as this may depend on individual preferences. This is because a variety of informational cues are used when assessing apparel quality (Hines & O' Neal, 1995; Swinker & Hines, 2006),

1.2. Statement of the Problem and Justification of the Study

Consumers' perceptions of apparel quality are multi-dimensional as they use a variety of informational cues, including textile attributes as well as their expectations when assessing the quality of apparel. However, it is doubtful whether all consumers have enough knowledge of textiles necessary to make accurate judgments about the apparel quality, particularly at the point of purchase. The apparent limitation in textile knowledge by some consumers coupled with the fact that a variety of apparel attributes exist creates some information asymmetries as regards the extent to which consumers use and can use these attributes to decide on the product quality.

Since consumers perceptions are influenced by various factors, including social environment, Kenyan apparel consumers may therefore have other factors that influence their perceptions of quality. There is need therefore, to investigate whether consumers are aware of these various attributes, including care-label instructions and if so, whether they use them to inform themselves about apparel quality and therefore their purchase decisions. It is therefore necessary to establish the extent to which these

attributes in general and specifically, care-labels instructions influence consumers' perceptions of apparel quality and their ultimate purchase decisions.

Also, the studies so far done in this field seem to come from out of the country such as, South Africa, U.S.A, Europe and Asia. These studies include Swinker and Hines (2006), Retief, (2007); Jacobs (2003); Beaudoin *et al.*, (2000); Shim, 2000) and Cotton Incorporated, (2007) among others. A research gap therefore exists since none of the mentioned studies focused on assessing apparel attributes that influence consumers' perceptions of apparel quality, particularly the care-label instructions,

1.3 The Purpose of the Study

The purpose of the study was to assess the attributes influencing consumers' perceptions of apparel quality, with special focus on the care-labels information.

1.4. Research Objectives

The study was guided by the following objectives;-

- i) To determine the apparel consumers awareness of care-labels instructions.
- ii) To investigate the existence of care label instructions on local and imported apparel.
- iii) To compare the difference in consumer awareness of care-label instructions between the academic and non-academic staff.
- iv) To compare the intrinsic and extrinsic apparel attributes in influencing consumers' perceptions of apparel product quality.

1.5. Hypothesis

The hypotheses for the study were formulated from the objectives (ii) and (iii) as follows:

H₁: *There is no significant difference in consumer awareness of care-label instructions between academic and non-academic staff.*

H₂: *There is no significant difference between extrinsic and intrinsic attributes in influencing consumers' perception of apparel quality.*

1.6. Significance of the Study

This study is significant to the stakeholders in many ways, including, creating awareness to consumers on intrinsic and extrinsic apparel attributes in influencing perceptions of apparel quality and purchase decisions. The study has also brought to the limelight the care-label instructions and other apparel attributes that are important to consider when assessing the quality of apparel products.

This study has recommended protection of consumers by the relevant government agencies by ensuring that apparel care-labels put on the apparel are genuine, informative and guiding enough. The study has also provided the necessary apparel information to empower the consumers to enable them use correct quality attributes when assessing the quality of apparel particularly at the point of purchase decision-making.

The study also provides the necessary information to the various relevant NGO's concerned with the promotion of consumer awareness, such as Kenya Consumer Organization (KCO), Kenya Consumer Network (KCN) and Consumer Information Network (CIN), among others, to enable them sensitize the consumers on the

importance of purchasing textile articles bearing appropriate and comprehensive care-label information about the apparel products. The study would also be useful as a reference material on apparel attributes, particularly the care-labels symbols and their interpretations. The study would also form the basis for future research work on the gaps that may not have been addressed by the scope of this study.

1.7. Limitation of the Study

The study focused on apparel consumers in Kenyatta University and Kenya Utalii College, which are institutions of higher learning based within Nairobi County and in urban set-up. Generalization of the study findings to consumers in other regions of the country and institutions should therefore be done with caution.

1.8. Assumptions of the Study

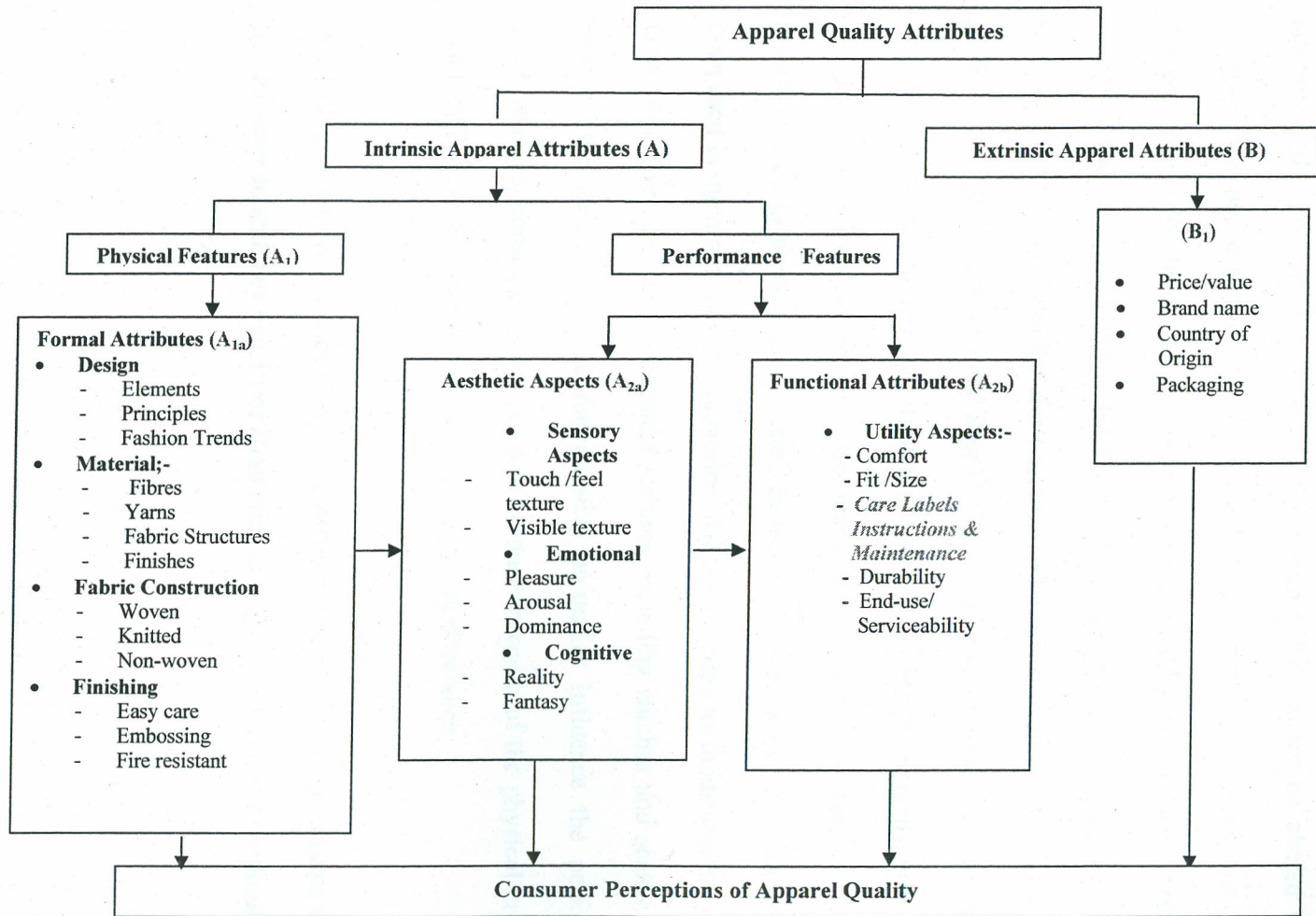
The study was based on the following assumptions;-

- i) Most garments, particularly the ready-to-wear, bought by the respondents had care-labels information.
- ii) Respondents checked on the care-labels information when making their purchases.
- iii) Respondents could read, understand and accurately answer questions in the questionnaire.

1.9. Conceptual Framework for the Study

The study was based on the modified model of Retief (2007), which is shown in figure 1.1. It shows the conceptual framework for the study indicating, apparel quality attributes and their influence on the consumer perception of apparel quality.

Figure 1.1: Conceptual Framework for the Study



Source: Adopted from Retief, A. (2007):

In figure 1.1, the elements that influence the consumer perceptions of apparel quality are broadly summed up into two forms, namely intrinsic attributes (**A**) and extrinsic attributes (**B**). The intrinsic attributes are features that cannot be altered without changing the product itself, while, the extrinsic attributes are those that are not component parts of the physical product, but are applied by the producer or retailer to influence purchasing (Olson and Jacoby, 1972). In the model used, intrinsic attributes consist of both the physical features (**A₁**) and performance features (**A₂**) of the apparel product. According to Brown and Rice (1998), the physical features embrace what the item is, and include the formal attributes (**A_{1a}**), such as design elements, principles of design, as well as fashion trends. Also, included in the physical features are all the materials used to produce the apparel, including the wet processing that may have been used in the production of the fabrics. The construction methods used to make the fabric also form part of the physical features, including stitches and seams used to produce the garments. Since the physical properties influence the performance characteristics, consumers select apparel products because of the physical properties that they believe will then bring about the desired performance.

According to Brown and Rice (1998), the performance features (**A₂**), indicate what the item can do and they consist of Aesthetic performance (**A_{2a}**) and Functional

Performance (**A_{2b}**). The aesthetic performance describes the attractiveness or beauty of a product and it usually satisfies the emotional needs of a consumer. It consists of, among others, sensory aspects, emotional and cognitive. The emotional (pleasure, arousal, dominance) and cognitive qualities are those aspects that refer to the satisfying of the consumer's social-psychological needs (i.e. to impress or be accepted)

Functional performance (**A_{2b}**) on the other hand, refers to the product's utility and durability aspects, which can be described as the usefulness of the product and how it conforms to the end-use standards in terms of suitability for different purposes and occasions. Features representing utility include garment fit, comfort, appropriate functioning for the intended end-use, and apparel care and maintenance. Durability is seen as serviceability or the ability of a product to retain its structure and appearance after wear and care ((Brown & Rice, 1998)

The care-labels information (shown under functional attributes (**A_{2b}**) is considered important and significant in restoring and maintaining the desirable and functional attributes of a garment (Wentz, 2007). The care-labels information basically emphasizes the importance of following the care instructions recommended for apparel which may include among others, appropriate cleaning treatments and/or methods of drying or ironing.

From the consumer point of view, extrinsic attributes (**B**), which consist of attributes such as brand name, price, country or place of origin, image, packaging (**B₁**), also play an important role when considering apparel products' quality especially, when

comparing alternatives. The product quality is often deduced from specific extrinsic attributes mentioned and usually, it shows that the consumers do not know much about an apparel product (Retief, 2007).

The link is therefore provided to indicate the extrinsic attributes' position and its role in the framework since there are some consumers who equate such features with the quality of a product. Extrinsic variables are therefore often used as indicators of product quality when the consumer has little or no experience about the product (Retief, 2007).

1.10 Operational Definition of Terms

Academic Staff

This refers to the teaching staff of the institution.

Aesthetics

This refers to the subjective experience of a product-how it looks, feels, tastes or smells,

Apparel

Any textile garment or article that is customarily used to cover or protect any part of the body, including hosiery, but excluding, footwear, gloves, hats or other similar articles.

Apparel Quality

The extent to which the apparel product satisfies the consumer's expectations and includes both the garments' physical and the performance features.

Care Label

Is an information tag or label attached to textile product, usually giving the consumer information about qualities inherent in the textile product and also regular care information.

Extrinsic Attributes

These are product attributes that are not component parts of the physical product but are applied by the manufacturer or retailer to influence purchasing. They include among others, price, country of origin and packaging.

Intrinsic Attributes

These are Product attributes that cannot be changed or manipulated without also changing the physical characteristics of the product itself. They include among others, fibre content, garment construction, care and size.

Non-academic Staff

Refers to the non-teaching employees of the institution

Perception

Is the way of selecting and interpreting information to form a meaningful understanding of the subject at hand.

Product Cues

Attributes and characteristics related directly to the apparel item itself, such as colour, brand, quality and durability.

Textile Product

Any commodity, woven, knitted or otherwise made of fibre, yarn or fabric and intended for sale or requiring care maintenance to effectuate ordinary use.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The literature reviewed in this study covers several areas including: use of apparel attributes in the assessment of apparel product quality. The attributes discussed include colour, texture, fit, care label instructions to evaluate the product quality among others. Some consumers handle the textile product to determine durability by judging according to the weight of the fabric (Jacobs, 2003). Other literatures discussed include, care-labels and symbol guidelines care-labels rules and regulations. In this literature, the basic common care-label symbols are shown and discussed. Also discussed are the common practices of cleaning clothes among consumers and the care-labels as a means of communicating product information. The literature has discussed, among others, the importance of care-labels to apparel consumers and their use as part of the evaluating criteria in decision-making process when purchasing apparel products (Shim, 2000).

