UNIVERSITY OF CAPE COAST

CLOTHING CARE AND MANAGEMENT PRACTICES OF SENIOR MEMBERS IN THE UNIVERSITY OF CAPE COAST, GHANA

STELLA EMEFA KOMASI

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UNIVERSITY OF CAPE COAST

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BY

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Thesis submitted to the Department of Vocational and Technical Education of the College of Education Studies, University of Cape Coast, in partial fulfilment of the requirements of the award of Master of Philosophy degree in Home Economics

MAY 2018

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DECLARATION

Candidate'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.

Candidate's Signature:..... Date:..... Name: Stella Emefa Komasi

Supervisors' 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 Cape Coast.

Principal Supervisor's Signature:..... Date:....

Name: Dr. Modesta Efua Gavor

Co-Supervisor's Signature: Date:

Name: Ms. Doreen Tetteh-Coffie

ABSTRACT

Clothing care and management practices increase clothing life time, which indirectly reduces the expenses of consumers in these times of economic hardship, and in turn, slow down the circulation pace. The primary objective of the study was to investigate the clothing care and management practices of senior members in the University of Cape Coast, Ghana. The study adopted a cross-sectional survey design. A simple random sampling method was utilized to select 176 senior members to participate in the study. Clothing care and management practices of senior members were sought by structured questionnaire. 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 clothing selection, laundering and repair practices, senior members engage in practices that prolong the lifespan of clothes. Nonetheless, it was also revealed that senior members have poor level of knowledge of care label symbols and do not engage in appropriate storage practices as well. Based on the findings of the study, I recommend that there should be adequate education on the clothing care and management practices among senior members through seminars.

KEY WORDS

Care labels

Clothing laundering

Clothing repairs

Clothing selection

Senior members

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DEDICATION

To my parents, most especially my father Mr. Sylvanus K. Komasi, my siblings;

Sylvia, Sophia, Senyo and Nayram. And to my sons Kofi and Kwame.

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CHAPTER ONE

INTRODUCTION

Background to the Study

The significance of clothing care and management has been discussed several centuries ago, during which rigorous techniques and practices have been postulated in the selection, storing, laundering, and mending of clothes so as to ensure that fabrics are not affected by factors that deteriorate it, even before its' expected functional lifespan (Jone, 1990). Yet, many consumers of clothes do not appreciate the unique properties of fabrics and, thus, are unable to care for their clothes as effectively as they should. For instance, many consumers do not know whether the best way to care for a garment is to hang it up or fold it, dry it flat or on a hanger, use the loops provided or hang it by the shoulders.

Clothing needs to be properly cared for to obtain the best from them and for them to last longer. According to Klepp (2003), deterioration of clothes results in so many clothes being discarded before their lifespan, despite the expensive nature of several clothing articles. Therefore, inquiries into clothing care and management practices helps direct efforts to reduce mishandling of clothing fabrics, and increase the lifespan of clothing articles and eventual wealth of its' consumers.

Clothing is one of the necessities of life after food. Clothing is anything worn on the body in order to protect it, adorn it or to communicate intention

(Anyakoha & Eluwa, 2010). Clothes show people's status and the roles they play in society. Clothing influences the impression people have about you. It also affects one's self-confidence. It is an important component of physical appearance. Marshall, Jackson, Stanley, Kefgan and Touchie-specht (2000) stated that clothing has a salient vocabulary that takes the form of symbols used by individuals as tools for social interaction. It constitutes visual communication, which gives varied impressions about the wearer.

Clothing includes clothes, accessories, hair-do, make-ups, shoes and others (Anyakoha & Eluwa, 2005). Clothes are dresses, gowns, shorts, blouses and related articles used for protection, adornment, modesty and social status, occupational and traditional identity (Jone, 1990).

Clothes play many functional and aesthetic roles which include protection from the environment, enhancement of personality, and role identification (Horn & Gurell, 1993). People have various reasons for wearing clothes. Some of the reasons are for protection, comfort and adornment while others are for psychological and social reasons such as self-confidence and expression of personality and identity. According to Cant (2006), the practical function of clothing is to protect the human body from physical dangers in the environment such as weather (i.e. strong sunlight, cold, heat, and perspiration), insects, noxious chemicals and contact with abrasive substances and other hazards. Thus, clothing can protect against many things that might injure the naked body (Horn & Gurell, 1993). According to Bull (1987), clothing, just like food and shelter, is an important aspect of everyday living, and forms part of the family's budget. Bull further stated that the overall cost of a garment is very important, in that consumers ask questions like; is the price within my budget? How long might one wear it or how long might it last? Sadly, the clothes people buy may not last very long due to improper care habits of consumers (Bull, 1987).

