

UNIVERSITY OF EDUCATION WINNEBA
COLLEGE OF TECHNOLOGY EDUCATION, KUMASI

INSTITUTIONAL REVIEW OF CARE LABELLING IN GHANA: A CASE STUDY
OF GHANA STANDARD AUTHORITY IN ACCRA METROPOLIS IN THE
GREATER ACCRA REGION



GLADYS ADZO AMENUVOR

2021

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(190010196)

**A Dissertation Submitted to the Department of FASHION DESIGN AND TEXTILES,
School of Research and Graduate Studies, University of Education, Winneba in Partial
Fulfillment of the Requirements for the award of Master of Technology
(Fashion Design and Textiles)**

APRIL, 2021

DECLARATION

Student's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

SIGNATURE.....

DATE.....

NAME: GLADYS ADZO AMENUVOR



Supervisor's Declaration

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Education Winneba-Kumasi.

SIGNATURE.....

DATE.....

NAME: DR. WILLIAMS SENAYAH

DEDICATION

This work is dedicated to the glory of God for His mercies and guidance, which enabled me to successfully complete this work. To Him be the glory.



ACKNOWLEDGEMENT

I wish to express my deepest appreciation to God Almighty for the wisdom and strength to carry out this research. I also wish to express my heartfelt appreciation and acknowledgement to my supervisor, Dr. Williams Senayah who offered immeasurable guidance and support throughout the research.

My deepest gratitude to my husband Rev. Paul Agbenyegah who supported both spiritually and financially during the conduct of the work. To my parents Mr. and Mrs. Amenuvor and my uncle Mr. Kwasi Wuli for their encouragement.

I also want to acknowledge the contributions of friends and colleagues who encouraged me.



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ABSTRACT

Proper clothing care practices increase clothing lifespan, which indirectly reduces the expenses of consumers in these times of economic hardship. The purpose of the study was to examine the Ghana Standard Authority on care labelling clothing and textiles products and their effectiveness in Ghana. Quantitative research design was adopted and a purposive sampling method was used to select 75 clothing consumers to participate in the study. A well-structured questionnaire was used to solicit information from consumers. Statistical procedures used in data analysis were mainly means and standard deviations, independent-samples t test, and frequency and percentages. Findings from the study showed that in terms of making purchasing decisions, consumers do not consider care labels at the point of purchase. It was also revealed that consumers have little knowledge about care label. In terms of performance of the Ghana Standard Authority it was revealed that they are doing well in terms of protecting consumers by inspecting all imported and locally manufactured goods. Nevertheless, they do not educate consumers about the importance of care labels. Based on the findings of the study, it has been recommended that the Ghana Standard Authority in conjunction with the National Commission for Civic Education to educate consumers about the importance of care labels.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

According to Cant (2006), clothing is an essential aspect of human lives as it protects the human body against strong sunlight, cold, heat, insects, and harmful chemicals.

The care of clothing is very essential as it helps the clothing consumer to be able to care and then to maintain clothes so that they retain their original size, shape and appearance for maximum wearing life (Travis, 2003).

The technological improvements in the fabric and fibre industries have led to numerous man-made fibres, fibre blends, new methods of fabric construction, and a variety of finishes. There are now numerous man-made fibres with their trade names. These man-made fibres are combined with one another or with natural fibres. Fibres are classified into generic groups. Each generic group contains fibres which are significantly different from those in other groups in chemical composition as well as in properties such as the ability to hold a press, launderability and serviceability (Nadiger 2007). Nadiger also explained that, generic names were established by the Federal Trade Commission, and a new generic classification novel became effective in February, 1974, illustrating the changing character of the textiles field. The performance and care required by a fabric are determined by a number of factors, namely the fibre content, the yarn structure, the method of construction, and the fabric finish. With such a wide variety of products on the market, each having different care performance characteristics, it is almost impossible for consumers to be informed about any one product, much less the entire range of products

According to Beltran & Wang (2006), trade names and generic names are not especially meaningful to consumers unless they are accompanied by specific instructions as to how the garment can be properly cleaned and laundered. Therefore, many consumers have based their care knowledge on trial and error experiences with similar garments and mistakes are common occurrence.

The need for care labels indicating proper handling instructions for garments was recognised by the Federal Trade Commission (FTC) in December 1971 in the United States of America (US). A trade regulation rule was issued, effective July 1972, requiring that articles of wearing apparel have permanent labels clearly stating instructions for care and maintenance. Piece goods sold for the purpose of making wearing apparel must also be accompanied by care labels (Calisir, 2013).

The FTC justified its care labelling rule by saying that because of the wide variety of textiles used in today's apparel, the consumer needs to be given proper care and maintenance procedures to avoid damaging the product through improper care, to choose the care that will give the best overall performance, and to be able to select apparel for purchase on the basis of inexpensive, yet effective care.

Calisir (2013) also stated that, before the Act, fabrics were falsely labelled for example silk when it may be an imitation. The regulation require that the silk may only be used when the fibres are obtained from the cocoon of the silk moth. The Act is established to protect consumers from false advertising and also ensures that the consumers is provided with basic information on what they are buying and how to care for it.

Care labels according to Dessouki (2015) are permanent tags which contain regular care information and instructions which are stitched in a finished garment or textile products and will remain legible during the useful life of the product. Care labels have all the relevant information about the care and maintenance of apparel, such as airing, washing, bleaching, drying and ironing, dry cleaning, stain removal, fabric composition, country of origin. Care labels help consumers to use the suitable cleaning procedure for textile goods, in order to reduce the danger of damage to articles. Care labels may be in the form of simple text such as Dry-clean, hand wash, and finish with cool iron or it may involve the use of a number of symbols. Disregard for the care labels can result in deterioration of clothing and textiles products making them unattractive.

Dessouki (2015) also stated that, there are four important factors in laundering or dry cleaning of clothing and textiles products, and these are; temperature, time, washing medium and mechanical action. These four have to be improved for effective care of textiles products. Particular laundering procedures have to be selected based on the fiber and its properties, for example, strength, sensitivity to chemicals and temperature. Additional limitations may be imposed by yarn fabrication processes, fabric construction method and special finishes. The provision of care symbols indicates the recommended procedures which avoid risk causing damage to the textile product being treated. The care symbols usually show the suitable procedure which is acceptable for the product. The recommendation is usually based on the most sensitive property. Proper care and storage of clothes help to keep them in good condition so that appearance of the wearer is enhanced. All clothes need to be cleaned but different types of clothes require different types of cleaning.

1.2 Statement of the Problem

Studies have addressed consumer knowledge on care labels in clothing and several sustainable clothing design strategies also exist. Unfortunately, there is limited literature on the effectiveness of institutions responsible for care labelling of clothing and textile products in Ghana.

Empirical gaps exist on how these institutions are regulating the care labelling of clothing and textile products and the extent to which it is affecting consumers negatively. This empirical gap, if unaddressed, has serious implications on the Ghanaian consumer.

From the above background, the researcher wonders if the Ghana Standard Authority mandated to regulate the care labelling of clothing and textile products is effective in Ghana.

1.3 Purpose of the Study

The purpose of the study is to examine the Ghana Standard Authority on care labelling clothing and textiles products and their effectiveness in Ghana.

1.4 Objective of the Study

The study seeks;

1. To examine the care labelling rule globally.
2. To examine consumers' knowledge about care labels in clothes.
3. To examine the functions and effectiveness of the Ghana Standard Authority in relation to care labelling of clothing and textile.

1.5 Research Questions

An analysis of the above stated purpose indicates that, the following research questions are appropriate to form the focus of the study.

1. How does care labelling of clothing and textile be regulated globally?
2. What is the knowledge of consumers about care labels?
3. What are the functions of the Ghana Standard Authority and how effective is it in relation to care labelling of clothing and textile?

1.6 Significance of the Study

Due to the increasing number of fibre and fabric choices available, the average consumer today may not have enough knowledge of modern textiles to be certain of using the correct care procedures for cleaning and maintaining their clothing. This problem necessitates a research into care practices that expand the life of existing clothes. The findings of this study would inform clothing consumers and the general public about the lapses associated with the care of clothes, and thereby, get the best satisfaction out of money spent on clothing.

The research may also bring to light the institutions responsible for care labelling of clothing and textiles products globally and in Ghana. Finally, the findings of this study would also serve students, teachers, and experts in clothing and textiles as an important reference source. Recommendations made in this study would set a new agenda for further studies on institutional review of care labelling in Ghana.

1.7 Limitation of the Study

The study examines the Ghana Standard Authority on care labelling clothing and textiles products and their effectiveness in Ghana. Like most studies, this study also had limitations. The first and foremost is unenthusiastic attitude of respondents due to the outbreak of corona

virus in the country last year for the fear of contracting the virus. This has also affected the sample size which has been used for the study. Another limitation is finance to carry out study due to economic hardship in the country as a result of the outbreak of the deadly virus which affected every aspect of the economy.

1.8 Delimitation of the Study

The study is confined to Achimota Metropolis in the Greater Accra region of Ghana.

1.9 Organization of the Study

This study is organized into five chapters. The first chapter discussed the introduction, which emphasized background to the study, statement of the problem, purpose of the study, research questions, significance of the study, limitation of the study and delimitation of the study. Chapter Two assesses the literature related to this study and presents a conceptual framework on the study. Chapter Three considers the research methods, including the research design, study area, population, sampling procedure, data collection instruments, data collection procedure, and data processing and analysis techniques. In Chapter Four, the results are examined, while Chapter Five, which is the final chapter, summarizes the main findings, and provides conclusions, recommendations, and suggestions for further research.

CHAPTER TWO

LITERATURE REVIEW

2.0 This chapter reviews relevant related literature on the topic under study. These include the following major headings: Importance of Care Labelling, Voluntary Care Labelling, Mandatory Care Labelling, Care Labelling Regulations, The Labelling Legislative Instrument (LI) in Ghana, The Ghana Standard Authority, Interpretation of Care Instructions and Symbols

2.1 Importance of Care Labelling

Identification of an item may come in different forms but labelling is one sure way of placing identity on objects. When it comes to the sale of textile products, manufacturers are obliged to identify what they sell to consumers. The content of a textile product cannot be ascertained unless there is a label that confirms what the content of the product is. Care label is a tag, containing regular care information and instructions that is stitched to finished garment and it remain legible during the useful life of the product. They act as guide to 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 (Federal Trade Commission, 1994).

Care labels may also be used as part of the evaluating criteria used in the decision-making process to purchase apparel products. Care labels therefore can influence consumer perception of an apparel quality, such as future performance of a garment. Care labels give care instructions for the item and also provide details such as, fibre content, size, brand name, place of origin and many others (Ghosh, Das & Bhattacharyya, 2014).

The Federal Trade Commission (1994) proposed that adequate consumer information should be truthful, intelligible, relevant and complete. When the consumer has enough information, the consumer has confidence in judging the characteristics and qualities of goods in making a choice which meets the consumer's needs. There are two forms of labelling which are practiced globally. This includes voluntary labelling and mandatory labelling.

2.1.1 Voluntary Care Labelling

According to Ginetex (2011), care labelling was introduced by Groupement International d'Étiquetage pour l'Entretien des Textiles (GINETEX – International Association for Textile Care Labelling) in Europe about 1950. It comprises eighteen member countries namely Belgium, France, Germany, England, Netherlands, Israel, Switzerland, and Spain among others. It is a voluntary service hence it was not regulated by any authority. It originated in the Netherlands and then spread to France and the other European countries as a voluntary service to the consumers offered by the textile and apparel industry.

Care labeling is not required under European Union law, but certain member countries, such as Austria, may require this labeling. However, the European Union may find manufacturers liable for defective products under the Product Liability Directive of 1985 if this information is not provided. Textile producers are only required to state the fiber composition of their textile products under the optional care labeling regimen. Care labels are not mandatory in the United Kingdom, though their use is strongly encouraged. The UK Fashion & Textile Association (UKFT) recommends the use of GINETEX symbols, which are also implemented throughout Europe as well in many other countries including Japan, India, and China (Ginetex 2011).