2.2 Use of Apparel Attributes in the Assessment of the Product Quality

The quality of a product can be conceptualized in different ways, depending on the perspective from which it is viewed. From a consumer viewpoint, quality focuses on the extent to which the apparel product conforms to the consumer desired serviceability (Brown & Rice, 1998). In this study, quality refers to the extent of serviceability desired by each consumer who usually, has certain expectations concerning the quality of items they purchase.

The assessment of apparel product quality involves the use of different set of attributes for different people (Norum & Clark, 1989). Some consumers use colour to evaluate the product, while others use texture, fit or care label instructions for this purpose and others, handle the textile product to determine durability by judging according to the weight of the fabric (Jacobs, 2003). Variety of apparel products in the global market are represented by a range of fibers, fabrics, surface decoration, construction methods, appearance standards and performance levels. These variables all combine to create products with varying levels of quality which pose a challenge to consumers who have to make choices and determine which products will prove to be satisfactory. Different consumer groups vary in their expectations of quality and ability to distinguish various quality characteristics. The more educated and sophisticated consumers tend to be more specific with their expectations of quality and are more precise in their ability to express those expectations (Swinker & Hines, 2006).

2.3 Intrinsic and Extrinsic Apparel Attributes in the Assessment of Quality

The attributes influencing consumer perceptions of apparel product quality are broadly summed up into two forms, namely the intrinsic and extrinsic attributes. Intrinsic cues are product attributes that cannot be changed or manipulated without also changing the physical characteristics of the product itself. The intrinsic factors include fibre content, fabric structure and garment construction. Also included in the intrinsic factors are aesthetic aspects such as feel, texture and colour. The functional features include care-label information, durability and size of the apparel (Beaudoin *et al.*, 2000).

The extrinsic cues are product attributes that are not component parts of the physical product but that are applied by the manufacturer or retailer to enhance their marketing strategy, among others, (Retief, 2007). They consist of brand name, price, country of origin, image and packaging. According to Beaudoin *et al.*, (2000), these attributes play an important role when considering apparel product quality especially, when consumers are comparing alternatives. (Retief, 2007) indicated that most studies cited, stated that quite a good number of consumers appreciate the use of extrinsic attributes when considering the quality of apparel product at the point of making purchase decision and that these attributes are often used as indicators of product quality when the consumer has little or no experience about the product. According to Eckman *et al.*, (1990), price and brand are the attributes most frequently used by consumers in assessing apparel products.

According to Fiore & Damhorst, (1992), the intrinsic properties of clothing products such as the physical features which include fibres, fabrics and finishes, rather than the extrinsic properties such as price, brand name, packaging and hangtag information, shape a consumer's perception of product quality which has a pronounced effect on the eventual decision-making and buying behaviour.

The position that extrinsic attributes influence apparel consumers relatively much more is consistent with research that specifically examined the extrinsic and intrinsic issue (Wheatley *et al.* in Eckman *et al.*, (1990). Also, Beaudoin *et al.*, (2000) identified eleven attributes that correlated with attitudes when purchasing apparel, namely: good fit, durability, ease of care, favourable price, comfort, colour, attractiveness, fashionableness, brand name, appropriateness for occasion, and choice

of styles. In addition, Dickerson, in Beaudoin *et al.*, (2000), investigated the relative importance that consumers attach to four garment extrinsic attributes in their pre-purchase decision-making process, namely: price, care, country of origin and style. According to Dickerson,, apparel consumers depend more on extrinsic attributes to influence their purchase decisions. Both intrinsic and extrinsic, therefore play important role in influencing consumers' perceptions of apparel product.

2.4 Textile Care-Labels and Symbol Guidelines

A care-label is a tag, containing regular care information and instructions that is attached to textile products to give among others, information about intrinsic or extrinsic attributes in the textile products. It is usually attached to a textile product in such a manner that it will not become separated from the product and will remain legible during the useful life of the product (Federal Trade Commission, 1994). The Kenya Bureau of Standard textile care-labelling code provides symbols and phrases (Appendix C: Table 5.1 – Table 5.5) that are grouped into care instructions for use. These care-labels are meant to guide apparel consumers and dry-cleaners in their selection of the appropriate cleaning treatments for textile goods, so as to reduce the risk of damage to articles, (Kenya Bureau of Standards (1987). KS08-422, 1987).

There are five basic symbols used to identify care recommendations on garments. These symbols include, washing basin, triangle, iron box, circle and rectangle. A series of modifiers such as dots or lines are added to the symbols (Appendix C: Table 5.1 – Table 5.5) which indicate increasing heat or temperature. For example, one dot on the tumble dr(Appendix C: Table 5.1 – Table 5.5) ier symbol means low temperature; two dots mean medium and three dots indicate high temperatures. Lines

added to a basic symbol mean “minus” or reduced action or treatment. No line under the wash symbol means normal wash cycle; one line under the wash symbol is for moderate and two lines are for even gentle treatment or reduced action for delicate items. A modifier such as an “X” over a symbol indicates a warning sign. For example, an “X” over the dry cleaning or bleaching symbol means “do not dry clean” or bleach respectively (Kenya Bureau of Standards (1987). KS08-422,1987).

2.5 Apparel Care-Labels as a Means of Communicating Product Information

Care-labels on textile products are recognized as important means of delivering minimal but critical information to customers for rational care, as well as for purchase decisions. They may also be used as part of the evaluating criteria used in the decision-making process to purchase apparel products (Shim, 2000). Care-label instructions therefore can influence consumer perceptions of an apparel quality, such as future performance of a garment (Workman & Johnson, 1991). They give care instructions for the item and also provide details such as, fibre content, size, brand name, place of origin and many others (Chambers & Moulton, 1969; Horn, 1979).

Any effective labelling must be simple but comprehensive and should last the lifetime of the product (Federal Trade Commission, 1994). This information is valuable to the consumer who wishes to choose an article for the intended purpose, hence makes the right purchase decisions. Consumers tend to be cautious no directions are given, which could result in the items not being effectively cleaned and their life-span decreased (Hatch & Lane, 1980). In cases where clothing items bear no labels, some consumers feel that they have been cheated out of their money since they have purchased unlabelled products that have behaved contrary to their expectations

(Cotton Incorporated, 2007). In Kenya, this information is often missing or not adequate in the locally made clothing items, unlike in the imported ones (Otieno, 1990). Consumers are therefore disadvantaged as they are not likely to give products the right care required.

2.6 Textile Care Label Rules and Regulations

Textile care label rules and regulations are managed by each country's local standards organisation, although most countries have common rules and regulations that cut across all other world's standards organizations under the affiliation of International Organisation for Standardisation (ISO). Among the requirements in the rules and regulations is that textile manufacturers are required to provide full care information about regular care or provide warnings about the cleaning conditions under which the product may get damaged (Wingate, 1970; Tartora, 1987). For instance, U.S.A. operates under legislation, called the Federal Trade Commission Act (F.T.C.A.), which requires that all textile products bear a care-label which also gives fibre content and percentage by weight in order of importance of each fibre used in an article (Mohler, 1984; Federal Trade Commission, 1984)

The specifics required by the Federal Trade Commission Act, cover various categories of who is covered, what is covered, what must be done, when must the labelling be done, how to label textile product, exemptions and violations. Those covered by the rule are the manufacturers of textile apparel, fabrics, importers of apparel, and importers of fabrics (Wingate & Mohler, 1984; Federal Trade Commission, 1984). The rule covers, all textile apparel used to cover or protect the body, except shoes, gloves and hats. Items such as handkerchief, belt, suspenders, and

neck ties are excluded because they are not used to cover or protect the body. Non-woven, one-time use garments are excluded because they do not require ordinary care and maintenance. What must be done, include, providing full care instructions about regular care for a garment (Federal Trade Commission, 1984).

Also covered in the rule is when labelling must be done. For instance, domestic manufacturers must attach care-labels to finished products before they are sold while importers must ensure that care-labels are attached to products before they are sold in the country. The rule also requires that care-labels must be fastened so they can be seen or easily found by consumers at the point of sale. If labels cannot be readily seen because of packaging, additional care information must appear on the outside of the package or on a hang tag fastened to the product.

The rule also covers consequences for the violation of the law. For instance, failure to provide reliable care instructions and warnings for an item, as required, constitutes a violation of the Federal Trade Commission Act (F.T.C.A.) and could subject the violator to enforcement action and specified penalty. The rule however, exempts textile products sold to institutional buyers for commercial use, including rental service companies. The institutional buyers include hospitals; colleges and universities; hotels and other bulk purchasers of uniforms and employee work-clothes. Exemption is also granted to products such as hosiery, including stockings, anklets, waist-high tights, and leg-warmers. All hosiery items are granted an exemption from having to use a permanent care-label, but they must have care instructions on a hangtag, on the package or in some other conspicuous place (Federal Trade Commission, 1984).

In Kenya, regulation and enforcement of care-labelling on textile products is not as elaborate as in the United States since many clothing items seem to have very brief care-label information or none at all. This may cause incorrect care handling of textile items (Otieno, 1990). In such a situation, consumers who highly value care-label information may not derive much satisfaction from the textile product. The consumer complaints directed at the fabric-care industry compelled the Kenya Bureau of Standards to come up with a code of practice, called "The Kenya Standard Code of Practice for Laundry and Dry-cleaning." The code specifies appropriate cleaning procedures for adoption by launderers and dry-cleaners, (Kenya Bureau of Standards (1987). KS08-422.1987)

2.7 Common Practices of Cleaning Clothes among Consumers

Knowledge of cleaning clothes and routine vary greatly among consumers. Consumers often clean their clothing in ways inconsistent with product care-labelling, and the resulting problems with the product performance directly affect consumers' perceptions of apparel product quality. For example, Cotton Incorporated, (2005) conducted a study in various homes across the United States to find out how consumers launder their clothes. The consumers used laundering methods which were not consistent with care label instructions. These care label instructions included, not reading instructions for proper use of the laundry detergents and not using the right water temperature setting, among others. The study revealed that 49% of consumers rarely or never change the water temperature setting on the machine and all these inconsistencies were basically due to the personal habit. If potentially half of consumers wash cloth at the wrong temperature, the resulting colour loss or shrinkage

and dissatisfaction with the product can affect their perceptions of the apparel product quality (Cotton Incorporated, 2005).

2.8 Summary of Literature Review and Identified Gaps

The summary of the literature discussed in this study include use of apparel attributes in the assessment of product quality (Norum & Clark, 1989). For instance, some consumers use colour while others use texture, fit or care label instructions. Others handle the textile to determine durability by judging according to the weight of the fabric (Jacobs, 2003). Different consumer groups vary in their expectations of quality and ability to distinguish various quality characteristics. For instance, the more educated and sophisticated consumers tend to be more specific with their expectations of quality.

Consumer perceptions of apparel quality can be influenced by attributes which are summed up broadly into two forms, namely intrinsic and extrinsic attributes. Intrinsic cues are product attributes that are part of the product itself. They also include both aesthetic aspects and functional features apparel. The extrinsic cues are product attributes that are not component parts of the physical product but that are applied by the manufacturer or retailer to enhance their marketing strategy, among others (Retief, 2007; Beaudoin *et al.*, 2000).

A care label is a tag, containing regular care information and instructions that is attached to textile product. The Kenya Bureau of Standard textile care-labelling code provides symbols and phrases that are grouped into care instructions for use. There are five basic symbols used to identify care recommendations on garments. Care-

labels may also be used as part of the evaluating criteria used in the decision-making process to purchase an apparel product (Shim, 2000). Textile care label rules and regulations include the requirements that manufacturers are supposed to provide about regular care or provide warnings about the cleaning conditions under which the product may get damaged. For instance, regulations require that all textile products bear a care-label which gives fibre content and percentage by weight in order of importance of each fibre used in an article. The specifics required by the rule cover various categories of who is covered, what is covered, what must be done, when must the labelling be done, how to label textile product, exemptions and violations of the rules.

Consumers use different ways of cleaning clothes. Some often clean their clothing in ways which are not consistent with the product care labelling and the resulting problems with the product performance directly affect consumers' perceptions of apparel quality.

None of the literatures reviewed in this study specifically covered care-labels instructions within Kenyan context. It was therefore necessary to conduct a study with the Kenyan apparel consumers to explore and establish which intrinsic or extrinsic apparel attributes influenced their decisions when assessing the apparel quality. It was also necessary to find out if the Kenyan consumers are aware of care-label symbols and whether they used them to inform themselves about apparel quality.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

This chapter describes the specific procedures used in data collection and analysis. The chapter focuses on research design, study variables, study location, target population, sampling technique, sample size and its determination, instrument development, pre-testing of the instrument, data collection techniques, data presentation and analysis, logistical and ethical considerations.