Even though clothes give an enormous benefit to people, it receives little or no attention from the people it serves. When this happens, clothes start to deteriorate and lose their function (Travis, 2003).

Clothing Deterioration

Travis (2003) stated that clothing once manufactured or bought, suffers some degree of deterioration when it comes into contact with the body and the environment. This could occur as a result of dirt, moisture (i.e. perspiration and rain), environmental pollutants, wrinkling, stains from food or perfumes, light and sunlight, stretching from movement, and abrasion. Kaiser (1985) defines clothing deterioration as anything that will cause the appearance, nature or the characteristics of the clothing item to change to the extent that it is not able to serve its purpose.

During use, clothing is subjected to rubbing actions and care procedures which leads to deterioration (Kaiser, 1985). Morton (1987) found out that a fabric undergoes abrasion when it is rubbed against adjacent textile or non-textile surfaces or when it is flexed or bent during wear or laundering. Abrasion causes deterioration of mechanical properties through attrition of fibre substance. At the

same time, the aesthetics may deteriorate because of loss of colour, lustre or surface finish. In addition, the abrasion action may mar the surface by giving rise to pilling and/or snagging, which also lowers the aesthetic appeal.

According to Gintis and Mead (1959), another possible reason for clothing deterioration is the potential of increased shrinkage or pilling. Pilling occurs due to mechanical action either during use or wash. Several properties affect pilling including; fibre, thread and fabric type (Gintis & Mead, 1959). In an experiment of large database of pure woollen materials, it was discovered that fabric cover factor had greatest influence on pilling properties (Beltran, Wang & Wang, 2006), as it gives the density of the fabric.

The rate of clothes' deterioration is also influenced by how it is maintained. Most people simply wear an item of clothing until it falls apart. Worn clothing, if not cleaned and refurbished, will itch, look scruffy, and loose functionality. All these cause change or failure in the use of the clothes in one way or the other. The frequency with which a garment is washed will also affect its lifetime. Laundering at the wrong temperature is liable to shorten clothes' lifespan. Recent evidence (Travis, 2013) suggests that many people do not sort their washing, hence increase the risk of colours running, or of washing more delicate fabrics at the wrong temperature. People also wash their clothes frequently, out of habit rather than necessity (Beltran, Wang & Wang, 2006).

Clothing Care and Management

Many consumers are unaware of fabric properties, and therefore do not care for their clothes as effectively as they could. Component failure has been

reported as a common cause of deterioration of 'dry-clean only' clothes, rather than the fabrics breaking down or being detrimentally affected by solvents (Mendelson, 2005). Deterioration of clothes results in so many clothes being discarded before their lifespan. However, clothing articles are expensive. They therefore need to be properly cared for to obtain the best from them and for them to last.

Clothing care activities include selection of clothes, laundering, storage and mending the clothes when they are torn or when they develop faults (Anyakoha & Eluwa, 2005). Proper care and storage of clothes help to keep them in good condition so that appearance of the wearer is enhanced. Foster, Hogan, Bettie and Giesenking-Williams (1994) stated that as you accept the responsibility for selecting and purchasing clothing, so must you also accept responsibility for its care management. They further stated that all clothes need to be cleaned but different types of garments require different types of cleaning. Proper care of clothes involves decision making (Anyakoha & Eluwa, 2007). Clothing care decisions include, among others, selections decisions, storage facilities, ways of storing specific items, factors that influence the procedures to adopt.

Clothing repair skills have been lost in recent years and people often lack confidence in their ability to mend or alter clothes. Most people can sew buttons on, but fewer are able to alter a hem or darn a hole. As a result, many people simply store or discard items in disrepair or in need of alteration (Woodward, 2006). Ohovoriole and Ugeru (2002) stated that the knowledge of proper care practices is very important. Improving care information within products and

packaging is clearly therefore a way to increase longevity of clothes. In addition, wider educational measures, such as encouraging people to wash their clothes only when necessary and where possible, could also help (Mendelson, 2005).