Ginetex also stated that, the care symbols may not be reproduced, issued or used without a special agreement with GINETEX. Such an agreement commits companies to use the symbols correctly at all times. Unauthorized or improper use of the symbols may lead to legal action.

The Textile Labelling Act is a federal law which was decreed on 1 April 1969 in Germany. The law was completely rewritten and the new version was announced on 14 August 1986. The law was last changed by decree on 14 November 2006. This law is part of the German consumer protection. Textiles to be commercially sold in Germany, commercially imported into Germany or produced to be sold in Germany have to have a label indicating the type and fraction based on weight of the textile raw materials it is composed of. Also any catalogue, brochure or other type of commercial have to state the composition of the textiles to be sold. There are certain rules on how to determine the weight fractions and how to calculate them.

Textiles in the context of this law is any good, fabric, part of mattress or camping goods, lining of shoes and gloves, floor-covering and many other goods which consist of at least 80% textile raw materials. Textile raw materials are filaments or hairs which can be spun, including bands and flexible tubes not wider than 5mm. For things made of wool and silk there are special regulations. One does not have to declare the country of production on labels. This declaration is optional. Care instructions are printed on labels for liability and compensation-prevention and are also optional (Ginetex 2011).

2.1.2 Mandatory Care Labelling

The rapid development and introduction of innovative synthetic textiles into the market in the 1960's and 1970's meant that clothing consumers' familiarity with and knowledge of how to care for new fabrics was often flawed. This led to damage of clothing through shrinkage, melting and running of colours through inappropriate care and cleaning methods by consumers

and dry cleaners. It is likely that incorrect care of clothing and textiles caused considerable damage to clothing and textiles prior to the introduction of the mandatory labelling (ACCC, 2008). The mandatory care labelling was first introduced by Gazette Notice on 13 February 1979 based on Australian Standard (AS) 1957-1978 and has undergone review and amendment in 1989, 1997, 1998 and most recently in 2003 in Australia. The most substantial review of the mandatory care labelling standard was completed and a report released in June 1997.

The 1997 review concluded that there was a case to continue the care labelling regulation on the grounds that there was sufficient doubt that suppliers would continue to provide care labelling information on a voluntary basis and that abandoning the care labelling standard had the potential to adversely affect consumers.

Rubik, and Frankl, (2005) stated that, dry cleaners were concerned that in the absence of a mandatory labelling, garments would not carry care labelling instructions resulting in an increase in the level of damage claims from customers due to dry cleaners attempting to dry clean garments without suitable dry cleaning instructions, as well as a loss of customers to dry cleaners as a result of people laundering garments more suitable for dry cleaning at home.

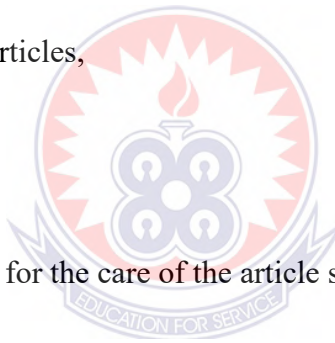
The 1998 review updated the mandatory standard to reference the then revised Australian Standard 1957-1998 Textile Care labelling and attempted to address concerns that the standard was too prescriptive. The 1998 review also considered but ultimately rejected amending the mandatory regulation to allow the use of symbols only in care labels due to industry concerns that based on experience in Europe, UK and US, care symbols were not well understood by consumers.

Schiller (2011) has revealed that, in 2003, the mandatory standard for care labelling was amended on 12 December 2003 to add some words to Clause 3.6 of the Care labeling phrases and symbols and to remove the sunset clause from the standard. A Regulation Impact Statement was not required for the 2003 amendments due to the minor nature of the changes and the absence of complaints or requests for modifications to the mandatory standard.

The current consumer product safety information standard for Care labeling of clothing and textile products came into effect from 1 January 2004.

The standard covered a variety of items from clothing, household textiles, furnishings, piece goods made from textiles, plastic coated fabrics, suede skins, leathers and furs. The standard requires that care instructions be:

- Permanently attached to articles,
- Written in English,
- Legible,
- Appropriate and adequate for the care of the article so that when followed the article is not damaged.
- Accessible at the point of sale.



According to Schiller (2011) the objective of the consumer product information standard for care labeling is to:

- Prevent damage to clothing and textiles caused through inappropriate treatments.
- Enable textile products to be properly maintained, for the useful life of the product to be extended.
- Enable consumers to be fully informed about the potential maintenance costs of textile products at the point of purchase.

- Inform dry cleaners and launderers of appropriate cleaning methods to be applied to the garments.

According to Revised Taiwan Care Labelling Standard - CNS 8148 (2014), textile and apparel products which are imported, manufactured and sold in Taiwan must comply with the labelling requirements authorized under Article 11 of the Commodity Labelling Act. The labelling requirements are regulated under the Labelling Criteria for Textiles and Labelling Criteria for Apparel and Garments. Providing care instructions is one of the mandatory labelling requirements in Taiwan. Recently, the Bureau of Standards, Metrology and Inspection (BSMI) released the revised national standard CNS 8148. This standard is meant to protect consumer interests requiring business operators to use the correct methods for clothing maintenance by giving clear washing and cleaning instructions on accurate and comprehensive labels.

Schiller also explained that, the requirements of the Taiwanese Standard CNS 8148:2008 are not entirely identical to those under ISO international standards. There are slight differences in the symbols and in the number of symbols required on a label. The Ministry of Economic Affairs made a revision in August 2014 to comprehensively adjust and update the corresponding care label symbols under CNS 8148 to be consistent with the ISO international standard 3758:2012. The revised CNS 8148:2014 standard supersedes the 2008 version. The 2014 version contains 5 basic textile care symbols in the order of washing, bleaching, drying, ironing and professional textile care treatments in dry and wet cleaning (excluding industrial laundering) and also a number of additional symbols. The care instructions must be expressed mainly in terms of symbols. Words may be used to supplement the symbols in cases where they are needed. Additional written care information may be needed when specific care is not covered by an appropriate care symbol.

In accordance with Article 11 of the Commodity Labelling Act, correct and proper labelling for textile and apparel or garments is required to contain the below information:

- Name, telephone & address of manufacturer or importer
- Size or dimension
- Country of origin
- Fiber composition
- Care instructions

According to Faust, Carrier, & Baptist, (2006), the Canadian Textile Labelling Act is a regulatory statute. It requires that consumer textile articles bear accurate and meaningful labelling information to help consumers make informed purchasing decisions. The Act prohibits the making of false or misleading representations and sets out specifications for mandatory label information such as the generic name of each fibre present and the manufacturer's full name and postal address or an identification number. The Act allows designated inspectors to enter any place at any reasonable time and examine textile fibre products, open packages, examine and make copies of documents or papers, and seize products which do not conform to the Act and Regulations

Prohibitions

- Paragraph 3(a) prohibits a dealer from selling, importing or advertising a prescribed consumer textile article unless it bears a label stating the fibre content of the article.
- Paragraph 3(b) requires that this label be applied in accordance with all applicable provisions of the Act. Paragraph 6(b) requires that each label containing a representation with respect to the fibre content show the identity of the manufacturer.

- Section 4 prohibits making any representation with respect to the advertising of the textile fibre content of a consumer textile article unless it is made in accordance with the Regulations.
- Subsection 5(1) prohibits the sale, importation or advertisement of a consumer textile article that has a label applied to it that contains any false or misleading representation that relates to or may reasonably be regarded as relating to the article.
- Subsection 5(2) prohibits the making of false or misleading representations related to textile fibre products.
- Subsection 5(3) provides guidance on what types of expressions, words, figures, depictions, descriptions or symbols that may be considered to be false or misleading representations.

Offence and punishment

Every dealer who contravenes any of section 3, 4 or 5 is guilty of an offence and liable to a fine of up to \$5,000 on summary conviction, or to a fine of up to \$10,000 upon indictment. Every person who contravenes any provision of the Act, other than section 3, 4 or 5, or of the Regulations is guilty of an offence and is liable to a fine of up to \$1,000 and or imprisonment up to six months on summary conviction, or to a fine of up to \$3,000 and or imprisonment up to one year upon indictment (Faust, Carrier, & Baptist, 2006).

2.2. Care Labelling Regulations

According to the International Organization for Standardization (2005), the apparel and textile industries worldwide have set different standards for care labelling a product. It becomes the suppliers or manufacturers responsibility to make sure customers understand the right methods of maintaining a product. Different countries have set different standards, rules, and laws for

the manufacturers or exporters that need to be duly followed. Some of these standards are being discussed below.

2.2.1 Labelling Regulations and Requirements in the United States of America (USA)

In the United States, the Federal Trade Commission (FTC) and Bipartisan Policy Center (CPB) work together to provide clothing label requirements to both domestic and foreign textile manufacturers. These requirements are summarized below:

1. Fibre Content

In compliance with the Wool Products Labelling Act and the Textile Fiber Products Identification Act, which are collectively known as the Textile and Wool Acts, all garments sold in the United States must feature clear labelling regarding their fiber content. These contents must be listed in descending order in terms of percentage, and it is not necessary to list non-fibrous materials in this list.

All fibers included in the garment that have functional significance must be listed, but non-functional fibers need not be listed if their concentrations in the final garment are fewer than 5 percent each. Instead, these fibers can be declared together as a total percentage under the heading "other fibers."

In addition, decorative items, such as braids and belts, do not need to be listed if they comprise less than 15 percent of the garment. If ornamentation on a textile product does not exceed 5 percent of its total composition, it can be omitted, but the phrase "Exclusive of Ornamentation" should be listed at the bottom of the label. Linings should be labelled separately, and all textile materials should be listed under their generic names instead of their trade names.

2. Country of Origin

The FTC requires that all clothing labels disclose the country where the clothing was created. A textile product can only be labelled "Made in USA" if it was manufactured in the USA and

it is made from materials that were manufactured in the United States. If a garment was made in the United States from materials that were created in a different country, its label must state "Made in the USA of Imported Materials."

3. Washing and Care Instructions

The FTC enforces the Care Labelling Rule, which requires all textile manufacturers selling products in the United States to provide labels that inform consumers regarding the best ways to care for their products. For instance, care practices that could harm the garment must be disclosed, and suggested washing temperatures are also required. These labels must be clear, legible, and designed to last the life of the garment.

4. Manufacturer Identification

This aspect of the FTC's garment labeling codes also helps the manufacturer marketing the brand. A garment label on a textile product sold in the USA must feature the registered identification number (RN) of the manufacturer, importer, or corporate entity handling the sale of the product. All domestic textile companies and importers are required to have RNs. This number establishes dealer identity, and the manufacturer can further reinforce the brand identity by including the name of the manufacturer on the garment label.

5. Label Placement

It is possible to include all of the FTC's required information on one label, or this information can be split into separate labels. These labels must remain attached to the garment until it reaches the consumer, which means that this FTC required information cannot be included on hang tags. If a garment has a neck, country of origin information must be located on the inside center of the neck, and other labels must be placed in easily noticed locations.

2.2.2 Labelling Regulations and Requirements in the United Kingdom (UK)

Yurchisin and Watchravesringkan (2008) stated that, although clothing labels are small, they have to contain specific information that is understandable to the consumer. These are details a label needs to include in the UK.

1. Fibre Content

As part of the Government's Textile Labelling Regulations, fiber content should be clearly displayed on the label. To showcase this, the manufacturer will need to include the main fiber content of the garment in percentages. For example, "100% cotton."

The regulations that cover fiber content explain definitions of certain materials and using expressions such as "pure" or "100%". There is also information on common descriptions and how to determine garment composition.

The manufacturer also has to consider suitable labeling if the product will be sold in other locations outside of the UK as there will be different regulations and labelling regulations to adhere to.

2. Country of Origin

This information is not compulsory in garment production in the UK. However, as part of trading regulations, it is essential to state the country the product was made. This is required so that brands don't mislead customers about where the item was created. For example, if the clothing is designed in the UK but manufactured in China, "Made in China" has to be clearly displayed.

3. Washing and Care Instructions

Care instructions are not a mandatory feature of clothing labels in the UK, but they are highly recommended to assist the customer in prolonging the life of the garment. Most manufacturers provide care and washing instructions on clothing during the production process as a standard operating procedure. The manufacturer can work with the supplier to make sure the information is beneficial and clear to the audience.