3.2 Research Design

A research design is a blue print or detailed plan of how a research is to be conducted (De Vos & Fouche, 1998). In this study descriptive survey research was adopted, which involved selecting a sample from the population and on that basis inferences are made about the population from which it is drawn. It is a more appropriate method to use as extensive data can be derived from a large sample of respondents within a short period of time. This type of research is commonly used to study and describe social conditions, possible behaviour, attitude, values and characteristics. It is also used in the correlation study for the investigation of relationships among the variables (Monette, *et al.*, 2005; Saunders, *et al.*, 2003; Mugenda & Mugenda, 2003; Cooper & Schindler, 2003). This research design was appropriate for this study as it allowed the use of questionnaires as a research instrument which made it possible to gather information about this study from a large sample of respondents within a short period of time.

3.3 Study Variables

Variables are conditions or characteristics which the researcher can manipulate, control and observe (Fraenkel & Wallen, 2006). In research, there are two variables, independent and dependent variables. The independent variables in this study consisted of intrinsic and extrinsic apparel quality attributes. The intrinsic attributes included fibre content, fabric structure and garment construction, feel, texture and colour. Functional features consisted of care-label instructions, size, and durability of the apparel. The extrinsic variables were price, brand name, packaging, store and country of origin of the apparel product (Retief, 2007). The dependent variable was perception of apparel product quality.

3.4 Location of the Study

The study was carried out at the KU and KUC main campuses both are in Nairobi County. The two institutions had a heterogeneous community having a varied background of different social, academic and economic status which provided an ideal sample frame of the Kenyan apparel consumers. The selection of the two institutions was therefore an ideal location for an exploratory research study.

3.5 Target Population.

The target population consisted of all staff from KU and KUC staff community. The combined target population size was 3364, comprising 3000 from KU and 364 from KUC. The population was heterogeneous in terms of employment, social classes, and therefore their way of perceiving apparel product quality was likely to be different, depending on their status at work place and social interaction

3.6 Sampling Technique

A stratified random sampling technique was employed. The sampling technique involved dividing the target population into two strata, KU and KUC staff communities. The sample size reflected the proportions of the population in each stratum. Each stratum was again divided into two clusters, academic and non-academic staff, considering the proportions in each stratum. A list of all the subjects in both academic and non-academic was obtained from each institution, and a computer based programme was used to randomise the names in the list. The number of the subjects pre-determined by the sampling was then picked from the list to fill the questionnaires.

3.7 Sample Size

A random sample was selected from the combined target population of 3364. A combined sample size of ten percent of the target population was drawn.

Table 3.1: Determination of Sample Size

Institution	Stratum	Sample Size	
		Academic staff	Non-academic staff
KUC Sample	36	9	27
KU Sample	300	100	200
Total Sample	336	109	227

The sample size was worked out mathematically as follows; KU sample; $3000 \times 10\% = 300$; and that of KUC was $364 \times 10\% = 36$. Each stratum was further sub-divided into two clusters: academic and non-academic staff. The ratio of academic to non-academic staff was 1: 2 for KU and that of KUC was 1:3. The sample size of each

cluster was therefore $1/3 \times 300 = 100$ and $2/3 \times 300 = 200$ for KU; while for KUC, it was $1/4 \times 36 = 9$, and $3/4 \times 36 = 27$, respectively. The breakdown of the sample size of the respondents is presented in Table 3.1.

3.8 Data Collection Instrument

The study employed questionnaires. The questions were designed to fall into various categories according to the research objectives, including social-demographic information, consumer awareness of apparel care-labels, intrinsic and extrinsic attributes of apparel quality and the existence of care-label instructions on local and imported apparel.

3.9 Pre-testing of the Instrument

A pre-test survey was carried out on nine subjects from KU of which three were from academic and six from non-academic staff respondents. For KUC, a total of four subjects were picked for the pre-test; one from the academic and three from the non-academic staff. Those who participated in the pre-test exercise were not among those who took part in the study. Experts in the area were also used to study the questionnaires to assess the relevance of content and their suggestions were considered in revising the research instrument

The purpose of pre-testing was to assess the strengths and weaknesses of the research instrument, assist in refining the tool to enhance the validity of the study findings. The pre-test was also done to help measure the duration to complete filling the questionnaire by a respondent.

3.10 Reliability of the Instrument

Cronbach's coefficient alpha was used to test for reliability of the instrument. As a rule of the thumb, a cronbach's coefficient alpha of above 0.7 indicates adequate reliability of the research instrument.

Table 3.2 Measurement of Correlation of Responses

Reliability Statistics		
	Cronbach's coefficient alpha	N of Items
Consumer Awareness of Care-label Symbols	0.732	9
Intrinsic and Extrinsic Attributes of Apparel Quality	0.750	11
Existence of care-label Instructions on Local and Imported Apparel	0.780	2
Total		22

Using the SPSS software, the cronbach's coefficient alpha of over 0.70 was obtained for each of the sets of questions that totalled up to 22 questions contained in the questionnaire in this study as shown in Table 3.2. Hence, the questionnaire was a reliable data collection instrument.

3.11 Data Collection Procedures

The researcher used questionnaires to carry out the research. They were administered to respondents by the researcher, and in instances where respondents were not available, prior consultations with them were made and the questionnaires were left behind for them to fill. The completed questionnaires were then collected later. Three research assistants were used to assist in the administration of the questionnaires. The research assistants had initially been trained and guided on how to carry out the exercise.

3.12 Data Analysis and Presentation

The raw data were systematically organized to facilitate analysis. The data were analysed using descriptive statistics including, means, frequencies and percentages. SPSS computer software version 17 was used to generate frequencies, percentages and means. To establish the attainment of each objective, descriptive statistics and inferential statistics were used. Descriptive statistics was used to report the respondents' demographic factors such as gender, age, marital status and educational background. The group descriptive statistics analysis was also used to determine the awareness of care-label instructions among apparel consumers. Descriptive analysis was also used to investigate the existence of care-label instructions on local and imported apparel.

T-test was used to compare the significant difference existing between the two groups of respondents, academic and non-academic staff. An ANOVA was used to compare the level of education and the consumer awareness among the individual care-label symbols. In addition, the study further used a post hoc test to investigate whether the

levels of education affected the awareness of individual care-label symbols. T-test analysis was also used to compare the intrinsic and extrinsic apparel attributes in influencing consumers' perceptions of apparel product quality. The findings from the data analysis were discussed in relation to the research objectives and the results used to draw implications, conclusions and recommendations.

3.13 Logistical and Ethical Consideration

Research approval was obtained from KU through the Graduate School to conduct the study within the KU campus. Permission was also sought from KUC administration to conduct the research in the institution. There was no loss or benefit to those who declined to participate or withdrew from the study at any stage. Confidentiality about the study was upheld, in that any information obtained in connection with the study remained confidential and anonymity of the participants was preserved. Access to the data was restricted to the researcher only.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

The purpose of this study was to establish the apparel attributes that influenced consumer perceptions of product quality, with special focus on care-label information. The study identified apparel attributes that influence consumers on the product quality. The study also established the consumers' level of awareness of apparel care-labels information and their impact in influencing the apparel product quality.

Data were collected using questionnaires, analysed and presented using frequencies, percentages and tables. The results were presented under the following sub-topics in relation to the research objectives: consumers' awareness of apparel care-label instructions, investigation of the existence of care label instructions on local and imported apparel, comparing the difference between the academic and non-academic staff in consumer awareness of care-label instructions and comparing the intrinsic and extrinsic apparel attributes in influencing consumers' perceptions of apparel product quality.

4.2 Response Rate

The respondents were drawn from two strata, KUC and KU as shown in Table 4.1. There were 36 and 191 respondents from KUC and KU respectively. In KUC, the respondents from non-academic staff attracted a response of 27 (75%), while those in the academic were 9 (25%). The non-academic staff from KU had a response of 121 (63%), compared to the academic who were 70 (37%). In overall, the non-academic

category in both institutions attracted the highest response rate of 65% against that of academic (35%).

4.3 Profile of Respondents

The respondents' profile is presented in terms of their gender, age, marital status, educational level and job position. The majority of staff in this category consisted of people with varied background in terms of educational levels, job positions and indeed social life. This may have had influence on their understanding and choice of different apparel attributes and how each attribute influenced them when they assessed apparel product quality and indeed purchase decisions.

4.3.1 Gender of Respondents

The gender composition of respondents in both institutions is shown in Table 4.1. The male respondents from K.U.C were 24 (67%), while the female were 12 (33%). It was also noted that male respondents from KU were 90(47%), while female constituted 101(53%) of the respondents. In overall, the male and female respondents from the two institutions were approximately equal at (50%). From the findings, it was clear that there was gender balance among the staff. This is consistent with the recently concluded Census Report conducted by the Ministry of Planning which put the gender distribution at approximately 50:50. The balanced gender distribution implied that the results obtained represented fair responses from the sampled population in terms of gender.

Table 4.1: Gender of Respondents

Institution	Male	Female
Kenya Utalii College	24 (67%)	12 (33%)
Kenyatta University	90 (47%)	101 (53%)
Grand Total	114 (50.2%)	113 (49.8%)

4.3.2 Age Brackets of Respondents

The age brackets of respondents from KUC and KU are shown in Table 4.2. The majority 14 (39%) of the respondents from KUC were in the age bracket of 33-40, whilst the least number of respondents 2 (6%) were in the age bracket of 50 years and above. For KU, the majority 62 (27%), of the respondents were also in the age bracket of 33-40 years, while those in the age bracket of 50 years and above had 17 (7%).

Table 4. 2: Age Brackets of Respondents

Age Bracket	Frequency	Percent
18 - 25 years	36	15.8%
26 - 32 years	52	22.9%
33 - 40 years	76	33.5%
41 - 49 years	44	19.4%
50 - Above years	19	8.4%
Grand Total	227	100%

Overall, the majority of respondents who participated in this study from the two institutions are 33-40 years of age, at 76 (34%), followed by 52 (22.9%) who were aged between 26-32 years, while 44 (19.4%) respondents were aged between 41-49 years and 36 (15.8%) were between the ages of 18 and 25 years. The finding implies that the majority of those employed by the two institutions are in the middle age category, which could have been an influential factor in determining the apparel attributes they use to assess the apparel product quality, thereby influencing their influence on apparel product quality.

4.3.3 Marital Status of Respondents

The marital statuses of respondents in both institutions are shown in Table 4.3. Married respondents from Kenya Utalii College were 27 (75%), while the single were 9 (25%). It was also noted that married respondents from KU were 160 (84%), while the single constituted 31 (16%) of the respondents. On the overall, the majority of respondents were married 187(82%).

Table 4. 3: Marital Status

Institution	Single	Married
Kenya Utalii College	9 (25%)	27 (75%)
Kenyatta University	31 (16%)	160 (82%)
Grand Total	40 (17.6%)	187 (82.4%)

The findings implied that the majority of those employed by the two institutions are married. The majority of the respondents were married which corresponds to the middle age category of 33 – 40 years. This may be taken as the normal marriage bracket for the majority of respondents. The marriage status could have been an

influential factor in determining the apparel attributes used to assess the apparel quality, thereby influencing their influence on the choice of quality.

4.3.4 Educational Background of Respondents

The educational levels of the respondents are shown in Table 4.4. The educational levels for both KUC and KU were categorised as primary, secondary, post-secondary and university.

Table 4. 4: Educational Background of Respondents

Level of Education	Kenya Utalii College	Kenyatta University	Grand Total
Primary	8 (22%)	13 (7%)	21 (9.3%)
Secondary	11 (31%)	45 (24%)	56 (24.7%)
Post Secondary	9 (25%)	35 (18%)	44 (19.4%)
University	8 (22%)	98 (51%)	106 (46.7%)

The breakdown of the educational levels of the respondents in KUC was as follows; primary 8 (22%), secondary 11 (31%), post secondary 9 (25%), and university 8 (22%). The educational levels of the respondents from KU was; primary 13 (7%), secondary 45 (24%), post secondary 35 (18%), university 98 (51%).

Overall, the majority of respondents from the two institutions 106 (47%), were of university level of education. The finding implied that the majority of those employed by the two institutions were educated fairly enough (at least up to secondary education level) to be able to understand the apparel attributes, as well as care-label

symbols and their interpretations. The level of education may have enabled the respondents to give more accurate and objective responses as they were able to understand the questions being asked well enough. Such responses could be relied upon to enhance the validity and reliability of the research study. The fair level of education of respondents may also have contributed to their ability to better understand about the textile apparel attributes that can influence the perceptions of consumers in regards to the product quality and hence purchase decisions. This is in agreement with Swinker and Hines, (2006), who stated that the more educated and sophisticated consumers were usually more specific with their expectations of product quality. The chances of the respondents being aware of care-label instructions were therefore relatively higher compared to the less educated group as the latter have the potential to read and interpret the care-label symbols.

4.3.5 Job Position of Respondents

The job positions of respondents in both institutions were categorised into two, namely, non-managerial and managerial as shown in Table 4.5. Respondents in non-managerial positions from Kenya Utalii College were 26 (72%), while those in managerial position were 10 (28%) of the respondents. It was also noted that the non-managerial respondents from Kenyatta University were 118 (62%), while the managerial constituted 73 (38%) of the respondents.