Acquisition of specialized skills is paramount to all practical oriented skill such as clothing care (Okoro, 1999). Improper clothing care practices of individuals living in the community can lead to skin diseases, bad body odour, feeling of unwholesome attitude and poor adjustment to social groups (Marshal et al.,2000). A meaningful step in this direction is to determine their present clothing care practices as a basis for determining ways of helping them. This study, therefore, investigates the clothing care practices of senior members in the University of Cape Coast.

Statement of the Problem

Clothing contributes negatively to environmental and social aspects of sustainability as a result of poor care and management practices (Madsen, Hartlin, Perumalpillai, Selby & Aumônier, 2007). Growth in clothing flows increases the need for storage space as well as the amount of waste (Laitala & Klepp, 2011). Considerable number of studies have addressed the potential for reducing the environmental impact in the phases before products reach the consumer, including the production and transportation phases (Morley, Bartlett, & McGill, 2009; Morley, Slater, Russell, Tipper, & Ward, 2006). Several sustainable clothing design strategies also exist. However, there is limited research on consumers' clothing care practices (Laitala et al., 2015).

According to Wood (2001) many of the changes in garments are

associated with laundry-related problems such as stains, odour, shrinkage, and colour changes. This shows that the care phase is important for continued use of clothes. Care of clothes is probably taken for granted but in reality it requires time and effort to prolong clothes lifespan. Sometimes in an attempt to care for clothes, one may cause harm to some clothing items due to poor care and laundering practices leading to failure of a particular clothes' functions (Wood, 2001). As the care phase also has environmental impacts due to energy and water consumption (Bain et al., 2009), practices that aim at reducing unnecessary care are preferable (Laitala et al., 2015).

However, many consumers are unaware of material properties and care labels, and therefore, do not care for their clothes as effectively as they could (WRAP, 2012). Extending the life of garments by even a few months could have a major impact on the volume of resource consumed and waste generated. Clothing care and management practices increases clothing life time, which indirectly reduces the expenses of consumers in these times of economic hardship, and in turn, slow down the circulation pace (WRAP, 2012).

Although in Ghana, research has shown that most garments are acquired through custom production, there are a lot of shops all over Ghana which carry imported clothes. Senior members are seen wearing some of these imported garments. According to international laws, ready-to-wear clothing should have labels that will indicate the fibre content and how the garment should be cared for. One wonders if senior members take into consideration the care of these garments. The study was confined to senior members due to the nature of their

work and ranks, which require that they pay particular attention to the kinds of clothes they put on and how the clothes are taken care of. Moreover, research indicates that the educational level of consumers influences clothing care practices, to a large extent.

Although, most of the fabrics made in Ghana are of cotton, there are other imported fabrics which are also used by these senior members. With the variety of fabrics and clothes, one wonders if care is considered in selecting clothes. Moreover, senior members of the University of Cape Coast community put on different apparels for different purposes. For instance, garments are worn to lectures, office, leisure activities, parties and many more. During these activities, clothes may suffer some degree of aggression that makes them begin to deteriorate. Perspiration, food, accumulated dirt and other substances get on the clothes during wear.

According to Mendelson (2005), when dirt stays on a garment for a long time, the dirt, particularly perspiration and many food stains weaken fabrics causing them to deteriorate, fade or turn yellow.

To reduce negative environmental impacts in the use stage, research should concentrate on how to diminish the total amount of clothes in circulation through expanding the life of the existing clothes and re-using the products (Cooper et al., 2013; Fletcher, 2012; Jorgensen et al., 2006; Madsen, Hartlin, Perumalpillai, Selby & Aumônier, 2007).

This study, therefore, sought to investigate the clothing care and management practices of senior members in the University of Cape Coast

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community. Stated in question form, the main research problem is: what are the clothing care and management practices of senior members in the University of Cape Coast?

Purpose of the Study

This study sought to investigate the clothing care and management practices of senior members in the University of Cape Coast. The study's main purpose will be to investigate how senior members of the University of Cape Coast take care of and manage their clothes in order to prolong the lifespan. Specifically, the study sought to investigate:

- 1. The extent to which care is considered in the clothing selection practices of senior members.
- 2. Senior members' level of knowledge on care-label symbols and terms.
- 3. Senior members' practices concerning care-label symbols.
- 4. The differences in practices concerning care label symbols that exist between female and male senior members.
- 5. The perceptions of senior members on care labels.
- 6. The differences in female and male senior members' perceptions on care labels.
- 7. The laundry practices of senior members.
- 8. The storage practices of senior members.
- The differences in storage practices that exist between female and male senior members.
- 10. The clothing repair practices of senior members.