Depending on the intended consumer audience, the manufacturer can include short, snappy care instructions such as:

- Wash inside out
- Dry flat
- Iron on reverse
- Wash similar colors together
- Reshape while damp
- Dry-clean only



There is also a range of universal symbols used in Europe named GINETEX that identify specific wash and care requirements. There are five main types of symbols including:

- Washing temperature and type
- Drying
- Ironing temperatures
- Bleaching options
- Dry cleaning only

4. Flammable Garments

If the manufacturer is producing specific types of garments such as children's clothing, baby clothing, and nightwear, the clothing label has to display wording that states the producer meets BS-5722, which is the British Standard for flammability.

If clothing does not meet these standards, the producer has to state on the label, "**KEEP AWAY FROM FIRE.**" This wording does carry some specific font and character requirements to ensure it can be read clearly. It must be in bold and red Arial font and in at least size 10 in capital letters.

This is a labelling requirement that should always be adhered to as any failure to follow this requirement can have severe consequences for consumers if they are not fully informed.

5. Label Placement

The position of the label should be clearly specified when the producer completes the tech pack. Most clothing manufacturers will place a label on the inside seam of the garment for ease. This way it is easy to be seen but hidden from the outside.

The amount of information the manufacturer needs to include will determine the length of the label. Placement of the label should be worked into the design and discussed with the clothing manufacturer to ensure all information is clearly displayed.

6. Brand Information and Style Numbers

Branding is a significant factor in clothing production, and something as simple as a small label can make a world of difference. Many consumers may ask "where was that from?" or "what size is it?"

As the manufacturer does not have a lot of space, a logo will suffice. This can usually be included on the top or bottom of the little satin label that is woven into the side of the garment. This also complements the main inside neck branding and size information.

2.2.3 Labelling Regulations and Requirements in the European Union (EU)

Internal Market Committee, (2011) explained that the European Union (EU) has laid down a variety of regulations regarding the labelling of textile products that are sold within its member nations. These textile labels must be provided in the native language of the member state where the garments are sold, and they must also include the following information:

1. Fiber Content

The fiber content of textile products sold within the European Union must be clearly labelled in an accessible area. The label containing this information must be securely attached and durable, and this information should not include abbreviations aside from internationally standardized mechanized processing codes.

Only textile products that are composed exclusively of one fiber can be labelled as "100 percent," and decorative fibers present in concentrations of less than 7 percent need not be labelled. Additionally, it is not necessary to label antistatic substances that are present in concentrations of less than 2 percent, but any non-textile components of animal origin must be marked.

2. Country of Origin

Legislation regarding declaration of country of origin is not harmonized within the EU. Certain member nations may require this type of labelling, but others may not.

3. Washing and Care Instructions

Care labelling is not required under EU law, but certain member countries, such as Austria, may require this labelling. However, the EU may find manufacturers liable for defective products under the Product Liability Directive of 1985 if they do not provide this information, so including care labelling with textile products sold in the European Union is highly recommended.

4. Manufacturer Identification

Manufacturer identification is not required under EU law. However, producers are strongly advised to include the branding information with items sold in the European Union to improve the brand exposure.

2.2.4 Labelling Regulations and Requirements in Australia

According to Australian Competition and Consumer Commission (2008) Textile manufacturers seeking to do business in Australia must follow these labelling guidelines.

1. Fiber Content

Australia no longer mandates fiber content labelling. This type of labelling was required until 2010, but it lapsed in 2011 when the Australian Consumer Law was passed. Nevertheless, it is still considered to be the best practice in this country to clearly declare the percentage of each fiber in descending order.

It is, however, important to point out that the Australian state of New South Wales (NSW) still has fiber content labelling laws. It is necessary to comply with these laws to sell textile products in this state.

2. Country of Origin

Different labelling requirements are mandated for items that are made wholly in Australia, partially in Australia, or wholly imported. These requirements are detailed in Competition and Consumer Act 2010, Commerce Act 1905, and Customs Act 1901.

3. Washing and Care Instructions

Australia has comprehensive care labeling laws that are enforced by the Australian Competition and Consumer Commission (ACCC). Care labels in Australia must provide consumers with information on how to:

- Care for textile products.
- Understand cleaning costs, such as dry cleaning, associated with the purchase of a textile product.
- Use the correct water temperature to clean products.
- Maximize the usable life of textile products.
- Avoid damage to other clothing during washing.

4. Manufacturer Identification

Manufacturer identification labelling is not explicitly required in Australia. However, it is important to properly brand the products if manufacturers want to increase the brand exposure.

2.3.0 The Labelling Legislative Instrument (LI) in Ghana

It is often said that ignorance of the law is no excuse. It is important manufacturers to note that there is a law that regulates labelling in Ghana. Breach of the law on the back of ignorance will not win any sympathies at the law court. The Ghana Standard Authority came out with the labelling rules based on the standard decree, (N.R.C.D.173) in 1992, 29th day of April. Once

these rules were made based on the law, it has legal backing and hence must be obeyed and implemented to the letter. Apart from ready to eat foods usually sold in restaurants and other eateries, all pre-packaged foods, cosmetics, textiles, and drugs must have labels that give more information about the product to inform consumers on what they are buying.

Benefits of Labelling to Consumers

- Consumer safety: Labelling prevents consumers who are allergic to some ingredients in a product by listing the ingredients.
- Regulatory compliance: Labelling is mandated by law, hence labelling your product is one way of complying with the law.
- Competitive urge: Through labelling manufacturers are able to showcase the superiority of their formulation through the listing of ingredients and claims, thereby attracting more customers.
- Usage instructions: To avoid unintended use of products, instructions for use on labels help consumers use products according to the intended purpose.
- Storage instructions: Labelling helps consumers to products under certain temperature limits. The label alerts customers and consumers on how to preserve these products before usage.
- Manufacturing dates, expiry or best before dates are very essential to inform consumers as to when they can be used or not.

2.3.1 The Ghana Standard Authority

The Ghana Standards Authority (GSA) was established in August, 1967, as the National Statutory Body responsible for the management of the nation's quality infrastructure embracing the three (3) pillars of Metrology, Standardization and Conformity Assessment that is (Testing,

Inspection and Certification). A sound quality infrastructure provides the necessary assurance that goods and services are of acceptable quality. Again, it promotes the growth of industry, enhances sustainable development and contributes to good public governance. The services rendered by Ghana Standards Authority (GSA) are essential for economic growth. This is because Standards bring technological, economic and societal benefits. They help to harmonize technical specifications of products and services making industry more efficient and breaking down barriers to international trade. Conformity to Standards helps reassure consumers that products are safe, efficient and good for the environment (www.gsa.gov.gh).

The Authority is legally mandated to undertake:

- National Standards development and dissemination
- Testing Services
- Inspection Activities
- Product certification scheme
- Promoting Quality Management Systems in Industry
- Destination Inspection of imported High Risk goods
- Calibration, Verification and Inspection of Weights, Measures and Weighing and Measuring Instruments
- Pattern approval of new weighing and measuring instruments
- Advise the Ministry of Trade and Industry on standards and related issues



Vision of the Ghana Standard Authority:

- To become a model of excellence for the development and dissemination of standards and related subjects.

Mission of the Ghana Standard Authority:

- To develop, adopt and disseminate standards in an efficient manner to the government, private sector and consumers in order to improve the competitiveness of Ghana.

2.3.2 Departments under the Standards Directorate

The standards directorate is responsible for the development, maintenance and dissemination of Standards on food, Agriculture, Chemistry and Materials (textiles).

Food and Agricultural Standards Bureau

The food and agricultural standards bureau develop, maintains and disseminates standards for processed foods, raw agricultural produce and fertilizers, for industry, regulators, government, consumers etc.

Chemistry Standards Bureau

The chemistry standards bureau develops standards for areas such as paints, varnishes, lubricants, soaps, detergents, cosmetics, plastics, rubber, paper, water, petroleum, rubber, environmental quality and herbal medicine etc.

Textiles Standards Bureau

The textiles and garments bureau develops standards for various textile fabrics and leather as well as provides specifications for garments, ornaments and handicraft.

2.3.3 Import Inspection

This Department conducts inspection of High Risk Goods imported into the country, for which the Ghana Standards Authority (GSA) has been appointed as the Competent Authority by the Ministry of Trade and Industry since 2003 (www.gsa.gov.gh).

Import Inspection

Is a system to ascertain the quality and safety of products through conformity assessment at their points of entry.

Conformity Assessment

A process whereby a product, process, service or a system is evaluated with the object of determining either directly or indirectly whether or if the relevant requirements are fulfilled. (The procedure should ensure confidence of consumers, public authorities and manufacturers.)

The scheme requires all importers to register with GSA and comply with documented procedures for clearance.

Labelling Requirements for Imported Products

With respect to compliance inspection of imported goods, the following are the labelling requirements as specified in the Ghana Standards Authority General Labelling Rules, 1992 (L.I.1541)

1. Labelling requirements for the imported products
 - Name of product
 - List of ingredients in food
 - List of active ingredients and their levels in drugs
 - Date of manufacture and Expiry date or Best before or Use by date in respect of food
 - Date of manufacture and Expiry date in respect of drugs
 - Storage conditions
 - Instructions or directions for use
 - Net content
 - Name and address of manufacturer

- Country of Origin
 - Date of manufacture (as applicable)
 - Batch or Lot number
 - Electro-technical or chemical; characteristics for goods other than food and drugs
 - The trade mark or brand name shall not be substituted for the name of a food
1. Marks or labels shall be printed, impressed, embossed, or stamped
 2. Where marks or labels are stamped they shall be in indelible ink and legible.
 3. All information on the label in a foreign language other than English shall be translated into English. Failure to comply may lead to impoundment of such goods or products
 4. Electric lamps (fluorescent lamps and electric bulbs) shall carry information on the ratings, among others.
 5. All electronic equipment or items and other item where applicable shall carry Guaranty or Warranty information of at least six (6) months
 6. All electronic equipment or items and instruments shall carry safety information and or safety signs.
 7. Batteries must carry clearly the ratings and type
 8. Air conditioners and Compact Fluorescent Lamps (CFLs) shall carry information on Energy Efficiency Ratings.

2.4. Interpretation of Care Instructions and Symbols

Care instructions according to Laitala and Klepp, (2011) provide guidelines to consumers about apparel care, and the best cleaning procedures to be used for a particular clothe. Garments with ease of care are often preferred over garments with complicated or difficult to understand care procedures. According to the Federal Trade Commission's Care Label rule, care labels may be composed of either words or symbols. Irrespective of whether the content is words, symbols,

or both, care instructions appear in the following order: Washing, Bleaching, Ironing, Dry-cleaning and Drying.

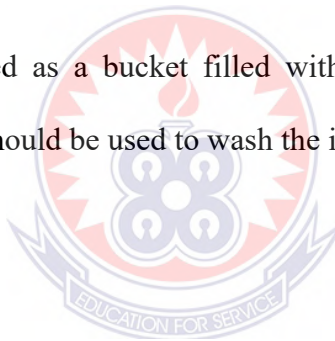
Washing

Laitala and Klepp, (2011) also explained that different cleaning operations are done with water or water containing detergent, alkali or builders. The washing symbol states whether domestic laundering is possible or not and this applies to both hand washing or by machine.

2.4.1 Washing Symbols and their Meaning



Machine Wash Symbol: depicted as a bucket filled with water, tells the consumer what temperature or machine setting should be used to wash the item of clothing.



Temperature indication: inside the normal wash symbol, there will either be a temperature value or 1 to 6 dots that signify temperature ranges.

- One Dot = 30 C
- Two Dots = 40 C
- Three Dots = 50 C
- Four Dots = 60 C
- Five Dots = 70 C
- Six Dots = 95 C



Permanent Press: the permanent press symbol has one line beneath the standard wash symbol.