Table 4.5: Job Status

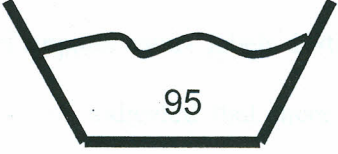
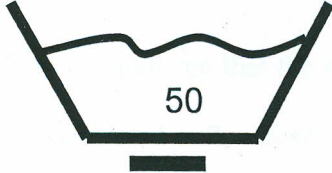
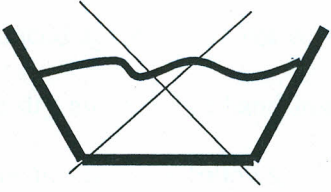


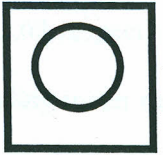

Institution	Managerial	Non-Managerial
Kenya Utalii College	10 (28%)	26 (72%)
Kenyatta University	73 (38%)	118 (62%)
Grand Total	83 (36.6%)	144(63.4%)

In overall, the majority of respondents 144 (63%) from the two institutions were from non-managerial category. The findings implied that the job position may have had an influence on the apparel consumers as regards to the apparel attributes used to assess the quality of apparel product and hence the influence on their purchase decision-making.

4.4 Consumer's Awareness of Care-Label Instructions

One of the study objectives was to determine the level of apparel consumer awareness of care-label instructions. Respondents were requested to rate their awareness of the seven symbols contained in the care-label instructions (Appendix B). The results for the awareness of the symbols are shown in the Figure 4.1.

Figure 4.1 Mean Responses of Consumer Awareness of Care-label Symbols

Care-labels Symbols	Description of process	N	Mean	Std. Dev.
Symbol 1 	Wash in water at max. Temperature 95 ⁰ C	227	2.00	0.798
Symbol 2 	Wash in water at max. Temperature 50 ⁰ C With reduced agitation	227	1.97	0.825
Symbol 3 	Do not wash in water	227	2.02	0.849
Symbol 4 	Bleach articles	227	1.89	.823
Symbol 5 	Dry-clean in all solvents	227	1.85	0.83
Symbol 6 	Tumble dry	227	1.88	0.823
Symbol 7 	Hot Hand Iron	227	1.98	0.854

To achieve the first objective, descriptive statistics was used. Figure 4.1 presents the descriptive statistics which show the mean responses relating to the awareness of

various symbols of the care-label instructions. The descriptive statistics show that all the mean responses on awareness are less than 3, (where 3 in the Likert scale in the questionnaire indicated “Aware of care-labels” while, below 3 indicated low awareness of apparel care- labels instructions). The results of the descriptive test analysis therefore indicated that there was fair and low awareness of the various symbols of the care-label instructions by the respondents, respectively.

Results in Figure 4.1 indicate that the respondents were generally not aware of care-labels shown in symbols 1 to 7, whose interpretations were given as follows; - wash in water at a maximum temperature of 95°C; wash in water at a maximum temperature of 50°C with reduced agitation, do not wash in water, bleach articles, dry clean in all solvents, tumble dry and use hot hand iron, respectively. This was supported by the corresponding mean scores as follows; - 2.00, 1.97, 2.02, 1.89, 1.85, 1.88, and 1.98, which in the Likert scale indicated that the respondents were generally not fairly aware of the care-labels. The findings also implied that the respondents were more familiar with or aware of some of the care-labels symbols than others.

For instance, the findings in Figure 4.1 show that symbols 1 and 3 attracted mean responses of 2.00 and 2.02 respectively, compared to symbols 2, 4, 5, 6 and 7 which recorded the corresponding mean responses of 1.97, 1.89, 1.85, 1.88 and 1.98. These findings implied that the consumers were relatively more aware of symbols 1 and 3, which are “wash in water at maximum temperature of 95°C” and “do not wash in water”, respectively. This could also have been attributed to the fact that the symbols were more familiar to the consumers and hence easy to interpret. This was in contrast to symbols 2, 4, 5, 6 and 7, which mean; wash in water at a maximum temperature of 50°C with reduced agitation, bleach articles, dry clean in all solvents, tumble dry and

hot hand iron, respectively. These symbols scored lower mean responses, probably because of they were more difficult to interpret due to their unfamiliarity to the consumers. On overall therefore, the results of the descriptive test analysis indicated that there was generally less awareness of the care-label symbols by the consumers. The findings further revealed that respondents were more familiar with some of the care-label symbols, particularly symbols 1 and 3 than the others.

The results are consistent with earlier studies cited in this study. For instance, the findings compared well with those of Njagi (1996) whose contention in the Kenyan context was that very little textile care-label information is made available to consumers by the local apparel producers; as a result therefore, the local consumers often have very limited textile knowledge, which is usually based on experience. The findings were also in agreement with those of Cotton Incorporated (2005) which stated that knowledge of cleaning clothes and routine vary greatly among consumers, as they usually cleaned their clothing in ways inconsistent with product care-labelling, and the resulting problems with the product performance directly affected consumers' perceptions of apparel quality. For example, some consumers used laundering methods which were inconsistent with care-label instructions which included, among others, using wrong washing or drying temperature and not proper laundry agents

The finding was also consistent with Otieno (1990), who in her studies reported customer dissatisfaction with the limited information presented on clothing care-labels. It was cited in her study that some care-labels, for instance, only had the brand name and size of the clothing item and gave no further information on details such as, fibre composition or care-label instructions. This implied that the majority of our local

Kenyan consumers are not exposed to the common symbols usually found on apparel care-labels, which in effect, meant that they were being denied the opportunity to familiarise themselves with and get to know the common care-label symbols, their interpretation and hence the opportunity to appreciate their importance in the care and maintenance of apparel.

These findings were also in agreement with Workman & Johnson, (1991), who reported in their studies that care-label instructions is considered as a critical attribute that can influence consumer perceptions of apparel quality because different care-label instructions are associated with different fibres, fabric and garment constructions and finishes applied to them during fabric manufacturing. They also found that knowledge of care-label instructions might affect perceptions of consumers on garment quality; predict a garment's future performance, estimate retail price and a customer's likelihood of purchasing a garment. The findings were also consistent with Wentz, (2007), who reported that care-label instructions played a significant role in restoring and maintaining the desirable and functional attributes of a garment. Lack of awareness of care-label instructions therefore put our Kenyan apparel consumers in a disadvantaged position in that they do not have an equal opportunity to make informed decisions during the selection of apparel products at the point of making purchase and whether what they finally decide to purchase would be able to give them their expected satisfactory service during use.

4.5 Existence of Care-labels on Locally Made and Imported Apparel

The second study objective was to investigate the existence of care-labels instructions on the local and imported apparel.

4.5.1 Existence of Care-labels on Locally Made Apparel

Descriptive Statistics Analysis

Descriptive statistics analysis was used to achieve the fourth study objective, which sought to investigate the existence of care-labels instructions on the locally manufactured and imported apparel. Table 4.6 shows the responses on the care-label apparel.

Table 4.6: Responses on Care-labels on Locally Made Apparel

	Frequency	Percent
Never	86	37.9%
Seldom	39	17.2%
Not sure	60	26.4%
Often	21	9.3%
Always	21	9.2%
Total	227	100%

The results shown in Table 4.6 indicate that 55.1% of the respondents usually do not find care-labels instructions whenever they purchased locally made apparel, 26% said that they are not sure whether care-labels instructions usually exist on locally made apparel, while only 18.5% of the respondents said that they find the care-label instructions. These results implied that care-labels instructions do not exist on the majority of the locally made apparel. The findings also implied that, 26% of the

respondents who, the study has indicated that they are not sure whether care-labels instructions exist on the locally made apparel, need to be sensitized on the awareness of the apparel care-labels information so that they can appreciate their role and importance.

The findings agree with those of Otieno, (1990) who asserted that in Kenya, care-label information is often missing or not adequate in the locally made clothing items, unlike in the imported ones. Consumers are therefore disadvantaged as they are not able to give products the right care required during use due to the absence of proper care guide. This may lead to damage to the apparel and eventual dissatisfaction with the apparel quality.

The findings also suggest that care-labels are not common among the local industry, especially in small apparel industry, the producers are not even aware of the intrinsic and extrinsic attributes of fabrics for them to be able to interpret the instructions on care-labels.

The finding confirms the study expectation that the majority of the locally made apparel usually do not bear care-label instructions, and this may further prove the need for quality regulatory organizations such as the Kenya Bureau of Standards to put more effort and come up with more appropriate measures that will ensure that apparel products, whether manufactured locally or imported, should have accurate care-label instructions which are comprehensive and informative enough to the consumers. It is also important to urge the NGO's concerned with the promotion of consumers' awareness such as Consumer Information Network, Kenya Consumer

Federation and Kenya Consumer Organisation to put more efforts in sensitizing consumers on the importance of purchasing apparel products which bear comprehensive and informative care-label instructions.

4.5.2 Existence of Care-label Instructions on Imported Apparel

Descriptive Statistics Analysis

The findings presented in Table 4.7 indicate that (74%) of the respondents said that they always find care-labels whenever they purchase imported apparel, 20% said that they often do not find care-labels on the imported apparel, while only 6% indicated that they were not sure of the existence of the care-labels on the imported apparel. These results implied that majority of the imported apparel usually bear care-label instructions. The findings also implied that the (6%) of the apparel consumers need to be sensitized on the importance of care-label instructions.

Table 4.7: Responses on Care-labels on Imported Apparel

	Frequency	Percent
Never	23	10%
Seldom	23	10%
Not sure	13	6%
Often	72	32%
Always	96	42%
Total	227	100%

The findings are consistent with the literature which argues that developed countries have put in place measures that ensure that apparel products must have care-label instructions. For instance, Wingate (1970) and Tartora (1987) in their separate studies state that U.S.A. operates under a legislation which requires that all textile products bear a care-label which also gives fibre content and percentage by weight in order of

importance of each fibre used in the article. These results also implied that there was need for a serious sensitization to the consumers not only for them to be aware of the care-label instructions, but also to be conscious of their existence and be able to interpret the symbols on the care-labels.

4.6 Consumer Awareness of Care-labels between Academic and Non-academic Staff

To achieve the third objective, two test methods, namely descriptive statistics and t-test, were used to analyse the data to compare the responses obtained from the groups, namely, academic and non-academic staff. Table 4.8 shows the results obtained from the two groups.

Table 4. 8: Mean Response Scores for Academic and Non- academic Staff.

	Category	N	Mean	Std. Dev.	Std. Error Mean
Symbol 1	Academic staff	79	2.59	0.67	0.075
	Non academic staff	148	1.68	0.67	0.055
Symbol 2	Academic staff	79	2.62	0.562	0.063
	Non academic staff	148	1.63	0.731	0.06
Symbol 3	Academic staff	79	2.85	0.395	0.044
	Non academic staff	148	1.58	0.68	0.056
Symbol 4	Academic staff	79	2.58	0.672	0.076
	Non academic staff	148	1.51	0.633	0.052
Symbol 5	Academic staff	79	2.53	0.695	0.078
	Non academic staff	148	1.48	0.644	0.053
Symbol 6	Academic staff	79	2.70	0.54	0.061
	Non academic staff	148	1.44	0.597	0.049
Symbol 7	Academic staff	79	2.78	0.498	0.056
	Non academic staff	148	1.55	0.673	0.055

Descriptive Statistics Analysis

The group descriptive statistics analysis was used to determine the awareness of care-label instructions among two groups of respondents, namely the academic and non-academic staff. The analysis showed that for each symbol, the mean response for academic staff was above 2.5, implying a relatively fair awareness. This is in contrast with non-academic staff response whose mean response was lower than 2, implying “low awareness”. This is according to question 9 in the questionnaire, (where 3 in the Likert scale indicate “Awareness of care-labels”, 2 “meant fairly awareness” while below 2 indicated “less awareness”).

Results in Table 4.8 indicate that there was a difference between responses from the academic staff and non-academic staff. In case of symbol 1 which “means washing articles at a maximum temperature of 95°C with normal mechanical action, rinsing and spinning”, the mean response for academic staff was 2.59, implying a relatively fair awareness, while the mean response for non-academic staff was 1.68, implying less awareness. The findings also indicated that the mean response for academic staff was 2.62), implying a relatively higher awareness while the mean for non-academic staff was 1.63, implying less awareness for symbol 2 (wash in water at a maximum temperature of 50°C, reduced agitation action).

The study findings further revealed that, for symbol 3 “do not wash”, the mean response for academic staff was 2.85, implying a relatively higher awareness while the mean response for non-academic staff was 1.58, implying less awareness for symbol 3 “do not wash”. For symbol 4 “may be bleached according to manufacturer’s instructions”, the mean response for academic staff was 2.58, implying a relatively

fair awareness while the mean response for non-academic staff was 1.51, implying less awareness.

Further, the results indicated that for symbol 5 “dry clean”, the mean response for academic staff was 2.53, implying a relatively fair awareness, while the mean response for non-academic staff was 1.48, implying less awareness, while the mean response for academic staff was 2.7, implying a relatively fair awareness while the mean response for non-academic staff was 1.44, implying less awareness for symbol 6 “tumble dry”.