- 11. The differences in clothing repair practices that exist between female and male senior members.
- 12. The environmental effects of the practices of senior members in terms of discarding of old clothes.

Research Questions

In order to address the above listed objectives, the study will be guided by the following research questions:

- 1. How care is considered in the clothing selection practices of senior members?
- 2. What is senior members' level of knowledge or understanding of care labels?
- 3. Which clothing care label symbols do senior members adhere to during laundering?
- 4. What differences exist between female and male senior members laundering practices concerning care label symbols?
- 5. How do senior members perceive care labels?
- 6. What differences in their perception of care labels exist between female and male senior members?
- 7. Which clothing laundry practices do senior members practice?
- 8. Which clothing storage practices do senior members practice?
- 9. What differences in clothing storage practices exist between male and female senior members?
- 10. What are the clothing repair practices of senior members?
- 11. What differences in clothing repair practices exist between male and female senior members?

12. What are the clothing discarding practices of senior members?

Significance of the Study

The rate at which poor clothing care practices contributes negatively to environmental and social aspects of sustainability necessitates a research into practices that expand the life of existing clothes and the proper discarding of old clothes. The findings of this study would inform senior members about the lapses associated with how they care for their clothes, and thereby, get the best satisfaction out of money spent on clothing. The family budget can be highly exaggerated due to poor care and maintenance of clothing by not adhering to basic care principles (WRAP, 2012).

The findings of this study will also facilitate senior members' understanding and knowledge of care label symbols and terms. Clothing and fashion experts, based on the findings of this study, could organize seminars and workshops for senior members, and the UCC community as a whole.

Finally, the findings of this study would also serve students, teachers, and experts in clothing as an important reference source. Recommendations made in this study would set a new agenda for further studies on clothing care and management practices.

Delimitations

Staffs of UCC can be categorized into senior members, senior staff, junior staff, and the support services (2013/2014 academic year staff statistics). However, the study was confined to academic and administrative senior members

in the University of Cape Coast. Senior members of UCC comprise lecturers, administrators and professionals who are members of Convocation.

According to Anyakoha and Eluwa (2005), clothing includes clothes, accessories, hair-do, make-ups, shoes and others. However, this study will be restricted to only clothes. Accessories, hair, shoes, make-up, will not be considered.

Limitations

The target population for the study was 5,631 employees of the various departments of the University of Cape Coast, including senior members, senior staffs, junior staffs and the support services. A sample size of 254, representing 3.12% of staff in the University of Cape Coast was therefore relatively small with regard to the target population. Other limitations included; the unenthusiastic attitude of senior members toward academic research work, and especially completion of questionnaire instruments. This resulted in 176 of the questionnaires being collected, which represented 69% response rate. This affects the generalizability of the study's findings to the entire staffs of the University of Cape Coast, as the required sample size for the study, based on the Krejcie and Morgan Sampling Determination Table, was 254 respondents.

In addition, data was collected and analysed quantitatively, and thus, was not so helpful in gaining insight and context into clothing care and management practices of senior members, and also did not allow respondents to describe what was important to them. According to Merriam (2001), questionnaires, unlike documents review and interviews are not helpful in uncovering meaning, developing understanding, and discovering insights relevant to the research problem. Moreover, one cannot judge the honesty and truthfulness of such responses made by respondents on a questionnaire. For instance, Merriam contended that a qualitative method such as documents analysis has the potential to reveal information that the interviewee is not ready to share.

Definition of Terms

Care labels: Care labels which are also sometimes referred to as laundry symbol is a pictogram which depicts a method of caring for clothing. Such symbols are written on labels and attached to clothing to indicate how a particular garment should be cleaned.

Clothing: Clothing is anything worn on the body in order to cover, protect and adorn it or to communicate intention.

Clothing care: Clothing care, also known as preventive conservation, is about ensuring clothes safety and functionality at all times.

Clothing laundering: Laundering is a process performed to get clothes clean

Clothing selection: Clothing selection refers to selecting a clothing item to buy, as in a store.

Clothing storage: Clothing storage refers to a number of activities that provide clothes protection from dust, dirt, insects, fungus and dye transfer (Marshal et al, 2000).

Clothing repairs: Clothing repairs refer to the practice of mending clothes.

Administrative senior members: They are administrative employees of the University of Cape Coast who are members of convocation.