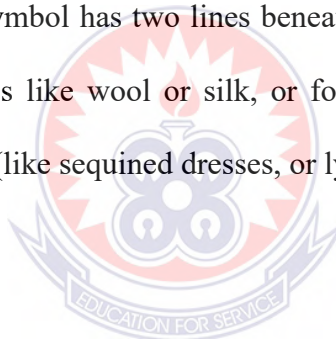
Permanent Press fabrics have been treated with chemicals to ensure they resist wrinkles and retain their original shape. If a piece of clothing is a permanent press, it usually means that you shouldn't iron it.



Gentle Cycle: the gentle cycle symbol has two lines beneath the standard wash symbol. The gentle cycle is for delicate fibres like wool or silk, or for items of clothing that could be damaged by a vigorous washing (like sequined dresses, or lycra).



Hand Wash: the hand wash symbol is the standard wash symbol with a hand at the top. For hand wash clothing, do not use a washing machine. Instead wash garments in a sink or small tub, using your hands to ensure that the cleaning liquid is thoroughly rubbed into the material and subsequently rinsed out.





Do Not Wash: the do not wash symbol is the standard wash symbol with a cross through it. If the label instructs the consumer not to wash the item, it will have to be dry cleaned after it gets dirty.

2.4.2 Bleaching

Bleaching is a process carried out in an aqueous medium before, during or after washing, requiring the use of an oxidizing agent including either chlorine or oxygen or non-chlorine products, for the purpose of improving soil and stain removal and or improving whiteness. The triangle symbols are used to express chlorine based bleaching processes. Bleaching instructions depend on the fabric and garment properties. The triangle provides information on whether the article can or cannot be bleached (Federal Trade Commission, 2005).



Bleaching is allowed: A triangle without anything in the middle means that any kind of bleach can be used on the clothing when needed.



Chlorine bleach only: Only chlorine bleaching is allowed.



Non-chlorine Bleach Only: A triangle filled with diagonal lines means that only non-chlorine bleaches should be used.



Do Not Bleach: A solid black triangle with crossed lines means the consumer should not attempt to use any kind of bleach on this garment.

2.4.3 Ironing

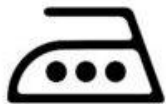
The ironing symbol is shaped like an old-fashioned iron. The iron symbolized the domestic ironing process. Maximum temperature level being indicated one, two, three dots placed within the symbols. The dots identify the temperature ranges of the iron (cool, warm and hot or low, moderate and high). In common irons, these setting ranges are sometimes also assigned to specific raw materials. The maximum temperature must be selected solely on the basis of the care symbol and not according to the raw material content of a textile article.



Iron at Low Temperature: iron at a maximum sole plate temperature of 110°C for silk fabric. This corresponds with the polyacrylic, polyamide (nylon), acetate setting.



Iron at Moderate Temperature: iron at a maximum sole plate temperature of 150°C for polyester fabric. This Corresponds with either Wool, silk, polyester or viscose temperature setting. Iron under a moderately moist intermediate cloth. A steam iron can be used.



Iron at High Temperature: iron at a maximum sole plate temperature of 200°C for cotton fabric. It also corresponds to the Cotton or linen temperature setting of the iron. Iron while damp or moisten as required. Use an ironing cloth on shiny or pressure-sensitive items or iron them inside out. A steam iron can be used.



Do not Steam: steam ironing will harm garment, but regular dry ironing at indicated temperature setting is acceptable.



Do not iron: ironing is not allowed. Garments can't be smoothened or finished with an iron.



2.4.4 Drying

Drying is a process carried out on a textile article after washing, with the intention of removing residual water by line drying, or drip drying, or flat drying, or drying in the shade. The method chosen depends on the function of the clothing and textile product. Square is the symbol for the drying process (Thiry 2008).



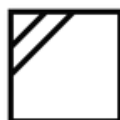
Line dry: is a process carried out on a textile article after washing and hydro-extracting, with the intention of removing residual water by hanging on a line or hanger.



Dry flat: is a process carried out on a textile article after washing and hydro-extracting, with the intention of removing residual water by lying horizontal.



Drip dry: is a process carried out on a textile article after washing without hydro-extracting, with the intention of removing residual water by hanging wet articles on a line or hanger.



Dry in the shade: is a process carried out on a textile article after washing without hydro-extracting, with the intention of removing residual water by hanging wet articles on a line or hanger in a shady place.



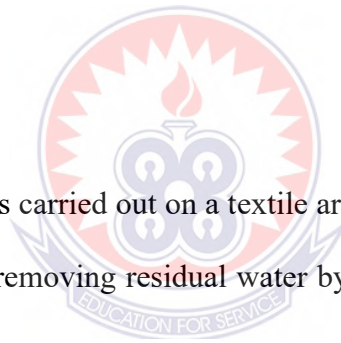
Line dry in the shade: is a process carried out on a textile article after washing and hydro-extracting, with the intention of removing residual water by hanging on a line or hanger in a shady place.



Dry flat in the shade: is a process carried out on a textile article after washing and hydro-extracting, with the intention of removing residual water by lying horizontal in a shady place.



Drip dry in the shade: is a process carried out on a textile article after washing without hydro-extracting, with the intention of removing residual water by hanging wet articles on a line or hanger in a shady place.



Tumble drying

Tumble drying is a process carried out on a textile article after washing without hydro-extracting, with the intention of removing residual water by hanging wet articles on a line or hanger.



Mild drying process: Select a mild process with reduced thermal action (lower temperature (60 °C), duration of treatment).



Normal drying process: Drying in the tumbler is possible under normal load and temperature (80 °C) without limitations.



Tumble dry possible on high heat: Machine dryer is used at a high heat setting.

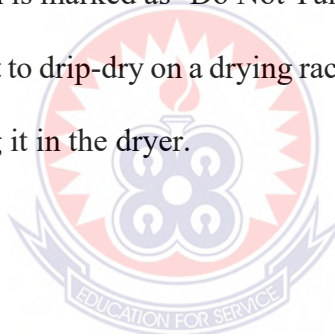


Do not tumble dry: When an item is marked as ‘Do Not Tumble Dry’ with a cross through the drying symbol, leave this garment to drip-dry on a drying rack, in an airing cupboard, or outside on the dry line rather than putting it in the dryer.

Wringing



Do not wring: Wring not allowed.



2.4.5 Dry cleaning

Dry cleaning is a fabric cleaning process with organic solvent to remove dirt and other types of stains. The circle symbolizes the dry cleaning process for clothing and textile products (excluding leather and fur). The letters within the circle are intended for professional textile cleaners. They give information on the solvents that can be used during the cleaning process. The bar below the circle indicates that certain limitations in the dry-cleaning process are required. These may concern the mechanical action, addition of moisture, bath and or drying temperature. When choosing the cleaning process, the professional textile cleaner must also

take into account the nature of the textile materials and the degree of soiling (International Organization for Standardization 2005).



Dry cleaning in any solvent, any cycle, any moisture, any heat.



Dry cleaning in any solvent. Usually used with other restrictions on proper dry cleaning procedure.



Any dry cleaning solvent except trichloroethylene can be safely used. Usually perchloroethylene, white spirit or solvent-113 is used.



Dry cleaning in the solvent accordance with P Strict limitation on amount of water, reduced mechanical action, low drying temperature, no self-service cleaning allowed.



Dry cleaning is done using only petroleum solvent. Usually used with other restrictions. White spirit or solvent-113 is used.



Do not dry clean: dry cleaning is not allowed.

2.5 Conceptual Framework

The conceptual framework of the study is developed, after a thorough review of the literature, by the researcher. As discussed earlier, the emphasis is on institutions responsible for care labelling of clothing and textile products globally and then narrowed down to Ghana. In this regard, the study focuses on the following areas such as the importance of labelling, the two types labelling thus voluntary care labelling and mandatory care labelling, it also look at labelling regulations in some countries like United States of America (USA), United Kingdom (UK), European Union (EU), and Australia. It also looks at care labelling in Ghana which focus on the functions of Ghana Standard Authority in relation to labelling and interpretation of care instructions and symbols such as washing, bleaching, ironing, drying and dry-cleaning.



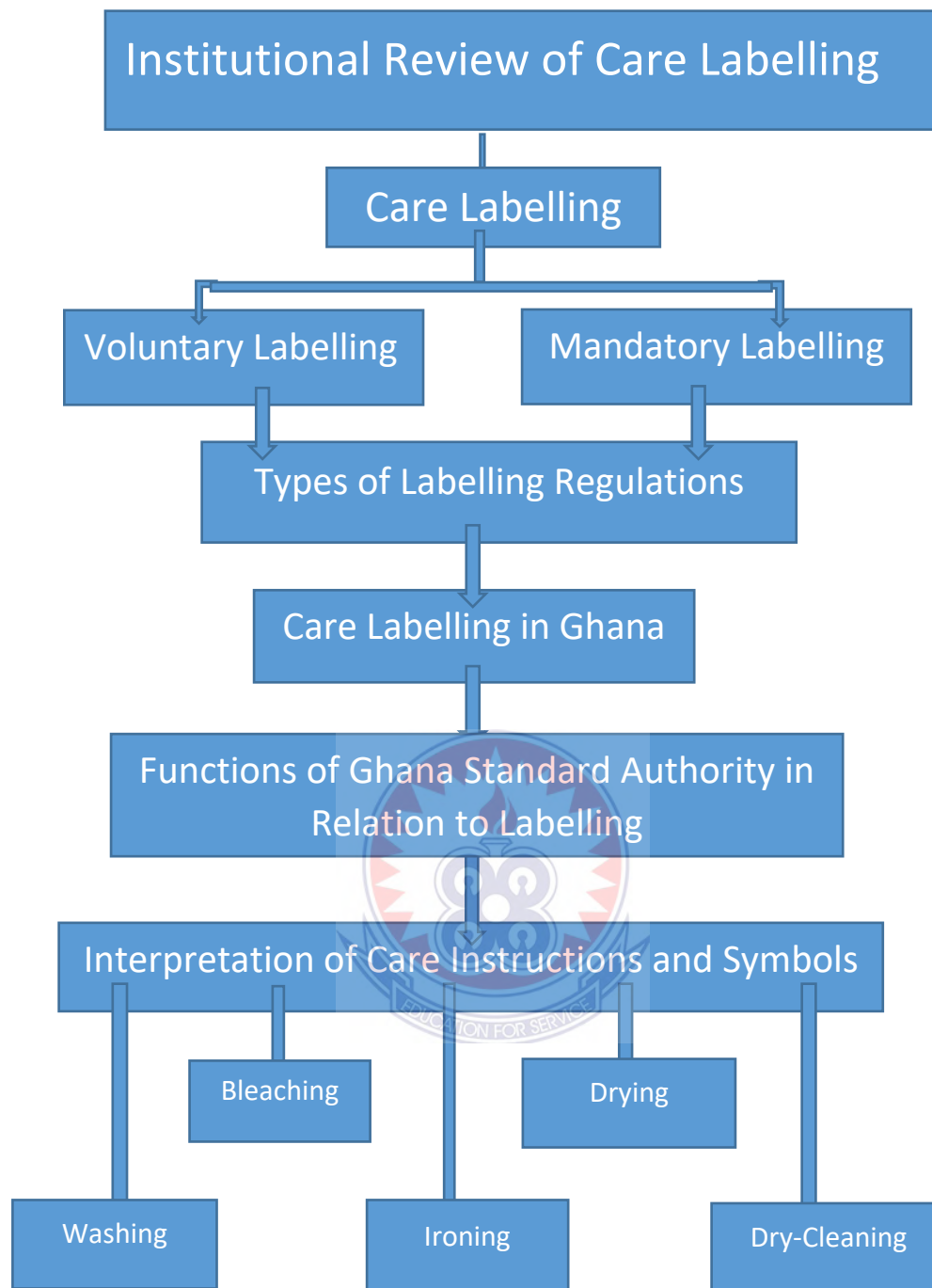


Figure 2: Conceptual Framework of the Study

Source: Field work (2020)

2.6 Conclusion

The effective care of textile products depend on proper care labeling, correct interpretation of care labels by consumers and utilization of care label information when cleaning clothing and textiles.

Comprehending these care symbols will help consumers prevent possible damages to expensive garment and increase its life. Failing to meet desired standards for care labeling of products can land suppliers and manufacturers in trouble of paying huge sum of fines and penalties. Besides cleaning, drying, and ironing guidelines, care labels also require mentioning the country of origin and fibre contents.