Finally, the study findings revealed that for symbol 7 “use hot iron temperature”, the mean response for academic staff was 2.78, implying a relatively fair awareness while the mean response for non-academic staff was 1.55, implying less awareness. The findings implied that the awareness of care-label symbols was relatively higher for the academic staff as compared to their counterparts’ in the non-academic whose mean response was below 2, indicating less awareness of the care-label instructions.

T-test Analysis

Hypothesis H_1 : *There is no significant difference between academic and non-academic staff in consumer awareness of care-labels instructions.*

T-test analysis was used to compare the significant difference existing between the two groups of respondents, academic and non-academic staff. Table 4.9 shows the comparison of two groups of respondents, academic and non-academic staff in awareness of care-labels instructions

Table 4.9: Independent Samples T- test for Equality of Means

Symbol		Levine's Test for Equality of Variances		T-test for Equality of Means						
		F	Sig.	T- (calc)	Df	P-Value Sig. (2tailed)	Mean Diff.	Std. Error Diff.	95% Confidence Interval of the Difference	
									Lower	Upper
1	Equal Variances Assumed	.326	.569	9.769	225	0.000	.91	.093	.728	1.097
2	Equal Variances Assumed	13.627	.000	10.513	225	0.000	.99	.094	.806	1.178
3	Equal Variances Assumed	74.050	.000	15.230	225	0.000	1.27	.083	1.103	1.431
4	Equal Variances Assumed	.014	.904	11.855	225	0.000	1.07	.090	.891	1.246
5	Equal Variances Assumed	.436	.510	11.404	225	0.000	1.05	.092	.870	1.234
6	Equal Variances Assumed	6.294	.013	15.609	225	0.000	1.26	.081	1.098	1.416
7	Equal Variances Assumed	34.057	.000	14.365	225	0.000	1.24	.086	1.068	1.407

A hypothesis was formulated and tested to determine the difference between academic and non-academic staff in awareness of care-labels symbols. The independent samples t-test yielded a p-value of 0.000 given 225 degrees of freedom as shown in Table 4.9. Since the *p*-value is less than the critical value of 0.05, the null hypothesis is rejected, implying that statistically there is a significant difference between academic and non-academic staff in the awareness of care-label instructions.

ANOVA

An ANOVA was conducted to compare the level of education and the consumer awareness among the seven individual care-label symbols 1 to 7. The descriptive statistics for the ANOVA are presented in Table 4.10.

Table 4.10: Descriptive Statistics: ANOVA: Education Level and Awareness of Symbol 1 to 7.

		N	Mean	Std. Dev	Std. Error	Min	Max
Symbol_1	Primary	21	1.62	0.740	.161	1	3
	Secondary	56	1.77	0.660	.088	1	3
	Post Secondary	44	1.70	0.701	.106	1	3
	University	106	2.32	0.799	.078	1	3
	Total	227	2.00	0.798	.053	1	3
Symbol_2	Primary	21	1.71	0.784	.171	1	3
	Secondary	56	1.75	0.745	.100	1	3
	Post Secondary	44	1.59	0.787	.119	1	3
	University	106	2.30	0.771	.075	1	3
	Total	227	1.97	0.825	.055	1	3
Symbol_3	Primary	21	1.62	0.669	.146	1	3
	Secondary	56	1.61	0.705	.094	1	3
	Post Secondary	44	1.59	0.693	.104	1	3
	University	106	2.50	0.759	.074	1	3
	Total	227	2.02	0.849	.056	1	3
Symbol_4	Primary	21	1.62	0.669	.146	1	3
	Secondary	56	1.54	0.660	.088	1	3
	Post Secondary	44	1.48	0.590	.089	1	3
	University	106	2.29	0.828	.080	1	3
	Total	227	1.89	0.823	.055	1	3
Symbol_5	Primary	21	1.71	0.717	.156	1	3
	Secondary	56	1.41	0.654	.087	1	3
	Post Secondary	44	1.48	0.628	.095	1	3
	University	106	2.25	0.817	.079	1	3
	Total	227	1.85	0.830	.055	1	3
Symbol_6	Primary	21	1.43	0.746	.163	1	3
	Secondary	56	1.50	0.632	.085	1	3
	Post Secondary	44	1.43	0.587	.088	1	3
	University	106	2.35	0.781	.076	1	3
	Total	227	1.88	0.832	.055	1	3
Symbol_7	Primary	21	1.57	0.746	.163	1	3
	Secondary	56	1.63	0.702	.094	1	3
	Post Secondary	44	1.50	0.665	.100	1	3
	University	106	2.44	0.782	.076	1	3
	Total	227	1.98	0.854	.057	1	3

Descriptive statistics analysis results in Table 4.10 indicate that the mean score for the awareness of symbol “1” for respondents with primary, secondary, post secondary and university level of education levels of education were 1.62, 1.77, 1.70 and 2.62, respectively. Similarly, the awareness in respect to awareness of symbol “2” for respondents with primary, secondary, post secondary and university level of education had a mean score of 1.71, 1.75, 1.59, and 2.30, respectively. For symbol “3” the respondents with primary, secondary, post secondary and university levels of education had a mean score of 1.62, 1.61, 1.59 and 2.50, as far as awareness was concerned, while in respect to symbol “4” the mean scores for respondents with primary, secondary, post secondary and university levels of education were; 1.62, 1.54, 1.48 and 2.29, respectively.

The awareness of symbol “5” for respondents with primary, secondary, post secondary and university levels of education had a mean score of 1.71, 1.41, 1.48 and 2.35, respectively and the mean scores for the awareness of symbol “6” for respondents with primary, secondary, post secondary and university levels of education were; 1.43, 1.50, 1.43 and 2.35, respectively, while for symbol “7” the respondents with primary, secondary, post secondary and university levels of education had a mean score of 1.57, 1.63, 1.50 and 2.44, respectively.

The results from the descriptive statistics analysis in Table 4.10, clearly indicate that for all symbols, 1, 2, 3, 4, 5, 6 and 7, the respondents with the university education had a corresponding higher mean score in each case, implying that the respondents were more aware of the care-label symbols. On the average, the respondents with

primary and a few with secondary levels of education had relatively low awareness of care-label symbols.

H₁: There is no significant difference between the awareness of symbols, 1 to 7 and the education levels of respondents.

The ANOVA was used to compare the awareness of symbols 1 to 7 and the educational levels of respondents.

Table 4. 11. ANOVA: Awareness of Symbol 1 to 7 for Education Levels

		Sum of Squares	df	Mean Square	F	Sig.(p-value)
Symbol_1	Between Groups	20.812	3	6.937	12.558	0.000
	Within Groups	123.188	223	0.552		
	Total	144.000	226			
Symbol_2	Between Groups	22.080	3	7.360	12.456	0.000
	Within Groups	131.762	223	0.591		
	Total	153.841	226			
Symbol_3	Between Groups	45.444	3	15.148	28.762	0.000
	Within Groups	117.446	223	0.527		
	Total	162.890	226			
Symbol_4	Between Groups	33.230	3	11.077	20.620	0.000
	Within Groups	119.792	223	0.537		
	Total	153.022	226			
Symbol_5	Between Groups	34.664	3	11.555	21.306	0.000
	Within Groups	120.939	223	0.542		
	Total	155.604	226			
Symbol_6	Between Groups	44.523	3	14.841	29.543	0.000
	Within Groups	112.023	223	0.502		
	Total	156.546	226			
Symbol_7	Between Groups	43.462	3	14.487	26.605	0.000
	Within Groups	121.428	223	0.545		
	Total	164.890	226			

Table 4.11 shows the results of the analysis on the awareness of all the symbols 1 to 7. The group statistics ANOVA test yielded a p-value of 0.000, which is less than the critical value of 0.05. The null hypothesis is therefore rejected at 0.05 level of significance (F=12.558; p-value 0.000), (F=12.456; p-value 0.000), (F=28.762; p-value 0.000), (F=20.620; p-value 0.000), (F=21.306; p-value 0.000), (F=29.543; p-value 0.000) and (F=26.605; p-value 0.000), respectively. This implies that statistically, education level is significant in determining the level of awareness of the symbols 1, 2, 3, 4, 5, 6 and 7, respectively. These findings clearly indicate that there is a corresponding difference between levels of education vis-à-vis the awareness of symbols, 1 to 7, which imply that those with the higher education were relatively had more awareness of care-label symbols.

Post hoc Analysis

A Post hoc test was used to investigate whether the education level of individual apparel consumers affect the awareness of the individual care-label symbols. Table 4.12 shows the results obtained from the analysis

Table 4. 121: Post hoc Analysis: Influence of Educational Level on the Awareness of Care-label Symbols 1-7.

Dependent Variable	(I) education	(J) education	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Symbol_1	Primary	Secondary	-.149	.190	.435	-.52	.23
		Post Secondary	-.085	.197	.665	-.47	.30
		University	-.702*	.178	.000	-1.05	-.35
	Secondary	Primary	.149	.190	.435	-.23	.52
		Post Secondary	.063	.150	.673	-.23	.36
		University	-.553*	.123	.000	-.79	-.31
	Post Secondary	Primary	.085	.197	.665	-.30	.47
		Secondary	-.063	.150	.673	-.36	.23
		University	-.616*	.133	.000	-.88	-.35
	University	Primary	.702*	.178	.000	.35	1.05
		Secondary	.553*	.123	.000	.31	.79
		Post Secondary	.616*	.133	.000	.35	.88
Symbol_2	Primary	Secondary	-.036	.197	.856	-.42	.35
		Post Secondary	.123	.204	.546	-.28	.53
		University	-.588*	.184	.002	-.95	-.23
	Secondary	Primary	.036	.197	.856	-.35	.42
		Post Secondary	.159	.155	.305	-.15	.46
		University	-.552*	.127	.000	-.80	-.30
	Post Secondary	Primary	-.123	.204	.546	-.53	.28
		Secondary	-.159	.155	.305	-.46	.15
		University	-.711*	.138	.000	-.98	-.44
	University	Primary	.588*	.184	.002	.23	.95
		Secondary	.552*	.127	.000	.30	.80
		Post Secondary	.711*	.138	.000	.44	.98
Symbol_3	Primary	Secondary	.012	.186	.949	-.35	.38
		Post Secondary	.028	.192	.884	-.35	.41
		University	-.881*	.173	.000	-1.22	-.54
	Secondary	Primary	-.012	.186	.949	-.38	.35
		Post Secondary	.016	.146	.912	-.27	.30
		University	-.893*	.120	.000	-1.13	-.66
	Post Secondary	Primary	-.028	.192	.884	-.41	.35
		Secondary	-.016	.146	.912	-.30	.27
		University	-.909*	.130	.000	-1.17	-.65
	University	Primary	.881*	.173	.000	.54	1.22
		Secondary	.893*	.120	.000	.66	1.13
		Post Secondary	.909*	.130	.000	.65	1.17

Dependent Variable	(I) Educatio	(J) Education	Mean Diff. (I-J)	Std. Error	Sig.	95% Conf. Interval		Dependent Variable
						Lower Bound	Upper Bound	
Symbol_4	Primary	Secondary	.083	.188	.657	-.29	.45	
		Post Secondary	.142	.194	.467	-.24	.52	
		University	-.673*	.175	.000	-1.02	-.33	
	Secondary	Primary	-.083	.188	.657	-.45	.29	
		Post Secondary	.058	.148	.693	-.23	.35	
		University	-.757*	.121	.000	-1.00	-.52	
	Post Secondary	Primary	-.142	.194	.467	-.52	.24	
		Secondary	-.058	.148	.693	-.35	.23	
		University	-.815*	.131	.000	-1.07	-.56	
	University	Primary	.673*	.175	.000	.33	1.02	
		Secondary	.757*	.121	.000	.52	1.00	
		Post Secondary	.815*	.131	.000	.56	1.07	
Symbol_5	Primary	Secondary	.304	.188	.109	-.07	.67	
		Post Secondary	.237	.195	.226	-.15	.62	
		University	-.540*	.176	.002	-.89	-.19	
	Secondary	Primary	-.304	.188	.109	-.67	.07	
		Post Secondary	-.067	.148	.654	-.36	.23	
		University	-.844*	.122	.000	-1.08	-.60	
	Post Secondary	Primary	-.237	.195	.226	-.62	.15	
		Secondary	.067	.148	.654	-.23	.36	
		University	-.777*	.132	.000	-1.04	-.52	
	University	Primary	.540*	.176	.002	.19	.89	
		Secondary	.844*	.122	.000	.60	1.08	
		Post Secondary	.777*	.132	.000	.52	1.04	
Symbol_6	Primary	Secondary	-.071	.181	.694	-.43	.29	
		Post Secondary	-.003	.188	.986	-.37	.37	
		University	-.920*	.169	.000	-1.25	-.59	
	Secondary	Primary	.071	.181	.694	-.29	.43	
		Post Secondary	.068	.143	.633	-.21	.35	
		University	-.849*	.117	.000	-1.08	-.62	
	Post Secondary	Primary	.003	.188	.986	-.37	.37	
		Secondary	-.068	.143	.633	-.35	.21	
		University	-.917*	.127	.000	-1.17	-.67	
	University	Primary	.920*	.169	.000	.59	1.25	
		Secondary	.849*	.117	.000	.62	1.08	
		Post Secondary	.917*	.127	.000	.67	1.17	
Symbol_7	Primary	Secondary	-.054	.189	.777	-.43	.32	
		Post Secondary	.071	.196	.715	-.31	.46	
		University	-.872*	.176	.000	-1.22	-.52	
	Secondary	Primary	.054	.189	.777	-.32	.43	
		Post Secondary	.125	.149	.401	-.17	.42	
		University	-.818*	.122	.000	-1.06	-.58	
	Post Secondary	Primary	-.071	.196	.715	-.46	.31	
		Secondary	-.125	.149	.401	-.42	.17	
		University	-.943*	.132	.000	-1.20	-.68	
	University	Primary	.872*	.176	.000	.52	1.22	
		Secondary	.818*	.122	.000	.58	1.06	
		Post Secondary	.943*	.132	.000	.68	1.20	

* The mean difference is significant at the 0.05 level.