Academic senior members: They are teaching staff of the University of Cape Coast who are members of convocation.

Organisation of the Study

This study was 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, delimitations, limitations, and definitions of terms.

Chapter Two assesses the literature related to this study. A conceptual framework and an empirical model were agreed to review literature. 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, synopsizes the main findings, and provides conclusions, recommendations, and suggestions for further research.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Overview

In this chapter, relevant literature was reviewed. The review was treated under two broad headings: conceptual and empirical review. Under the conceptual review, literature was reviewed on the following subtopics:

- 1. The concept of clothing.
 - a. Making of Garments
 - b. History of clothing
 - c. Purpose of wearing clothing
- 2. Clothing selection practices.
 - a. Information sources in clothing selection.
 - b. Factors affecting choice of clothing.
- 3. The concept of clothing care management practices.
- 4. Care labels.
- 5. Laundry practices.
- 6. Clothing storage practices.
- 7. Clothes repair and mending practices.
- 8. Clothing re-use.

Empirical review, on the other hand, reviewed available findings from related studies on clothing care practices. Specifically, findings from related

studies on selection, care labels, laundering, storage, and repair practices were reviewed.

The Concept of Clothing

Clothing is anything worn on the body in order to protect it, adorn it or to communicate intention (Anyakoha & Eluwa, 2010). It is an important component of physical appearance. It includes all the different garments, accessories or ornaments worn by people. Clothing, which is made from textiles, is one of the three basic necessities of mankind, alongside food and shelter (Adu-Akwaboa, 2010). Although, clothing is usually prioritized second to food, Agyemang (2001) posits that one can go unnoticed without food or shelter for a moment but without clothing, he or she may be perceived in a civilized world as demented or a delirious person.

Clothing is defined in its broadest sense as covering for the torso and limbs as well as covering for the hands (gloves), feet (socks, shoes, sandals, and boots) and head (hat, caps). Human beings, nearly universally, wear clothing, which is mostly referred to as dress, garment, attire or apparel (Allwood, Bocken, Lausen, & Malvido de Rodriguez, 2006). Clothing has been seen as an intimate part of an individual. It is one of the most personal components of daily life, and at the same time, it is an expression of the social activities embedded in the cultural patterns within a particular era (Dzramedo, 2009).

Making of garments

Although modern consumers take clothing for granted, making the fabrics that go into clothing is not easy. One sign of this is that the textile industry was

the first to be mechanized during the Industrial Revolution. Before the invention of the powered loom, textile production was a tedious and labour-intensive process. In the thousands of years that humans have spent constructing clothing, they have created an astonishing array of styles, many of which we can reconstruct from surviving garments, photos, paintings, mosaics, etc., as well as from written descriptions.

There are different approaches to the making of fabrics. One approach simply involves draping the cloth. The Ghanaian "ntoma", Indian dhoti and saree, Scottish kilt, and Javanese sarong, are examples (Dzramedo, 2009). These clothes may simply be tied up, as is the case of the first two garments; or pins or belts hold the garments in place, as in the case of the latter two. With draping, the precious cloth remains uncut, and people of various sizes or the same person at different sizes can wear the garment (Marshall et al., 2000).

Another approach involves cutting and sewing the cloth, but using every bit of the cloth rectangle in constructing the clothing. The tailor may cut triangular pieces from one corner of the cloth, and then add them elsewhere as gussets. Traditional European patterns for men's shirts and women's chemises take this approach. Modern European fashion treats cloth much more prodigally, typically cutting in such a way as to leave various odd-shaped cloth remnants. Industrial sewing operations sell these as waste; home sewers may turn them into quilts.

Origin and history of clothing

Costume history serves as a source of inspiration to current fashion designers, as well as a topic of professional interest to costumers constructing for

plays, films, television, and historical re-enactment. According to archaeologists and anthropologists, the earliest clothing probably consisted of fur, leather, leaves or grass, draped, wrapped or tied about the body for protection from the elements. Knowledge of the origin of clothing remains inferential, since clothing materials deteriorate quickly compared to stone, bone, shell and metal artefacts, but some information has been inferred by studying lice. The body louse specifically lives in human clothing and when it diverged from head lice it can be inferred that clothing existed at that time. One study estimated that this happened between 83,000 to 170,000 years ago (Kittler, Kayser, & Stoneking, 2003; Choi, 2011).