It can be concluded that, maintaining and following a good labeling practice is of utmost importance to the apparel and textile industry. It creates goodwill among consumers, shows that a company or brand cares and gives rise to a fine business sense.



CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

To obtain concrete results from any activity requiring an investigation, a well laid down systematic procedure becomes very imperative. Thus, this chapter outlines a description of the procedures and methods used to execute the study. It is divided into subsections comprising the research design, population, sample and sampling procedure, instruments for data collection, data collection procedure and finally data analysis procedure.

The main goal of the study was to review the care labelling rule globally, examine the functions of the Ghana Standards Authority in relation to care label and finally assess the effectiveness of the Ghana Standard Authority in relation to care labelling of clothing and textile.

3.1 Research Design

A research design consists of identifying a problem, selecting a sample and sampling techniques, data collection and analysis and presenting the results of the study (Punch, 1999). According to De Vaus (2001), the primary function of a research design is to ensure that the results obtained through the research process addresses the research problem effectively and unambiguously as possible. The research objectives and questions posed necessitate the collection of data from selected individuals in a point in time. Quantitative research involves an inquiry and information gathering from a selected sample usually through a questionnaire. This technique is often undertaken to learn about people's knowledge, beliefs and preferences, and assess the views of a general population (Kotler, 2000). The justification for using quantitative research for the study is that it collects descriptive information and gives detailed explanations of the phenomenon studied rather than providing and analysing statistical data.

This design was chosen as it best fits the nature and purpose of this study. The core features of quantitative research; description, interpretation, verification and evaluation of situations, settings, processes, relationships, systems or people (Leedy & Ormrod, 2005) made it very relevant technique for this study.

3.2 Sources of Data

The study made use of both primary and secondary sources of data. The primary data relating to the research objectives were ascertained through the administration of questionnaires with respondents. Secondary data that was used including annual reports, policy documents, academic journals and materials from both local and international organizations with interest in care labelling.

3.3 Study Area

The research was conducted in the Achimota Metropolis in the Greater Accra region of Ghana. The city of Accra which is capital of the country, and the most cosmopolitan was deemed suitable for the study. This is greatly because it houses the headquarters of the Ghana Standards Authority, and also as the capital, the population there must be familiar with the Ghana Standards Authority, as well as have a deeper understanding and appreciation of the duties of such an institution.

3.4 Population

In a research study, a population is group of elements or individuals about which the research intends to make inferences (Casley & Lury, 1987; Bernard, 2000). In any research, two kinds of the populations are dealt with; these are target population and accessible population.

The target population is the entire group of people about whom the researcher wishes to generalise the findings of the study, while accessible population is the final group of

participants from which data is collected for a study (Lunsford & Lunsford 1995). For this study, the target population consisted of all consumers in the Greater Accra Metropolis between the ages of 25 to 50 who purchase and use clothing and textile products. The choice of this category of consumers was partly based on the fact that, they are more fashion-oriented and have a high level of appearance consciousness unlike the elderly. The population was heterogeneous in terms of employment, social classes, literacy and therefore their way of perceiving the importance of care labelling and the effectiveness of the Ghana Standard Authority in relation to care labelling was likely to be different, depending on their knowledge of the role of care labels in the care and maintenance of clothing and textiles products.

3.5 Accessible Population

Accessible population according to Bartlett et al (2011), is the final group of participants from which data is collected by surveying either all its members or a sample drawn from it. It represents the sampling frame. With respect to this study, the accessible population included all literates of the population in the age category of twenty-five to fifty who can read and write.

3.6 Sample /Sampling Technique

A sample is a small proportion of a population selected for observation and analysis (Best & Kahn, 1989). A sample which is representative of the population helps the researcher to study a relatively smaller number of the target population, and make inferences about the population on the phenomenon under study. The sample size for the study was seventy-five (75) comprising sixty (60) consumers and fifteen (15) personnel from the Ghana Standard Authority to represent the entire population. This figure was obtained using Cochran's formula given as

$$n = \frac{z^2 pq}{e^2}$$

Where 'e' is the desired margin of error

"p" is the proportion of the population which have the attribute of interest

“q” is $1 - p$.

The population of the Accra Metropolis in the year 2020 was estimated to be 2514000 (Population Stat, n.d). Since the 2020 population census data was unavailable, data from the 2010 Population and Housing Census by the Ghana Statistical Service was used to estimate the population of interest (literate people in the age category of twenty-five (25) to fifty (50), and the figure obtained was 358783. 75 respondents were used to represent the entire population of 358783 which is the target population. Therefore, the 75 respondents has become the accessible population. The study was conducted at the ninety-five percent (95%) confidence level, which gives a z-value of 1.96. The margin of error employed in the study was (7.9%), which is in the acceptable interval of between 5%-10% for social science research Bayne (2018). Substituting the above information into Cochran’s formula yielded the sample of size seventy-five.

3.7 Sampling Procedure

The sampling procedure employed by the researcher in selecting the sample is Purposive sampling. Oliver (2006) defines purposive sampling as a type of non-probability sampling where the researcher chooses which persons are going to be included in the sample, based on set criteria. Oliver asserted that purposive sampling is useful in identifying individuals who are more likely to offer relevant and detailed information regarding the research topic. That is, purposive sampling produces a lower margin of error because the information collected comes directly from the right source. Thus, considering that this study intended to gain an in-depth understanding into an occurring phenomenon, purposive sampling was deemed a more suitable method. It was thus used in selecting the individuals comprising of the sample for this study.

3.8 Data Collection Instruments

Research instruments are measurement tools designed to ascertain data on a particular topic of interest. There are various forms of research instruments such as tests, checklists, interviews, observation, scales, questionnaires, just to mention a few. The most commonly used tools in research for obtaining data are the questionnaire, interview, checklist and observation (Eladio, 2006). Questionnaires were used to collect data for this study because it is the appropriate instrument for collecting data in a survey design. The questionnaire consisted of six sections which were all made up of closed-ended items for the purpose of gathering information from respondents. The first section (i.e., Section A) looked at the bio-data of respondents. Section B of the questionnaire was concerned with consumer knowledge about care labels. Section C also dealt with information about care labels. Section D looked at the performance of the Ghana Standard Authority in relation to care labelling. Section E also looked at consumers' level of satisfaction on the performance of the GSA by rating them. According to Kombo and Tromp (2009), questionnaires are easy to use and provide a uniform and standardized manner of asking respondents' questions. They also provide a platform for recording and making reference during the process of analysing information. It is a cost-effective way of collecting information and a large number of responses can be analysed. Kombo and Tromp also observed that questionnaires are faster to administer to a larger number of respondents to save time. Though the questionnaire is a cost-effective way of collecting information, it does not offer opportunities for motivating respondents to probe into matters of concern and it cannot be used on an illiterate population as non-response from some of the respondents might occur. Questionnaire is also low in reliability and validity for this reason, internal validity threats such as longitudinal, location, instrumentation (testing, history, and instrument decay), subject attitudes (Hawthorne effect) may threaten the study hence techniques such as standardizing the conditions under which the study occurred, obtaining and using more information on the

subjects of the study, obtaining and using more information on the details of the study were employed. Measures such as making time with the respondents in order to explain issues to them and making appointments with the respondents for the collection of the questionnaires were put in place. The questionnaire was used for respondents who can read and write. It was developed to answer the research questions posed.

The questionnaire was developed after a careful review of related works on care labeling and the institutions mandated to ensure the care label rules are enforced. Items on the questionnaire were scored on a 5-point Likert scale that ranged from one extreme to the other. All questions were close ended (that is, respondents were provided with answers from which they could choose their response). Shaughnessy and Zechmeister (1990) posit that close ended (rating and ranking scale) questions produce a higher response rate, easily analyzed and are generally good for such a study. For sections A and B, the items were scored ranging from “always” (scored 1) to “Don’t Know” (scored 5). Similarly, items in sections C and D were also scored “Strongly Agree” (scored 1) to “Strongly Disagree” (scored 5). On the last items in section E, relating to the rating of the Ghana Standard Authority by respondents, the scoring was done from “very well” (scored 5) to “very poor” (scored 1).

3.9 Test for Validity and Reliability

To determine whether the scale used is reliable, a reliability test was performed. Since multiple Likert questions were used in the questionnaire, it became very imperative to test for the internal consistency and reliability of the responses to the questions. The measure of reliability and internal consistency that is widely used especially for multiple Likert questions is the Cronbach’s alpha. The questionnaire was piloted using fifteen (15) participants which consist of twelve (12) consumers of clothing and textiles products and three (3) personnel from the

Ghana Standard Authority representing 20% of the actual sample size were involved in the pilot study. This was in line with Baker (1994) who stated that a sample size of 10-20% of the sample size for the actual study is a reasonable number of participants to consider enrolling in a pilot. The pilot had a Cronbach's alpha of 0.785 as the estimate of its internal consistency. Such a value is considered as high and also appropriate as it is greater than a coefficient alpha of 0.7 (Pavet, Diener, Colvin & Sandvick, 1991). Thus, the responses to the questions can be deemed as very reliable for further analysis.

3.10 Data Collection Procedure

Data for the study was obtained from the primary source with the use of a questionnaire. The questionnaires were administered to the seventy-five (75) respondents consisting of sixty (60) consumers and fifteen (15) staff members of the Ghana Standards Authority. Before administering the instrument, the researcher wrote a permission to the Ghana Standard Authority for approval for involving some of their staff in the study. Visited the participants and a day and time was scheduled for the administering of the questionnaire. The telephone numbers of respondents who were willing to participate in the study were obtained. The respondents whose telephone numbers had been obtained were contacted and the date for data collection determined. Respondents' consent were attached to the questionnaires for the participants to read in order to understand the purpose and objective of the study. The questionnaire was administered in person. The advantage of administering in person is summarised by Osuala (1982) that the researcher has the opportunity to brief respondents to understand exactly what the items mean so as to obtain the right responses, and also to erase respondents' biases and prejudices (Trochim, 2000). Respondents were assured of the confidentiality and anonymity of their responses, and to ensure this, they were told not to write their names on the questionnaire.

3. 11 Data Analysis and Presentation

The researcher after collecting the data subjected the data to thorough examination in order to find linkages between findings and the research questions. The data was entered into computer software, screened for errors and summarised using the Statistical Package for Social Sciences (SPSS) version 23. A combination of descriptive and inferential analysis was employed to make sense out of the data and also to answer the research questions (Punch 1999; Bernard 2000; Thomas 2003). The inferential statistics were used to help generalise the results of the study from the sample to the whole population, while the descriptive statistics were used to describe the sample. A cross tabulation and the Chi square test of association was used to determine whether the responses provided by respondents to questions in Section D were dependent on their category (consumer or staff of Ghana Standards Authority). The Chi square test is one of the most widely used tests in inferential statistics when the level of measurement on a variable under consideration is clearly nominal (like the category of respondent in the case of this study). The assumption of the Chi square which states that the variables must be independent was satisfied. Another test carried out by the researcher is the independent samples t-test. The independent samples t-test is used to test whether the difference between the two means of the two samples is significantly different from one another. Thus, the t-test was also used to test whether the average rating of the performance of the duties of the Also, discussion and presentation of data were done descriptively and supported with tables and figures and presented in the fourth and fifth chapters. Both primary and secondary data obtained were assembled, synthesized, analyzed and interpreted to draw conclusions and the necessary recommendations made.

CHAPTER FOUR

PRESENTATION OF RESULTS AND DISCUSSION

4.0 Introduction

This chapter presents and discusses the findings of the study from the questionnaire administered to respondent. The main goal of the study was to review the care labelling rule globally, examine consumers' knowledge about care labels in clothes and finally examine the functions and the effectiveness of the Ghana Standard Authority in relation to care labelling of clothing and textile.