The results from the post hoc test reveal that education is indeed an important determinant of the level of awareness of care-label symbols. This confirms the findings from the earlier analysis that the respondents with low education equally have a relatively lower awareness of care-labels symbols compared to the respondents with higher education.

Results revealed that in respect to symbol 1, the difference between primary education and secondary education, post secondary is not significant with p-value 0.435 and 0.665 respectively, while it is significant with university education, p-value 0.000. The difference between secondary education and primary and post secondary is not significant (p-value 0.435, 0.673) but was significant with university education (p-value 0.000). The difference between post secondary education and primary and secondary is not significant (p-value 0.665, 0.673) but was significant with university education (p value 0.000). The difference between university education and primary, secondary and post secondary education was significant (p value 0.000).

Results revealed that in respect to symbol 2, the difference between primary education and secondary education, post secondary is not significant with p-value 0.856 and 0.546, while it is significant with university education p-value 0.002. The difference between secondary education and primary and post secondary is not significant (p-value 0.856, 0.305) but was significant with university education (p-value 0.000). The difference between post secondary education and primary and secondary is not significant (p-value 0.546, 0.305) but was significant with university education (p-value 0.000). The difference between university education and primary, secondary and post secondary education was significant (p-value 0.000).

Results revealed that in respect to symbol 3, the difference between primary education and secondary education, post secondary is not significant with p value 0.949 and 0.884, while it is significant with university education p-value 0.000. The difference between secondary education and primary and post secondary was not significant (p-value 0.949, 0.912) but was significant with university education (p-value 0.000). The difference between post secondary education and primary and secondary is not significant (p-value 0.884, 0.912) but was significant with university education (p-value 0.000). The difference between university education and primary, secondary and post secondary education was significant (p-value 0.000).

Furthermore, results revealed that in respect to symbol 4, the difference between primary education and secondary education, post secondary is not significant with p value 0.657 and 0.467, while it is significant with university education p value 0.000. The difference between secondary education and primary and post secondary is not significant (p-value 0.657, 0.693) but was significant with university education (p-value 0.000). The difference between post secondary education and primary and secondary is not significant (p-value 0.467, 0.693) but was significant with university education (p-value 0.000). The relationship between university education and primary, secondary and post secondary education is significant (p value 0.000).

In addition, results revealed that in respect to symbol 5, the difference between primary education and secondary education, post secondary is not significant with p value 0.109 and 0.226, while it is significant with university education p value 0.002. The difference between secondary education and primary and post secondary is not significant (p value 0.109, 0.654) but was significant with university education (p-

value 0.000). The difference between post secondary education and primary and secondary is not significant (p-value 0.226, 0.654) but was significant with university education (p-value 0.000). The difference between university education and primary, secondary and post secondary education is significant (p-value 0.000).

In addition, results revealed that in respect to symbol 6, the difference between primary education and secondary education, post secondary is not significant with p-value 0.694 and 0.986, while it is significant with university education p-value 0.000. The difference between secondary education and primary and post secondary is not significant (p value 0.694, 0.633) but was significant with university education (p-value 0.000). The difference between post secondary education and primary and secondary is not significant (p-value 0.986, 0.633) but was significant with university education (p-value 0.000). The difference between university education and primary, secondary and post secondary education is significant (p value 0.000).

Finally, the results revealed that in respect to symbol 7, the difference between primary education and secondary education, post secondary is not significant with p-value 0.777 and 0.715, while it is significant with university education p value 0.000. The difference between secondary education and primary and post secondary is not significant (p-value 0.777, 0.401) but was significant with university education (p-value 0.000). The difference between post secondary education and primary and secondary is not significant (p-value 0.715, 0.401) but was significant with university education (p-value 0.000). The difference between university education and primary, secondary and post secondary education was significant (p-value 0.000). These results from post hoc analysis indicated that the difference between respondents with

the University level of education and primary, secondary and post secondary education was significant which implied that those with the University education were relatively more aware of the individual care-label symbols, 1 to 7.

The above findings are consistent with Swinker and Hines, (2006), who argue that different consumer groups vary in their expectations of quality and ability to distinguish various quality characteristics. The more educated and sophisticated consumers tend to be more specific with their expectations of quality and are more precise in their ability to express those expectations. The academic staff, being relatively more educated are likely to exhibit more awareness of care-label information compared to the majority of non-academic staff. The academic staff tend to be more concerned with how their clothes would be cleaned; whether by professional dry-cleaners or family members. Perhaps this is due to the fact that by virtue of their status, they are expected to be well groomed and presentable in different places, including social environment, lecture rooms and other public places. Also, since the academicians, especially the lecturers have read widely either for academic purposes or general knowledge may have in one way or another, read relevant literatures related to care-labels information, hence making them relatively more aware of the care-label symbols.

4.7 Apparel Attributes and Perceived Product Quality.

The apparel attributes influencing apparel quality are broadly divided into two, namely, intrinsic and extrinsic attributes. The intrinsic attributes are part of the apparel and are features that cannot be altered without changing the product itself. They include garment size, fibre type, and colour, among others. Meanwhile, the extrinsic attributes are those that are not component parts of the physical product, but are applied by the producer or retailer to influence purchasing (Olson and Jacoby, 1972). Extrinsic attributes include price, brand name, packaging country of origin and store or shop.

To achieve the fourth objective of this study, two test methods, descriptive statistics and t-test, were used to analyse the data to compare the responses obtained on intrinsic and extrinsic attributes.

4.7.1 Intrinsic Apparel Quality Attributes

Descriptive Statistics Analysis

Table 4.13 represents the descriptive statistics which show the mean scores relating to consumers' agreement with the intrinsic attributes that influence apparel quality. The mean score responses indicate that attributes including durability, fibre content, garment size and colour fastness all had a mean score ranging 4.20, 4.13, 4.10, 4.01 and 4.01, respectively. Other mean scores for intrinsic attributes included, fabric finish, garment construction and fabric finish were 3.96, 3.93 and 3.91, in that order. However, the total for all the mean scores was 4.034. In the likert scale, 4.00 and above, means agreeing with the attribute as being important in influencing the quality of apparel. These results show that durability, 4.20 is the most influential attribute,

while fabric finish, 3.91 although was ranked the least influential attribute is equally well within the influential range. These results imply that on the average, for all the apparel attributes considered, majority of respondents agreed that intrinsic attributes influenced consumer's perception of product quality.

Table 4.13: Mean Scores for Intrinsic and Extrinsic Apparel Attributes

(a) Intrinsic Attributes	N	Min.	Max.	Mean	Std Dev.
Durability	227	2	5	4.20	1.056
Fibre content	227	2	5	4.13	0.978
Garment fit	227	2	5	4.10	1.010
Colour fastness	227	2	5	4.01	1.158
Fabric finishes	227	2	5	3.96	1.185
Garment construction	227	1	5	3.93	1.439
Fabric construction	227	1	5	3.91	1.467
Total Mean				4.034	0.11138
(b) Extrinsic Attributes					
Country of origin	227	4	5	4.89	0.308
Price	227	3	5	4.64	0.698
Brand name	227	3	5	4.46	0.680
Packaging	227	3	5	4.23	0.804
Total Mean				4.5562	0.28195

The findings agree with those in Fiore & Damhorst (1992), who argued that the intrinsic properties of clothing products such as the physical features including, fibres, fabrics and finishes shape a consumer's perception of product quality which may have a pronounced effect on the eventual purchase decision-making.

4.7.2 Extrinsic Apparel Quality Attributes

Descriptive Statistics Analysis

Consumer responses on extrinsic attributes are shown in Table 4.13. The results indicated that all the mean scores for extrinsic attributes were above 4. The findings indicated that the mean score for the attributes included country of origin 4.89, price 4.64 brand name 4.46 and packaging 4.23. The total mean scores for all the attributes was 4.5562. In the likert scale, 4.00 and above, means agreeing with the attribute as being important in influencing the quality of apparel. These results show that among the extrinsic attributes considered, country of origin, 4.89 is the most influential attribute, while packaging 4.23 although was ranked the least influential attribute is equally well within the influential range of attributes. The overall mean score of all extrinsic attributes was over 4.5562, which implied that the majority of respondents agreed that extrinsic apparel attributes influenced consumer's perception of product quality. Comparing the total mean score for both the intrinsic attributes, 4.034 and extrinsic attributes, 4.5562, it shows that the total mean score for extrinsic attributes is higher than that of intrinsic tributes which implies that extrinsic attributes has more influence on the perceptions of apparel quality compared to the intrinsic attributes.

The findings agreed with those of Retief, (2007) who argues that the product quality is often deduced from specific extrinsic attributes and is usually indicative of sparse consumer knowledge about a textile product. Retief, (2007) also alludes to the observation that in most studies cited, quite a good number of consumers appreciate the use of such extrinsic features when considering the apparel product quality at the point of making purchase decision. She therefore concludes that extrinsic variables are often used as indicators of product quality when the consumer has little or no

experience about the product. These findings implied that the respondents have sparse knowledge of textile product as they depended on extrinsic attributes to assess the quality of apparel products.

T-test Analysis

Hypothesis H₁: *There is no significant difference between extrinsic and intrinsic attributes in influencing consumers' perception of apparel quality.*

Table 4.14: Equality of Means for Intrinsic and Extrinsic Attributes

		Levine's Test for Equality of Variances		T-test for Equality of Means						
Ave. Score	Equal Variances Assumed	F	Sig.	T	Df	P - Value Sig. (2-tailed)	Mean Diff.	Std. Error Diff.	95% Confidence Interval of the Difference	
									Lower	Upper
		4.579	0.61	1.468	9	0.002	0.5222	11687	-0.78657	.25780

To enhance the results of the descriptive statistics analysis shown in Table 4.13, a null hypothesis was formulated as stated above and the t-test was used to analyse the data. In order to reject or accept the null hypothesis; a two-independent samples t-test analysis was conducted and the results shown in Table 4.14. The outcome yielded a *p*-value of 0.002 given 9 degrees of freedom, which is less than the critical *p*-value of 0.05. Hence the null hypothesis was rejected, concluding that extrinsic attributes influence perceptions of apparel quality more than intrinsic apparel attributes.

The results of the statistical test carried out are consistent with the findings of the earlier studies conducted by other researchers. For instance, Retief, (2007) reported that apparel product quality is often deduced from specific extrinsic variables which

are often used as indicators of product quality when the consumer has little or no experience about the product. According to Retief, (2007) and Beaudoin *et al.*, (2000), quite a good number of apparel consumers appreciate the use of extrinsic attributes when considering the quality of apparel product at the point of making purchase decision.

The results of the findings also agree with those of Eckman *et al* (1990), who indicate that price and brand (extrinsic attributes) are the attributes most frequently used by consumers in assessing apparel for quality. The findings can be explained by the low consumer awareness of care-label instructions, indicating sparse knowledge of apparel products by the consumers.

The results however, differ with those of Fiore & Damhorst (1992) who argue that the intrinsic properties of clothing products such as the physical features which include fibres, fabrics and finishes, rather than the extrinsic properties such as price, brand name, packaging and hangtag information, shape a consumer's perception of product quality which has a pronounced effect on the eventual decision-making and buying behaviour. Other studies that are not consistent with the study results included those of Hatch & Roberts; Syzbillo & Jacoby; and Wheatley *et al* cited in Eckman *et al*, 1990. The cited studies argue that intrinsic characteristics seem to be more important to consumers than extrinsic characteristics. This pattern is not consistent with the findings of this research that has specifically examined the extrinsic and intrinsic cues.