4.1 Demographic Characteristics of Respondents

4.1.1 Gender of Respondents

The study was carried out with consumers and staff of the Ghana Standards Authority in the Accra metropolis. In all, seventy-five (75) respondents were selected for the study comprising sixty consumers and fifteen staff members. For the consumers, there were thirty-five (35) females and twenty-five (25) males. There were ten (10) females and five (5) males from the staff of GSA. In total, there were forty-five females (45) representing 60% of the respondents and thirty (30) males representing 40% of the respondents. The reason for the greater number of females as compared to that of the males is attributed to the fact that although both sexes purchase clothing and textile materials, the females do more of the purchasing, and they are also particular about the details of care label instructions on the materials than the males.

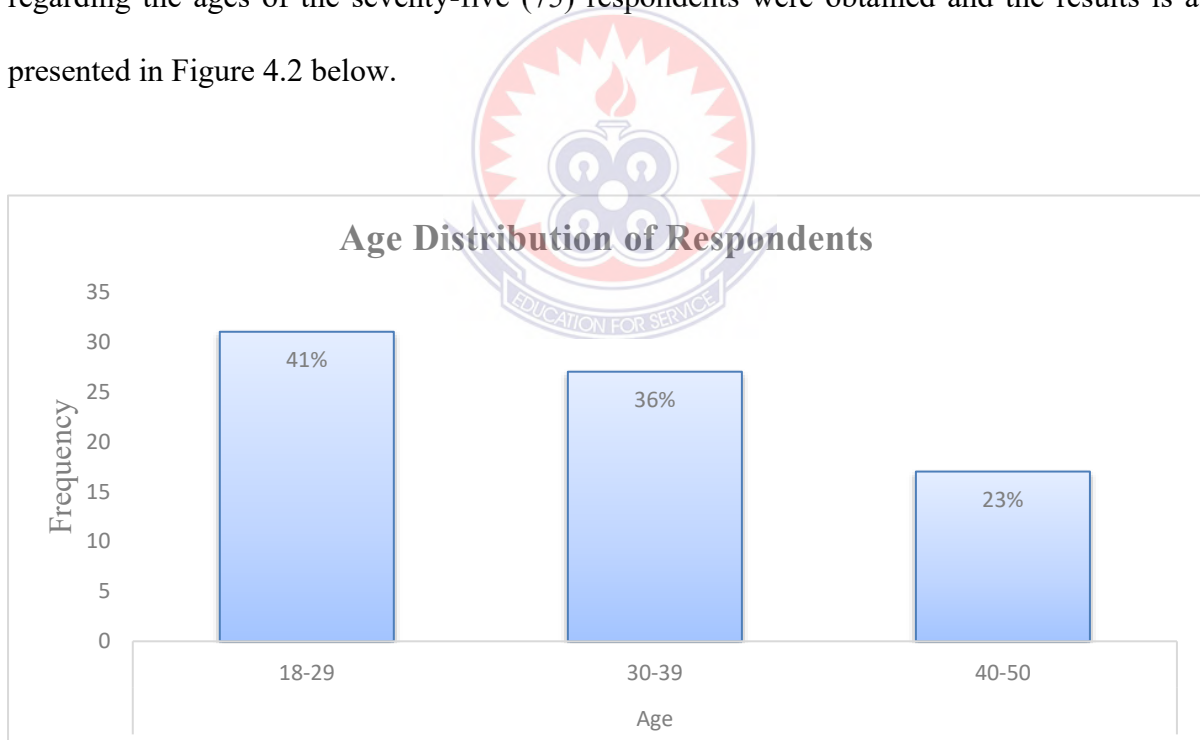
4.1.2 Educational Level of Respondents

Out of a random sample size of seventy-five (75) respondents, fifty (50) of them, representing 67% had obtained tertiary education, twenty-five (25) of them, representing 33% had obtained secondary education while none of the respondents had primary education. Thus, the

respondents were highly educated and hence were deemed to have understood and appreciated the concepts and the questions very well.

4.1.3 Age of Respondents

The study considered people within the age range of eighteen to fifty (18-50) years. The choice of this category of consumers was partly based on that they are more fashion-oriented and have a high level of appearance consciousness unlike the elderly. Therefore, their ways of perceiving the importance of care labelling and the effectiveness of the Ghana Standard Authority in relation to care labelling was likely to be different, depending on their knowledge of the role of care labels in the care and maintenance of clothing and textiles products. Information regarding the ages of the seventy-five (75) respondents were obtained and the results is as presented in Figure 4.2 below.



Source: Field work (2020)

Figure 1: Age Distribution of Respondents

It can be clearly observed from Figure 4.2 that thirty-one (31) of the respondents, corresponding to 41% were within the ages of 18-29, which was the majority. This was

followed by respondents within the ages of 30-39, who were twenty-seven (27) and represented 36%. Seventeen (17) of the respondents were within the ages of 40-50, and they also constituted 23%.

Table 4.3: Knowledge about Care Labels

Care labels are attached to clothes in order to help consumers know how to care for them and prolong the lifespan of its use. Items 7 to 13 of the questionnaire sought to find out from respondents, the level of knowledge of care labels. The items were scored using a five-point Likert scale, as “always” (coded 1) to “don’t know” (coded 5). The result obtained from respondents is as presented above in Table 4.3.

Frequency (%)	Always	Very Often	Not Often	Never	Don't Know	Total
In general, how often do you hear information about care label?	4(5.3%)	9(12.0%)	24(32.0%)	38(50.7%)	-	75(100%)
How often have you heard that a garment has a care label on it?	4(5.3%)	13(17.3%)	21(28.0%)	37(49.3%)	-	75(100%)
How often do you consider the information on the care label?	12(16%)	31(41.3%)	23(30.7%)	9(12.0%)	-	75(100%)
How often have you tried to find the meaning to any of the care symbols?	11(14.7%)	34(45.3%)	16(21.3%)	14(18.7%)	-	75(100%)
How often do you use the information on care labels when you are deciding on what clothes to buy?	9(12.0%)	14(18.7%)	15(20.0%)	37(49.3%)	-	75(100%)

How often do you use the information on care labels when you are caring for your clothing by washing, dry cleaning, or pressing?	19(25.3%)	31(41.3%)	19(25.3%)	5(6.7%)	1(1.3%)	75(100%)
How often have any of these symbols deterred you from purchasing clothes?	3(4.0%)	9(12.0%)	18(24.0%)	44(58.7)	1(1.3%)	75(100%)

Source: Field work (2020)

Overall, the respondents indicated that, majority of the respondents have little or no knowledge about care labels. Even those who have little knowledge about care labels do not consider it during purchase of clothes. This result confirms earlier findings in table 4.3 that respondents do not look out for care instructions during purchase of clothes. The result further shows that the majority of respondent assert that they do not use information on care labels during care of clothes. This can affect the appearance and the durability of the clothes because the information on the care label is a guide to consumers to know how to care for the clothes (Joseph 1998). It is therefore important to first of all identify treatment required for each clothes b It is therefore important to first of all identify treatment required for each clothes by studying the care label (Lauw 1989 & Cooper 1985). This will maintain clothes in their best condition.

Studies have proven that lack of knowledge on care labels resulted in selection of incorrect laundering procedures. Some consumers end up washing clothes that are supposed to be dry-clean there by causing shrinkage which distort the shape of the cloth. Not all clothes are washable (Lauw 1983). Some clothes should be dry-cleaned because if washed they may shrink or bleed. This has answered research question three that majority of consumers have little or no knowledge about care label.

4.4 Information about Care Labels

Items 14 to 17 of the questionnaire were used to gather information about where and how care labels are to be accessed by customers. The items were scored using a five-point Likert scale, as “strongly agree” (coded 1) to “strongly disagree” (coded 5). The result obtained from respondents is as presented below in Table 4.4. For the purpose of analysis, the researcher put the responses of “strongly agree” and “agree” together, as well as those for “disagree” and “strongly disagree”. In all, the majority of respondents agree that care labels are to be permanently attached to articles, few of them are neutral while some few also disagree that care labels should be permanent. Also, a vast majority said that care label instructions are to be written in English, some of them were neutral while few disagreed. With the issue of the legibility of care labels, a large number of respondents were emphatic that care labels should be legible, some disagreed while few were neutral. Finally, on this section was the question about the accessibility of care labels, the majority of respondents stated that care labels should be accessible at the point of sale and few of them were neutral.

Table 4.4: Information about Care Labels

Frequency (%)	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
Care labels should be permanently attached to articles.	30(40%)	30(40%)	1(1.3%)	14(18.7%)	-	75(100%)
Care labels should be written in English.	33(44%)	33(44%)	5(6.7%)	4(5.3%)	-	75(100%)
Care labels should be legible.	45(60%)	25(33.3%)	1(1.3%)	4(5.3%)	-	75(100%)
Care labels should be accessible at the point of sale.	36(48%)	34(45.3%)	5(6.7%)	-	-	75(100%)

Source: Field work (2020)

The result from table 4.4 shows that, majority of respondents agreed that care label should be permanently attached to articles, it should be written in English, it should be legible and accessible at the point of sale.

This results confirms the standard set by the mandatory standard for care labelling in 2003 that items from clothing, household textiles, furnishings, piece goods made from textiles, plastic coated fabrics, suede skins, leathers and furs should be.

- Permanently attached to articles,
- Written in English,
- Legible,
- Appropriate and adequate for the care of the article so that when followed the article is not damaged.
- Accessible at the point of sale.

4.5 Performance of Ghana Standards Authority in terms of Care Labeling

The principal purpose of the study is to examine the functions of the Ghana Standards Authority in terms of care labelling of clothing and textiles products and their effectiveness in Ghana. Thus, the researcher sought to find out whether respondents know and appreciate the functions of the Ghana Standards Authority. Items 18 to 22 of the questionnaire were used to obtain such information from respondents and the details are as seen in Table 4.5 above. The items were scored using a five-point Likert scale, as “strongly agree” (coded 1) to “strongly disagree” (coded 5). The result obtained from respondents is as presented below in Table 4.5. For the purpose of analysis, the researcher put the responses of “strongly agree” and “agree” together, as well as those for “disagree” and “strongly disagree”.

Table 4.5: Performance of Ghana Standards Authority in terms of Care Labeling

Frequency (%)	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
Ghana Standard Authority protects consumers by making sure all products are properly labelled.	31(41.3%)	27(36%)	9(12%)	7(9.3%)	1(1.3%)	75(100%)
G S A. ensures improved quality and reliability.	22(29.3%)	39(52%)	9(12%)	2(2.7%)	3(4%)	75(100%)
G S A. inspects all imported and locally manufactured goods that they are well labelled.	31(41.3%)	31(41.3%)	8(10.7%)	3(4%)	2(2.7%)	75(100%)
G S A. ensures the availability of effective consumer redress.	8(10.7%)	18(24%)	6(8%)	41(54.6%)	2(2.7%)	75(100%)
G S A. promotes and protects economic interests of consumers, industry and businesses.	25(33.3%)	31(41.3%)	12(16%)	5(6.7%)	2(2.7%)	75(100%)

Source: Field work (2020)

The first issue was to ascertain from respondents whether the Ghana Standards Authority perform their function of ensuring that all products are well labeled, which in turn goes to ensure the safety and protection of consumers. With this, a large number of respondents stated that the GSA performs their function, some few of them were neutral while few also disagreed. On ensuring that there is improved quality and reliability of products, vast number of respondents said that GSA does well in this regard, few were neutral while some few also said

the GSA is not doing well when it comes to this function. Respondents were asked whether the GSA inspects all imported and locally manufactured goods, to ensure that they are well labelled. Here, majority said that GSA does well in performing such a function only few were neutral while others were of the view that GSA is not doing well with that. When it comes to ensuring the availability of effective consumer redress, majority of respondents disagreed to that, few were neutral while others were of the opinion that the GSA performed such duty. Lastly, respondents were asked whether the GSA promotes and protects economic interests of consumers, industry and businesses. Here, a vast number of respondents said they agree, some few were neutral and few also disagreed.

The respondents in this study were made of two categories; consumers and staff of the Ghana Standards Authority. Thus, the responses provided above comprise both categories. However, the researcher wanted to find out whether the responses were dependent on the category or not. That is, whether the responses of the staff were statistically different from that of the consumers. This was to ensure that there is no bias, especially on the part of the staff to speak in favour of their institution and also to ensure that proper inferences can be made with the responses obtained. To carry out this investigation, the Chi square test of independence was used. The Chi square test was most appropriate since the variables under consideration are clearly nominal. The test was performed at the 5% level of significance. The result of the chi square test is presented in Table 4.6 below.