The results of the above findings perhaps would have been different if the majority of the respondents were from academic staff since it had earlier been found that academic staff respondents are relatively more familiar with some basic textile apparel knowledge. However, the results are well explained by the observation that non-academic staff who are the majority of the total respondents, have been found to have low awareness of care-label instructions.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the findings, conclusion and recommendations for policy and further research. To achieve its objectives, the study determined the level of consumer awareness of apparel care-labels instructions, including investigation of the existence of care-label instructions on the locally made and imported apparel products. The study also compared the difference in consumer awareness between the academic and non-academic staff. In addition, the study further compared the intrinsic and extrinsic apparel attributes to find out how they influence consumers perceptions of apparel product quality.

To achieve the objectives of the study, descriptive statistics and inferential statistics, including t-test were used to analyze the data. ANOVA and Post hoc test analysis were also used to determine the effect of the levels of education on the awareness of care-label symbols. Descriptive statistics used included, frequencies, percentages and means of responses, while the null hypotheses were generated from objective three and four, and analysed using t-tests, ANOVA and Post hoc analysis. Data were collected using questionnaires which were administered to respondents. The questionnaire was designed to provide detailed information for each variable, for example, the demographic characteristics of the respondents, consumer awareness of apparel care-labels instructions and the existence of care-label instructions on the local and imported apparel. The questionnaire also sought information to compare the consumer awareness between academic and non-academic staff. In addition, the

questionnaire further provided information to compare the intrinsic and extrinsic apparel attributes in influencing consumers' perceptions of apparel product quality.

Data obtained from the study were coded and systematically organized to facilitate analysis. The dependent variable was the perceptions of apparel quality, while the independent variables on the other hand consisted of intrinsic and extrinsic apparel attributes. The intrinsic attributes included formal and functional features. Formal features were the fibre content, fabric structure and garment construction. Functional features consisted of care-label instructions, size and durability of the apparel. Also included in the intrinsic attributes were aesthetic aspects such as feel, texture and colour. The extrinsic attributes on the other hand, are price, brand name, packaging and country of origin of the apparel product.

5.2 Summary of the Major Findings

The summary of the major findings presented were guided by the research objectives, which included; to determine the apparel consumers awareness of care-labels instructions, to investigate the existence of care label instructions on the local and imported apparel, to compare the difference in consumer awareness of care-label instructions, between the academic and non-academic staff and to compare the intrinsic and extrinsic apparel attributes in influencing perceptions of apparel product quality.

5.2.1 Determination the Consumers Awareness of Apparel Care-Labels .

To attain the research objective, descriptive statistics was used to test the data. The results of the analysis indicated that there was low awareness of the various symbols

of the care-label instructions by the respondents. However, the respondents were more familiar with or aware of some of the care-labels symbols and were able to interpret them compared to the other symbols.

5.2.2 Investigation of the Existence of Care-labels on Locally Made and Imported Apparel

A descriptive statistics analysis was used to analyse the data from the responses. A relatively higher percentage 55.1% of respondents indicated that they never find care-labels whenever they purchase locally produced apparel, while 26% said that they were not sure whether the care-labels instructions exist or not on apparel. A relatively higher percentage (74%) of the respondents said that they always find care-labels instructions whenever they purchased imported apparel, while, 26% said that they often do not find care-label instructions on the imported apparel. The results confirmed the researcher's expectation that the imported apparel usually have care-labels instructions compared to the locally made apparel products.

5.2.3 Comparison of Consumer Awareness of Care-labels between Academic and Non-academic Staff.

Three test methods, namely descriptive statistics, t-test and ANOVA, followed by post hoc test, were all used to supplement each other in analysing the data comparing the responses obtained from academic and non-academic staff. The findings revealed that there was a significant difference in the care-labels awareness between the academic and non-academic respondents. There was a notably higher degree of awareness among academic staff compared to the non-academic respondents.

The ANOVA results also revealed that education of individual respondents determined the level of awareness of the care-label symbols. Those with low education had a relatively lower awareness of care-labels and vice-a-versa compared to their colleagues in the higher education. Specifically, the difference between respondents with the University education and primary, secondary and post secondary education was significant implying that those with the University education were more aware of the individual symbols 1 to 7.

5.2.4 Comparison of Intrinsic and Extrinsic Apparel Attributes in Influencing Consumers' Perceptions of Apparel Quality.

Descriptive statistics and t-test methods were used to analyse the data to compare the influence of extrinsic and intrinsic apparel attributes. The results indicated that both extrinsic and intrinsic apparel attributes influence consumer perceptions of the apparel quality, however, extrinsic including country of origin, price and brand name, were found to have more influence on perceived apparel quality compared to the intrinsic apparel attributes, such as durability, fibre content and size of garment. The results therefore confirmed that the respondents had little knowledge about textile apparel products. Perhaps the results would have been different if the majority of the respondents were academic staff.

5.3 Conclusions

Based on the findings of the study the following conclusions were made:-

On overall, the respondents were of balanced gender, with majority of them being married and of middle age (33-40 years). Also, most of respondents from the two institutions were of at least secondary level of education with the majority of them

being in the non-managerial category. They had the ability to respond well to the questions asked in the questionnaire and the feedback obtained was therefore reliable and credible.

There was low awareness of care-label instructions among apparel consumers with significant difference being shown between academic and non-academic staff with the former exhibiting relatively more awareness. Identifying and interpreting the care-label symbols by the apparel consumers was a notable challenge as they seemed to be more aware of certain symbols than others, such as, washing and ironing symbols. This was probably because the washing and ironing symbols were more common and easy to guess compared to the other symbols such as dry-cleaning, tumble drying or bleaching. This proved even more difficult for the non-academic staff.

As expected, the study confirmed that most locally made apparel products do not bear care-labels instructions compared to the imported ones. However, a remarkable 26.4% of the respondents indicated that they are not sure whether care-labels existed on the locally produced apparel. This implied that there was need for a serious sensitization to the consumers not only for them to be aware of the care-label instructions, but also to be conscious of their existence and be able to interpret the care-labels symbols.

The majority of the academic staff were more aware of the care-labels compared to the non-academic staff. This was because majority of them, being relatively more educated are likely to exhibit more awareness of care-label information compared to the majority of non-academic staff as they tend to be more concerned with how their clothes would be cleaned; whether by professional dry-cleaners or family members.

This was consistent with those of Swinker and Hines (2006) who found out that the more educated and sophisticated consumers tend to be more specific with their expectations of quality and are more precise in their ability to express those expectations.

Both extrinsic and intrinsic apparel attributes influence perceptions of apparel product quality; however extrinsic attributes had more influence on perceived apparel quality compared to intrinsic apparel attributes. This implied that majority of the respondents had scarce knowledge of textile products when making product quality decisions. The findings would probably have been different if the majority of respondents had good knowledge of textile products as they would have used the intrinsic attributes as opposed to the extrinsic attributes to determine the quality of apparel products.

The knowledge of care-labels instructions plays an important role in guiding the consumers during cleaning of their clothes so as to enable them have good care and maintenance of their textile apparel which would enable long life-span performance of their apparel products. The apparel consumers should use intrinsic attributes, including among others, durability, fibre content and size of garment as opposed to extrinsic attributes such as, country of origin, price, brand name, among others, in assessing apparel products quality since they would now be knowledgeable in textile apparel issues, which would enable the consumers to make accurate quality assessment of apparel products.

5.4 Recommendations

Based on the findings and conclusion of this study, the following recommendations are made: The apparel manufacturers should make efforts to enhance consumers' awareness of care-label instructions; specifically the consumers should be aware and understand the various care-label symbols and their interpretations. This can be achieved through a strong awareness campaign by clothing manufacturers, apparel retailers, detergent producers and the relevant NGOs. In the Kenyan context, the textile and apparel products producers can be compelled through the relevant government legislation through the relevant ministry, to put genuine, accurate and comprehensive care-labels instructions on their textile goods before dispatching them to the market. The legislation should include care-labels instructions as a mandatory feature and one of the quality indicators of apparel used to assess the quality of apparel. Relevant NGOs in collaboration with the government agencies should organize and conduct refresher courses for small scale traders who may not be aware of care-label instructions to be sensitized on the same.

The Kenya Bureau of Standards should increase its efforts at ensuring that all apparel, whether locally made or imported must bear genuine, comprehensive and informative care-label instructions. It should be made mandatory by appropriate legislation that all those dealing with the production and trading of textile and clothing products, particularly, the apparel manufacturers, retailers and even the small scale producers who are in the business of dress making and tailoring, should ensure that their goods do not get to the market outlet if they do not have appropriate care-labels instructions.

The Non-Governmental Organizations concerned with the promotion of consumer products quality awareness should enhance their efforts in sensitizing the apparel consumers on the importance of purchasing articles with appropriate and comprehensive information about the apparel products. The NGOs should have a mechanism through which they can be receiving feedback from consumers (in terms of complaints or compliments) and act on them. This way, the consumers will take the NGOs, seriously and appreciate the services they offer to them.

The local quality standards regulatory organisations affiliated to the International Organisation for Standardisation (ISO), such as the Kenya Bureau of Standards (KEBS), should seek to recommend to the umbrella body ISO, to consider coming up with simpler and easy-to-understand symbols which can be identified and interpreted easily by consumers, especially for those symbols that have been singled out to be difficult to understand and interpret by the apparel consumers, such as tumble drying, dry-cleaning, bleaching, among others.

It is also recommended that apparel consumers should use intrinsic as opposed to extrinsic attributes, since extrinsic attributes are usually used when the consumers have little knowledge of the apparel products. They are used mainly for marketing purposes and not necessarily to represent the quality of the apparel product. The consumers should be informed about the intrinsic attributes through serious campaigns to be initiated and spearheaded by the relevant NGOs. The NGOs may source for willing organizations to sponsor refresher courses for small scale traders who may not be aware of the clothing attributes to help enhance their knowledge on textiles apparel. Home science taught in schools should be made mandatory because

this is where many people will have the opportunity to get some basic knowledge of the properties of different fibres and fabrics in order to take good care of them.

5.5 Contribution of the Studies to the Knowledge and Policy

This study has a significant contribution to the awareness of care-label symbols by the apparel consumers. It has also brought to the limelight the apparel attributes that are important to consider when assessing the quality of apparel products.

As a policy issue, the research findings suggest that continuous and sustained quality awareness campaigns to apparel consumer community be enhanced by the relevant government agencies. This can also be done in partnership with the relevant NGO's.

5.6 Suggestion for Further Research

One area of future study is to look at the implication of the country of origin of apparel product as an extrinsic attribute, whether it is used for deception purposes by the apparel manufacturers for marketing their merchandise. Furthermore, a study may be carried out to establish the sustainability of the perceived good product quality by the apparel producers. This is to avoid the possibility of the apparel producers capitalizing on the perceived good quality due to the already established brand name on a particular product by reducing the quality of apparel to maximize profits, while purporting to maintain the same high product quality.

A thorough study may be carried out specifically to establish whether demographic characteristics of consumers, such as gender, age, marital status and education

background of consumers may have significant role in influencing the consumers in the perceptions of product quality, purchase decisions and the laundry practices

A study may also be carried out across Kenya to find out how consumers maintain their clothes, to establish laundering practices which may be inconsistent with care-label instructions such as not following care label instructions for proper use of the laundry agents, not using the correct temperature setting during washing and drying of clothes.

In order to guarantee the apparel consumers of good care for their apparel products, there is need to carry out a study across the country to establish the accuracy and sources of the care-labels affixed onto the locally produced textile apparel. A study may also be conducted to establish the accuracy of the “Diamond Mark” obtained from the Kenya Bureau of Standards (KEBS) which signifies the good quality of product, whether they all originate from KEBS.

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APPENDIX A**LETTER TO RESPONDENTS**

School of Applied Human Sciences
Department of Fashion Design and Marketing
KENYATTA UNIVERSITY
P.O.BOX 43844
NAIROBI.

Dear Sir / Madam,

RE: REQUEST TO INVITE YOU TO PARTICIPATE IN THE RESEARCH

I am currently pursuing a Master of Science Degree course in Textile Science and Design at Kenyatta University. My study research is on the investigation of the apparel attributes that influence consumer perceptions of apparel product quality, focusing more on care-labels instructions. I wish to invite you to participate in this research.

The information collected shall purely be used for the purpose of academics and as such will be treated with strict confidence. Participation in this study is anonymous and voluntary, and therefore no respondent will be identified by name or referred in the report.

Thank you for your time and I appreciate your participation in this study.

Yours sincerely,

MICHAEL O. OWINO

APPENDIX B
QUESTIONNAIRES

Instructions:

- Please tick (✓) next to the correct answer.
- Please fill where there are open-ended dots (.....)
- Please explain where required.