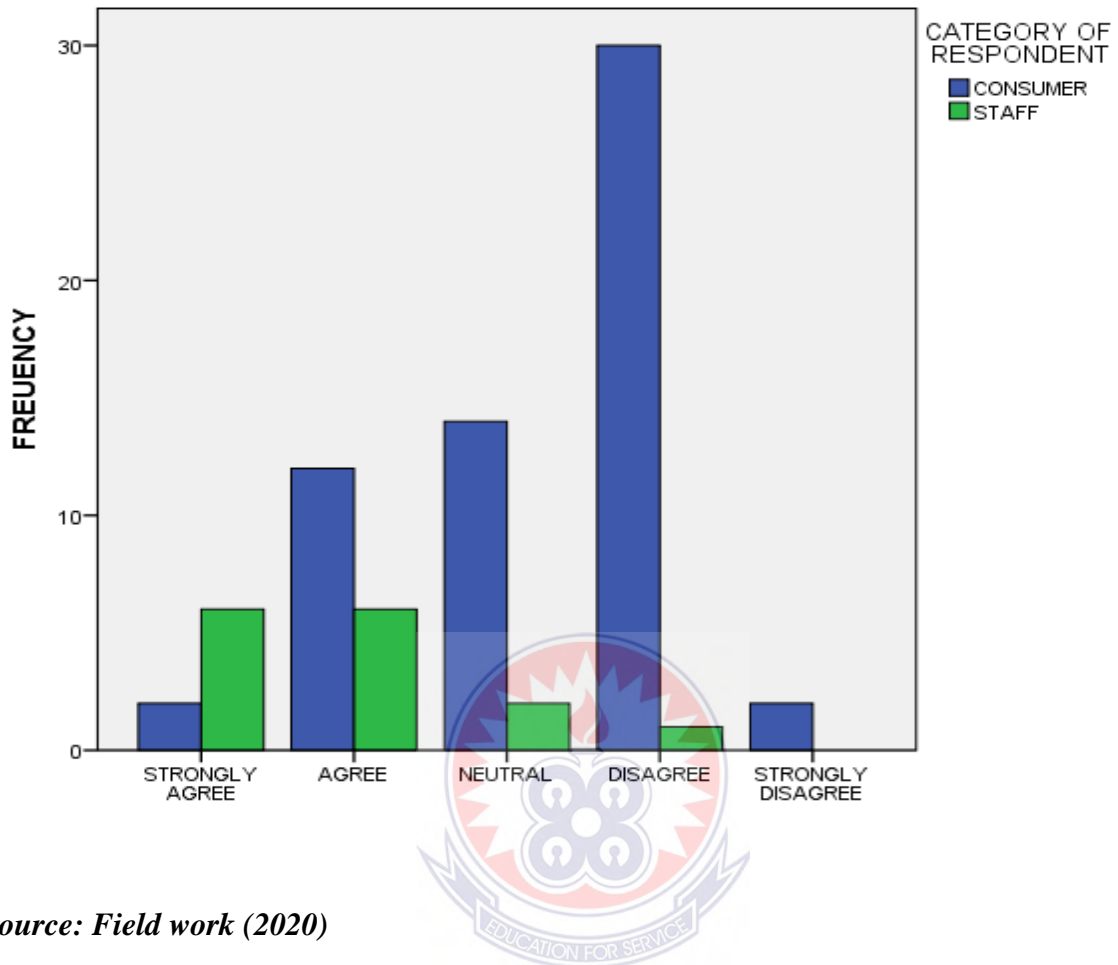
Table 4.6 Chi Square Tests

Variable	P-Value
Ghana Standard Authority protects consumers by making sure all products are properly labelled.	0.047
G S A. ensures improved quality and reliability.	0.122
G S A. inspects all imported and locally manufactured goods that they are well labelled.	0.064
G S A. ensures the availability of effective consumer redress.	0.000
G S A. promotes and protects economic interests of consumers, industry and businesses.	0.067

Source: Field work (2020)

From the above the p-values of three of the variables were greater (0.122, 0.064 and 0.067) than the significance level of 5%. This means that the responses were indeed independent of the category of respondents (whether consumer or staff). However, two of the variables had p-values to be less than the 5% level of significance. This also implies that responses to those were to some extent dependent on the category of the respondents. To further investigate the source of the dependence, a bar chart and a cross table showing the responses by each category to the two variables are presented below.

GSA ENSURES AVAILABILITY OF EFFECTIVE CONSUMER REDRESS



Source: Field work (2020)

Figure 2: GSA Ensure Availably of Effective Consumer Redress

From the bar chart above, it is evidently clear that while a greater number of the consumers disagreed or were neutral, majority of the staff were in agreement (strongly agree or agree) to the statement. Thus, while the staff of the GSA were asserting that the GSA ensures availability of effective consumer redress, the consumers were saying otherwise

Table 4.6 Cross Table

		Category OF Respondent		
		Consumer	Staff	Total
GSA Protects	Strongly Agree	22	9	31
Consumers	Agree	12	5	17
	Neutral	19	0	19
	Disagree	7	0	7
	Strongly disagree	0	1	1
Total		60	15	75

From Table 4.6 above, it is clearly seen that majority of the respondents strongly agree or agree that GSA protects consumers by making sure all products are properly labelled. This confirm the functions of GSA which has been discussed in the literature review.

4.7 Rating the Ghana Standards Authority

After examining the performance and the effectiveness of the Ghana Standards Authority, respondents were asked to rate the GSA in terms of their effectiveness in terms of their functions in terms of care labelling of clothing and textile products. Items 23 to 27 of the questionnaire were used to obtain such information from respondents. The items were scored using a five-point Likert scale, as “very well” (scored 5) to “very poor” (scored 1). The result obtained from respondents is as presented below in Table 4.7.

Table 4.7: Rating the Ghana Standards Authority

Standard Deviation	N	Mean	
GSA protecting the consumers	75	3.92	0.941
GSA educating consumers on the importance of care labels.	75	2.53	1.178
GSA encourages consumers to read care labels before the use of product.	75	2.53	1.308
Inspecting of all imported and locally manufactured products	75	3.27	0.908
Encouraging manufacturers to Interpret care instructions to consumers.	75	4.01	1.279

Source: Field work (2020)

The discussion of the results as presented above in Table 4.7 is based on two cut-off points ranging from “very well” (with a mean score of above 3) to “very poor” (with a mean of above 3). From Table 4.7, inspecting all imported and locally manufactured products had the highest mean of 4.01, with a standard deviation of 0.908. This indicates that, it is the function of the GSA which respondents see as being done very well in their estimation. The variable with the next higher average is the one concerning GSA Protecting consumers. The mean was 3.92 while the standard deviation was 0.941. From inspecting all imported and locally manufactured products, respondents are of the view that the GSA does so well in protecting consumers. This conclusion can be related to the fact that, inspecting all imported and locally manufactured products, also implies protecting consumers since the GSA will not allow any inferior or substandard product to go onto the market, all things being equal. Encouraging manufacturers to interpret care instructions. consumers had a mean of 3.35 and a standard deviation 1.279, which means that respondents approve that the GSA perform this function quite well. When it comes to encouraging consumers to read care labels before the use of product, the mean was 3.27 with a standard deviation of 1.308. This implies that the GSA does well with this function

too. Only one of the variables had a mean score below the 3.0 cut-off, and this concerns GSA educating consumers on the importance of care labels. The mean score was 2.53 with a standard deviation of 1.178. By this, respondents are saying that when it comes to educating consumers on the importance of care labels, GSA has done very poorly. Therefore, the GSA is encouraged to educate consumers more on the importance of care labels.

Since the response obtained above also comprises two categories; consumers and staff of GSA, it was imperative to find out whether the responses were dependent on the category or not. That is, whether the on the average, the ratings done by the two categories were statistically different. To carry out this investigation, the independent samples t-test was employed. The independent samples t-test evaluates the difference between the means of two independent groups. Thus, it is used to determine whether the means for two independent groups are significantly different from each other. The independent samples t-test was most appropriate since the two groups are clearly independent of each other. The test was performed at the 5% level of significance. The result of the chi square test is presented in Table 4.8 below.

Table 4.8: Independent Samples t-test

Variable	P-Value
GSA protecting the consumers	0.111
GSA educating consumers on the importance of care labels.	0.079
GSA encourages consumers to read care labels before the use of product.	0.128
Inspecting of all imported and locally manufactured product	0.058
Encouraging manufacturers to Interpret care instructions to consumers.	0.063

Source: Field work (2020)

From Table 4.8 above, none of the tests was significant. That is, all the tests yielded p-values which were less than the 5% level of significance. This means that, although there could be differences in the mean rating of the GSA by the two categories (consumer and staff), those differences were not statistically significant. Thus, it can be concluded at the 5% level of significance that there was no difference in the mean rating of the performance of the GSA by both consumers and staff.



CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Overview

The main goal of the study was to review the care labelling rule globally, examine consumers' knowledge about care labels in clothes and finally examine the functions and the effectiveness of the Ghana Standard Authority in relation to care labelling of clothing and textile.

Quantitative research design was adopted for the study. Purposive sampling method was utilized in selecting 75 respondents to participate for the study. The 75 respondents comprise of sixty (60) consumers and fifteen (15) staffs of the Ghana Standard Authority. A well-structured closed-ended was used to information from respondents. Statistical procedures used in data analysis were mean, standard deviations, independent-samples t-test, frequency, percentages and charts.



5.2 Summary of Findings

Analysis of responses to the items on the questionnaire showed that forty-five (45) representing 60% of the respondents were female and thirty (30) representing 40% of the respondents were male.

In addition, 50 of the respondents sampled for the study, representing 67% had obtained tertiary education, twenty-five (25) of them, representing 33% had obtained secondary education while none of the respondents had primary education.

According to the responses from the respondent, thirty-one (31) of the respondents, corresponding to 41% were within the ages of 18-29, which was the majority. This was followed by respondents within the ages of 30-39, who were twenty-seven (27) and represented 36%. Seventeen (17) of the respondents were within the ages of 40-50, which constituted 23%.

Also, on respondents' knowledge about care labels 50.7% of respondents said they have no knowledge about care labels. Question on garment labels, approximately half of the respondents representing 49.3% said they have heard about garment labels but not often. In addition, question on whether respondents understand the meaning of care label symbols, 60% of them tried to find the meaning of the symbols. Responses on whether respondents use the information on care labels during laundry, majority (49.3%) of the respondents stated clearly that they do not use the information on the care labels. item on the questionnaire regarding the legibility and accessibility of labels, majority of the respondents representing 93% agreed that labels should be legible and accessible. On the performance of Ghana Standards Authority in terms of care labelling, a higher number of the respondents representing 77.3% stated that the GSA performs their function as expected.

5.3 Conclusion

This study has come out with comprehensive evidence on the performance of the Ghana Standard Authority in relation to care labelling of clothing and textiles and their effectiveness.

Based on the major findings, the following conclusions are drawn.

1. Consumers do not have adequate knowledge about care label.
2. Consumers support the standard set by the mandatory standard for care labelling in 2003 that care label should be:
 - Permanently attached to articles,
 - Written in English,
 - Legible,
 - Appropriate and adequate for the care of the article so that when followed the article is not damaged.
 - Accessible at the point of sale.

3. The Ghana Standard Authority performs its functions very well. However, in terms of consumer redress according to respondents, it is not doing well therefore it need to sit up.
4. The Ghana Standard Authority need to educate consumers about the importance of care labels in order to help consumers use the correct care procedure when caring for their clothes.

5.4 Recommendations

Based on the findings of this study, the following recommendations are made:

1. It is recommended that in order to achieve an improvement in the care of clothing, consumers should read care label in order to choose the correct care procedure during the care of clothing to increase the life span of their clothes.
2. Secondly, the Ghana Standard Authority in collaboration with the National Commission for Civic Education should educate consumers about the importance of care labels during the care of clothing
3. Finally, appropriate punishment should be given to law breakers who will import products that has no care label on them into the country.

5.5 Suggestions for Future Research

1. This study could be administered on consumers who are illiterate to develop profile for all consumers. This profile could be compared with this study to see if differences exist in the findings.
2. A qualitative approach could be used in conducting the study in order to obtain in-depth understanding of the issues and provide further explanations to the findings from this study.

3. The study can be replicated to see whether there will be differences in findings. This will allow for general conclusion to be drawn.



REFERENCES

- Ariely, D. (2000). Controlling the information flow: Effects on consumers' decision making and Preferences. *Journal of Consumer Research*, 27(2), 233-248.
- Australian Competition and Consumer Commission (2008). "Care Labelling of Clothing and Textile Products- A Mandatory Standard Guide",
[URL:http://www.accc.gov.au/content/index.phtml/itemId/808357](http://www.accc.gov.au/content/index.phtml/itemId/808357)
- Baker, T. L. (1994). *Doing Social Research* (2nd ed.). New York McGraw-Hill Inc.
- Bartlett, J. E., Kotrlik, J. W., & Higgins, C. C. (2001). Organizational research: Determining Appropriate sample size in survey research. *Information Technology, Learning, and Performance Journal*, 19(1), 1-8.
- Bayne, Karen. (2018). Re: What is the permissible margin of error when computing a social Research sample size? Retrieved from:
https://www.researchgate.net/post/What_is_the_permissible_margin_of_error_when_computing_a_social_research_sample_size/5bf367263d48b73b556f9d23
- Beltran, R., Wang, L. & Wang, X. (2006). Measuring the influence of fibre-to-fabric properties on the pilling of wool fabrics. *Journal of the Textile Institute*, 97(3), 197-204.
- Bernard, H. R. (2000). *Social research methods: Qualitative and quantitative approaches*. London: Sage Publication Inc.
- Best, J. W., & Kahn, J. V. (1989). *Research in education* (6th Edition). Englewood's Cliffs, N.J. Prentice-Hall.
- Calisir, F. (2013). Comprehension of Care Label Symbols: Effect of Age, Gender and Education. Level. *Proceeding of the world Congress on Engineering and Computer Science*. 2(2), 1-5.
- Cant, M. (2006). *Consumer Behaviour*. Cape Town: Juta & Co Publishing.

- Casley, D. J., & Lury, D. A. (1987). *Data Collection in Developing Countries*. New York: Oxford University Press.
- De Vaus, D. A. (2001). *Research Design in Social Research*. London: Sage.
- Eladio, Z. O. (2006). *Así se Investiga*. Santa Tecla: Clasicos Roxil.
- Dessouki, H. A. (2015). A survey on knowledge about care label on garments by Residents in Egypt. *Life Science Journal*, 12(3), 49-53.
- Faust, M. E., Carrier, S. & Baptist, P. (2006). 'Variations in Canadian women's ready-to-wear Standard sizes', *Journal of Fashion Marketing and Management*, vol. 10, no.1, pp. 71-83.
- Federal Trade Commission (1994). "FTC Issues a Laundry List of Care Label Symbols Partnerships", *Textiles - Care labelling code using symbols*, Ed. International Organization for Standardization. URL: <http://www.ftc.gov/opa/1994/07/carepcon.shtml> ISO 3758 2005.
- Federal Trade Commission (2005). *Threading Your Way through the Labeling Requirements Under the Textile and Wool Acts*. Available at: <http://business.ftc.gov/documents/bus21-threading-your-way-through-labeling-requirements-under-textile-and-wool-acts.pdf>.
- Ghosh, S. K., Das, A.B., & Bhattacharyya, R. (2014). Care Label Issues of Silk fabric. *International Journal of Research in Engineering and Technology*.3 (7), 176-179. (www.coats.com › Information-Hub › Care-Labels).
- Ginetex (2011). *The international association for textile care labelling*, Available at: <http://www.ginetex.net/>. www.gsa.gov.gh.

Internal Market Committee (2011). "Made in" labels should be compulsory for textiles, says

Internal Market Committee, Press release 22.03.2011, Available at:

<https://www.europarl.europa.eu/en/pressroom/content/20110318IPR15855/html/Made-in-labels-should-be-compulsory-for-textiles>.

International Organization for Standardization (2005). "International Standard 3758-Textiles

Care Labelling code using symbols", second edition, (received by email), URL:

<https://www.iso.org>.

Joseph, M. L. (1988). *Essential of Textiles*. (4th Ed) New York: Rhinehart and Winston. Inc.

Kombo K. D. & Tromp A. L. (2009). *Proposal and Thesis Writing. An Introduction*. Nairobi.

Kotler, Philip. (2000). *Marketing management*. Upper Saddle River, N.J.: Prentice Hall.

Laitala, K. & Klepp, I.G. (2011). 'Environmental improvement by prolonging clothing use

Period', in *towards sustainability in the textile and fashion industry*. Copenhagen.

Available at: <http://www.sifo.no/files/file77517laitalakl>

[epp_prolonging_clothing_use_period.pdf](#).

Leedy, P .D. & Ormrod, J .E. (2005). *Practical Research: Planning and Design*. Prentice Hall, Upper Saddle River, NJ.

Li, E.P.H., (2010). 'Managing Knowledge in Fashion Businesses: A Contextual Review

Research Journal of Textile and Apparel, vol. 9, no. 2, pp. 97-104.

Lim, S. J. (1978). Study of Consumers' Interest in Garment Label. *Journal of Korean*

Society of Clothing and Textiles, 2(2).

Lunsford, T. S., & Lunsford, B. R. (1995). The Research Sample, Part 1: Sampling. *Journal*

of Prosthetics and Orthotics, 105 – 112.

Nadiger, G. S. (2007). Care labeling of textile apparels. *Journal of the Textile Association*,

Mumbai, Pavitra publisher, May-June, 7-18.

- Oliver, Paul & Jupp, Victor (2006). Purposive sampling. In: The SAGE dictionary of social Research methods. Sage, pp. 244-245.
- Osuala, E .C. (1982). Introduction to Research Methodology. Enugu: Africana-First Publishers Ltd.
- Paulines Publication Africa.
- Pavot, W. G., Diener, E., Colvin, C. R., & Sandvik, E. (1991). Further validation of the Satisfaction with Life Scale: Evidence for the cross-method convergence of well-being measures. *Journal of Personality Assessment*, 57, 149-161.
- Punch K. F. (1999). Introduction to social research: Quantitative and qualitative approaches London, Sage Publications.
- Rubik, F. & Frankl, P. (2005). The Future of Eco-labelling: Making Environmental Product Information System Effective. London: Greenleaf Publishing.
- Schiller, W. (2011). 'Care labelling code on the basis of symbols-What is behind all this?' in 45th International detergency conference. Düsseldorf: WFK.
- Shaughnessy, J. J., & Zechmeister, E. B. (1990). Research methods in psychology. New York: McGraw-Hill.
- Shin, S. (2000). Consumers' Use of Care-label Information in the Laundering of Apparel Products. *The Journal of the Textile Institute*, 91 Part 2 (1).
- Thiry, M.C. (2008). 'Tagged', in AATCC Review, October, pp. 22-28.
- Thomas, R. Murray. (2003). Blending Qualitative and Quantitative. Research Methods in Theses and Dissertations. Thousand Oaks. CA: Corwin Press.
- Travis, J. (2003). Essentials of textiles science (3rd ed.). Holt: Rineheart Company and Winston.
- Trochim, W. (2000). The Research Method Knowledge Base. 2nd Edition, Atomic Dog Publishing, Cincinnati.

Yan, R., Yurchisin, J. & Watchravesringkan, K. (2008). Use of Care Labels: Linking Need for Cognition with Consumer Confidence and Perceived Risk. *Journal of Fashion Marketing and Management*.



APPENDIX

UNIVERSITY OF EDUCATION WINNEBA- KUMASI

COLLEGE OF TECHNOLOGY EDUCATION

Respondent's Consent:

The purpose of this questionnaire is to elicit information on the effectiveness of the Ghana Standard Authority in relation to care labelling clothing and textiles products in Ghana.

Your full participation will help make informed conclusions on the knowledge gap in terms of care labelling. It would therefore be appreciated if you could provide responses to all items on the questionnaire, and do it honestly. You are assured of complete confidentiality and anonymity of all information provided. Nothing will ever be published or reported that will associate your name with your responses to the survey questions. Therefore, you should not, under any circumstances, write your name on any part of the instrument. Your participation in this study is completely voluntary. However, your participation is very much appreciated and will assist in educating the general public on the importance of care labelling clothing and textile products in Ghana.

Again, questions on this survey instrument have gone through a thorough review by a professional at the University of Education Winneba-Kumasi, and have been declared ethical for educational research.

You are hereby encouraged to voluntarily participate in this study by providing responses to items in the various sections of this instrument. Thank You.

SECTION A

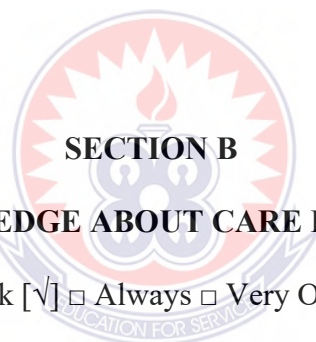
BIO- DATA

DIRECTIONS: Indicate with a tick []

1. Sex of respondent. Male Female

2. Which of the following age groups would best describe you? 18 to 23 years 25 to 32 years Over 34 years

3. Which of the following is your level of education? Tertiary Secondary Primary Other



SECTION B

KNOWLEDGE ABOUT CARE LABELS

DIRECTIONS: Indicate with a tick [] Always Very Often Not Often Never Don't Know

The Care Labels that are attached to clothing are intended to help consumers to properly clean and care for their clothes.

Indicate with a tick [<input checked="" type="checkbox"/>]	Always	Very Often	Not Often	Never	Don't Know
4. In general, how often do you hear information about care labels?					
5. How often have you heard that a garment has a care label on it?					

6. How often do you consider the information on the care label?					
7. How often have you tried to find the meaning to any of the care symbols?					
8. How often do you use the information on care labels when you are deciding on what clothes to buy?					
9. How often do you use the information on care labels when you are caring for your clothing by washing, dry cleaning, or pressing?					
10. How often have any of these symbols deterred you from purchasing clothes?					

SECTION C

INFORMATION ABOUT CARE LABELS

DIRECTIONS: Indicate with a tick [√] your level of agreement on the following statements regarding care labels. Where: SA = Strongly Agree, A = Agree, N = Neutral, D = Disagree, and SD = Strongly Disagree.

Indicate with a tick [√]	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
11. Care labels should be permanently attached to articles.					
12. Care labels should be written in English.					
13. Care labels should be legible.					

14. Care labels should be accessible at the point of sale.					
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SECTION D

PERFORMANCE OF GHANA STANDARD AUTHORITY IN RELATION TO CARE LABELLING

DIRECTIONS: Indicate with a tick [] your level of agreement on the performance of the GSA. Where: SA = Strongly Agree, A = Agree, N = Neutral, D = Disagree, and SD = Strongly Disagree.

Indicate with a tick [<input type="checkbox"/>]	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
15. Ghana Standard Authority protects consumers by making sure all products are properly labelled.					
16. G S A. ensures improved quality and reliability.					
17. G S A. inspects all imported and locally manufactured goods that they are well labelled.					
18. G S A. ensures the availability of effective consumer redress.					
19. G S A. promotes and protects economic interests of					

consumers, industry and businesses.					
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SECTION E

RATING THE GHANA STANDARD AUTHORITY

DIRECTIONS: Indicate with a tick [√] your level of Satisfaction on the performance of the GSA by rating them accordingly. Where: VW = VERY WELL, W= WELL, S= SATISFACTORY, P= POOR, AND VP= VERY POOR

Indicate with a tick [√]	Very well	Well	Satisfactory	Poor	Very poor
20. GSA protecting the consumers					
21. GSA educating consumers on the importance of care labels.					
22. GSA encourages consumers to read care labels before the use of product.					
23. Inspections of all imported and locally manufactured products.					
24. Encouraging manufacturers to Interpret care instructions to consumers.					