SECTION A : Socio-Demographic Information (Respondent's Profile)

1. Gender of respondent:

- Male Female

2. Please indicate your age bracket

- 18 – 25 26 – 32 33 – 40 41 – 49 50 - Above

3. Marital status:

- Single Married

4. Kindly indicate your highest level of Education

- Primary Secondary Post Secondary University

5. What best describes your broad area of occupation

- Academic Non-Academic

6. Please indicate your job position/title

- Managerial Non-Managerial

SECTION B: Consumer Awareness of Apparel Care-Labels

7. I follow care label instructions when washing my clothes?

- Always Often Seldom Never

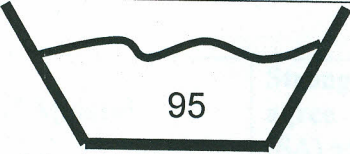
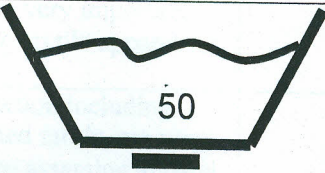
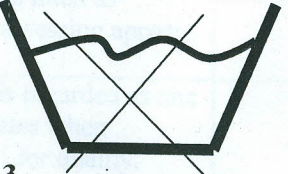
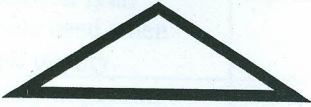

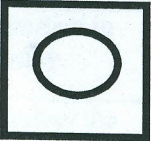
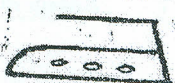
8. The following are the basic textile care symbols found in the apparel care-labels.

Indicate by ticking your awareness with the following care-label symbols using the following Likert scale.

Very Aware = 3

Fairly Aware = 2

Not Aware = 1

Care-labels Symbols	Very Aware = 3	Fairly Aware = 2	Not Aware = 1
<p data-bbox="66 643 182 674">Symbol 1</p> 			
<p data-bbox="66 872 182 902">Symbol 2</p> 			
<p data-bbox="66 1100 182 1130">Symbol 3</p> 			
<p data-bbox="66 1271 182 1302">Symbol 4</p> 			
<p data-bbox="66 1348 182 1378">Symbol 5</p> 			
<p data-bbox="66 1481 182 1511">Symbol 6</p> 			
<p data-bbox="66 1671 182 1702">Symbol 7</p> 			

SECTION C: Intrinsic and Extrinsic Attributes of Apparel Quality

9. The following statements are about consumers' assessment of apparel quality.

Please indicate how much you agree or disagree with the following statements using the following Likert scale.

Strongly agree (SA) =5 Agree (A) =4 Not sure (NS) =3 Disagree (D) =2
Strongly Disagree (SD) =1

Attributes of Apparel Quality	Strongly agree (SA) =5	Agree (A) =4	Not sure (NS) =3	Disagree (D) =2	Strongly Disagree (SD) =1
Fibre content is very important when assessing textile apparel for quality.					
Fabric construction including woven or knitted fabric, are very important when assessing apparel for quality.					
Fabric finishes are rated as important when assessing apparel for quality.					
Colour fastness is regarded as one of the key attributes when assessing apparel for quality.					
Garment construction is an important attribute used when assessing apparel quality.					
Garment fit is very important when assessing textile apparel for quality.					
Durability is very important in assessing textile apparel for quality					
Price of an item plays an important role in assessing apparel for quality.					
Brand name is very important in determining apparel quality.					
Country of origin determines the quality of apparel.					
Packaging plays an important role in determining apparel quality.					

SECTION D: Existence of care-label Instructions on Local and Imported**Apparel**

10. When purchasing locally made apparel do they have care-labels? Tick using the following likert scale.

Always = 5, Often = 4, Not sure = 3, Seldom = 2, Never = 1,

Always Often Not sure Seldom Never

11. When purchasing imported apparel do they have care-labels? Tick using the following likert scale.

Always=5, Often=4, Not sure =3, Seldom=2, Never=1,

Always Often Not sure Seldom Never




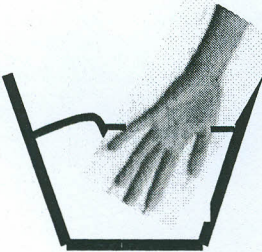
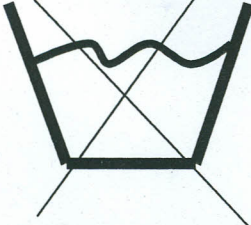
THE END

❖ ***THANK YOU FOR YOUR TIME***

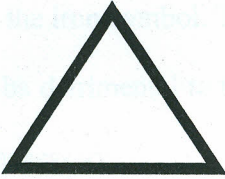
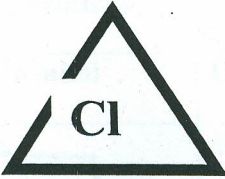
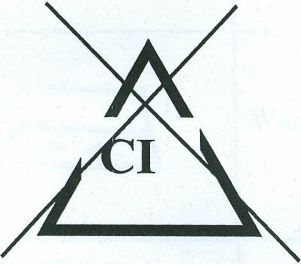
APPENDIX C

CARE-LABEL SYMBOLS AND PHRASES

Washing Symbols

Symbol	Required Phrase	Description of Process
	'Wash in cotton programme' or 'Wash as cotton'	Maximum temperature of Wash: 95°C. Normal Mechanical action Rinsing and Spinning
	'Wash in cotton programme' or 'Wash as cotton'	Maximum temperature of wash: 40°C. Mechanical action Rinsing with gradual cooling Before spinning. Reduced spinning action
	'Wash in cotton programme' or 'Wash as cotton'	Maximum temperature of wash: 40°C. Reduced mechanical action much reduced normal rinsing action, normal rinsing and spinning. Do not wring by hand
	Hand wash	Hand wash. Do not machine wash. Maximum temperature of Wash: 40°C. Wash time: short Wash, rinse and gently squeeze by hand. Do not wring
		Do not wash


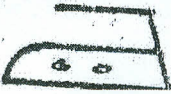


Bleaching Symbols

Symbol	Optional Phrase	Description of Process
	May be bleached	Bleaching according to manufacturer's instructions
	May be chlorine bleached	Bleaching (chlorine-based)
	Do not chlorine bleach	Do not use chlorine based Bleach







Ironing Symbols

The ironing symbols are given in Table D together with examples of recommended applications to various fibre types. The sole-plate temperatures are indicated by the dots in the iron-symbol. The 'do not iron' symbol shall be used in cases where ironing would be detrimental to the fabric and not on easy care fabric to indicate that ironing is not necessary.


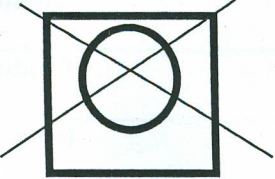


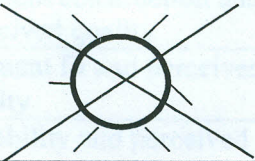
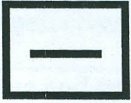
Ironing Symbols

Symbol	Optional Phrase	Description of Process	Examples of Application
	Hot iron	Iron at a maximum sole-plate temperature (hot iron)	Cotton, linen, viscose or modified viscose
	Warm iron	Iron at a maximum sole-plate temperature of 150°C (warm water)	Polyester mixtures, wool
	Cool iron	Iron at a maximum sole-plate temperature of 110°C (cool iron)	Polyester, Nylon, Acrylic, Acetate, Triacetate,
	Do not iron	Do not iron	

Dry-cleaning Symbols

Symbol	Optional Phrase	Description of Process
	Dry clean	Articles which are suitable for dry-cleaning in all solvents normally used for dry cleaning.
	Dry-clean	Articles which are suitable for dry-cleaning in Tetrachloroethylene (Perchloroethylene), Trichlorotrifluoroethane (solvent 113), Trichlorofluoroethane (solvent 11) and hydrocarbons (white spirit), using the normal dry cleaning procedures without restriction
	Dry-clean	Articles which are suitable for dry cleaning in the solvents given in the preceding paragraph but which are sensitive to some dry-cleaning procedures and for which there is a strict limitation on the addition of water during cleaning and/or certain restrictions concerning mechanical action and/or drying temperature.
	Dry-clean	Articles which are suitable for dry cleaning in Trichlorotrifluoroethane (solvent 113) and hydrocarbons using the normal dry cleaning procedures without restriction.
	Dry-clean	Articles which are suitable for dry cleaning in the preceding paragraph, but which are sensitive to some dry cleaning procedures and for which there is a strict limitation on the addition of water during cleaning and/or certain restrictions concerning mechanical action and/or dry cleaning temperature.
	Do not dry clean	Articles which are not suitable for dry cleaning.

Drying After Washing Symbols

Symbol	Optional Phrase	Description of Process
	Tumble dry	Articles which are suitable for tumble drying
	Do not tumble dry	Articles which are not to be tumble dried
	Drip Dry	Articles which are best to hang while wet
	Line dry	Articles which are line dried
	Do not dry in the sun	Articles which are not to be dried in the sun
	Dry flat	Do not line dry

APPENDIX D
LONG TABLES

Descriptive Statistics

	N	Min	Max.	Mean	Standard. Deviation
Symbol 1	227	1	3	2.00	.798
Symbol 2	227	1	3	1.97	.825
Symbol 3	227	1	3	2.02	.849
Symbol 4	227	1	3	1.89	.823
Symbol 5	227	1	3	1.85	.830
Symbol 6	227	1	3	1.88	.832
Symbol 7	227	1	3	1.98	.854
Fibre content and perceived quality	227	2	5	4.13	.978
Fabric construction and perceived quality	227	1	5	3.91	1.467
Fabric finishes and perceived quality	227	2	5	3.96	1.185
Colour fastness and perceived quality	227	2	5	4.01	1.158
Garment construction and perceived quality	227	1	5	3.93	1.439
Garment fit and perceived quality	227	2	5	4.10	1.010
Durability and perceived quality	227	2	5	4.20	1.056
Price and perceived quality	227	3	5	4.64	.698
Brand name and perceived quality	227	3	5	4.46	.680
Country of origin and perceived quality	227	4	5	4.89	.308
Packaging and perceived quality	227	3	5	4.23	.804
Fibre type and purchase decisions	227	2	5	4.08	1.023
Fabric construction and	227	1	5	3.94	1.428

purchase decisions					
Fabric finishes and purchase decisions	227	2	5	3.89	1.215
Colour fastness and purchase decisions	227	2	5	4.01	1.135
Garment construction and purchase decisions	227	1	5	3.91	1.411
Garment fit and purchase decisions	227	2	5	4.07	1.018
Durability and purchase decisions	227	2	5	4.17	1.048
Price and purchase decisions	227	3	5	4.65	.691
Brand name and purchase decisions	227	3	5	4.42	.708
Country of origin and purchase decisions	227	4	5	4.87	.335
Packaging and purchase decisions	227	3	5	4.21	.818
Existence of local care labels	227	1	5	2.35	1.316
Existence of imported care labels	227	1	5	3.86	1.336
Care label instruction and perceived quality	227	4	5	4.87	.335
Care label instruction and purchase decisions	227	3	5	4.21	.818
Valid N (list-wise)	227				

Skewness and Kurtosis Tests

Descriptive Statistics

	Statistics	Skewness Statistic	Std. Error	Kurtosis Statistic	Std. Error
Symbol 1	227	.000	.162	-1.429	.322
Symbol 2	227	.049	.162	-1.530	.322
Symbol 3	227	-.042	.162	-1.614	.322
Symbol 4	227	.216	.162	-1.492	.322
Symbol 5	227	.295	.162	-1.487	.322
Symbol 6	227	.235	.162	-1.519	.322
Symbol 7	227	.042	.162	-1.631	.322
Fibre content and perceived quality	227	-.956	.162	-.101	.322
Fabric construction and perceived quality	227	-.958	.162	-.639	.322
Fabric finishes and perceived quality	227	-.670	.162	-1.120	.322
Colour fastness and perceived quality	227	-.889	.162	-.716	.322
Garment construction and perceived quality	227	-.938	.162	-.658	.322
Garment fit and perceived quality	227	-.906	.162	-.303	.322
Durability and perceived quality	227	-1.018	.162	-.344	.322
Price and perceived quality	227	-1.665	.162	1.137	.322
Brand name and perceived quality	227	-.872	.162	-.422	.322
Country of origin and perceived quality	227	-2.582	.162	4.706	.322
Packaging and perceived quality	227	-.439	.162	-1.320	.322

Fibre type and purchase decisions	227	-.885	.162	-.368	.322
Fabric construction and purchase decisions	227	-.993	.162	-.522	.322
Fabric finishes and purchase decisions	227	-.588	.162	-1.267	.322
Colour fastness and purchase decisions	227	-.906	.162	-.621	.322
Garment construction and purchase decisions	227	-.900	.162	-.674	.322
Garment fit and purchase decisions	227	-.820	.162	-.480	.322
Durability and purchase decisions	227	-.977	.162	-.375	.322
Price and purchase decisions	227	-1.681	.162	1.218	.322
Brand name and purchase decisions	227	-.817	.162	-.602	.322
Country of origin and purchase decisions	227	-2.245	.162	3.068	.322
Packaging and purchase decisions	227	-.399	.162	-1.395	.322
Existence of local care labels	227	.569	.162	-.783	.322
Existence of imported care labels	227	-1.031	.162	-.216	.322
Care label instruction and perceived quality	227	-2.245	.162	3.068	.322
Care label instruction and purchase decisions	227	-.399	.162	-1.395	.322
Valid N (list-wise)	227				