Archaeologists have identified very early sewing needles of bone and ivory from about 30,000 BC, found near Kostenki, Russia in 1988 (Reed et al. 2004). Anthropologists, at the Max Planck Institute for Evolutionary Anthropology, conducted a genetic analysis of human body lice and indicated that they originated about 107,000 years ago. However, a second group of researchers used similar genetic methods and estimated that body lice originated about 540,000 years ago (Reed et al., 2004). Probably, clothing was discovered years ago. A discovery of a 500-year old male corpse on a glacier on the Austrian-Italian border revealed such. The body was clad in a fur cap, a leather cape, a loincloth, and leather shoes (Henderson, 2010).

For now, the date of the origin of clothing remains unresolved. Some human cultures, such as the various peoples of the Arctic Circle, until recently made their clothing entirely of prepared and decorated furs and skins. Other cultures have supplemented or replaced leather and skins with cloth: woven, knitted, or twined from various animal and vegetable fibres.

Purpose of wearing clothes

Some scholars believe that clothing was needed merely because of protection of one's body from the threats in the environment. Others have argued stating that clothing was created to create sexual attraction or to display beauty of one's body (Henderson, 2010; Anyangwe, 2010; Fletcher, 2008). Clothing is an integral part of human life and has a number of functions, which includes adornment, status modesty and protection (Riungu, 2008). The primary role of clothing is to form a layer or layers of barriers that protect the body against unsuitable physical environments. People wear clothing for functional as well as for social reasons. Clothing protects the vulnerable nude human body from the extremes of weather, other features of the environment and for safety reasons (Riungu, 2008).

Ideally, the practical function of clothing is to protect the human body from dangers in the environment. Kaiser (1990) identifies such environment dangers as weather (strong sunlight, extreme heat or cold and precipitations), insects, noxious chemicals, weapons and contact with abrasive substances and other hazards. Clothing can protect against many things that might injure the naked human body.

Stone as cited in Marques (2011) posited that clothing is used to communicate the individual identity to the society, and it is considered one of the most important sources of information when meeting new people. Marques further indicated that people with a low level of self-esteem usually give more

importance to clothing. Clothing is influenced by our culture and society. It defines one's origin, lifestyle, current moods, tastes, attitudes, opinion, interests, personality, and occupation. Marshall, Jackson; Stanley, Kefgan and Touchie-specht (2000) stated that clothing has a salient vocabulary that takes the form of symbols used by individuals as tools for social interaction. Our clothing behaviour speaks volumes of our 'self-image' (the type of person we are) and the world around us. It is a form of non-verbal communication.

In many societies, people of high rank reserve special items of clothing or decoration for themselves as symbols of their social status. Recent scholars now state that clothing represents one's identity and communicates it nonverbally (Riungu, 2008; Marques, 2011). Clothing in some societies is as functional as language. It represents a person's age, gender, marital status, ethnicity, social status and occupation (Henderson, 2010). For example, uniform depicts one's occupation. They are most likely to be worn by police, students, army, and so forth. Sportswear is another clothing class worn by sportsmen and women in order to provide easy movement and protection during games such as soccer, basketball, cricket, etc. In ancient times, only Roman senators were permitted to wear garments dyed with tyrian purple. Also, only high-ranking Hawaiian chiefs were allowed to wear feather cloaks and palaoa or carved whale teeth. Under the Travancore kingdom of Kerala (India), lower caste women had to pay a tax for the right to cover their upper body. In China, before the establishment of the republic, only the emperor could wear yellow (Henderson, 2010). According to

Gilbert (20004), in the ancient Asante kingdom, the kente cloth is worn mainly by the Ashanti royalty.

Clothing reveals some information about an individual's personality, and economic standing. If a woman is dressed in blue jeans and is wearing a frilly flowered top, she is probably trying to state that she wants to look more casual. On the other hand, a person wearing a T-shirt with a rock band's name on the shirt implies that the person is a rock band fan. In many cases throughout history, there have been elaborate systems of sumptuary laws regulating who could wear what. In other societies (including most modern societies) no laws prohibit lowerstatus people wearing high status garments, but the high cost of high status garments effectively limits their purchase and display. Thus, the economy of one's society also inspires what one wears. Since senior members are people of high social and economic standing, they tend to wear high status garments.

Clothing Selection Practices

Since one purchases clothing for a definite purpose, it follows that the buying of clothes should be carefully executed in order to meet its purpose. Clothing will appear to wear longest when care is considered during purchase. Thus the care of clothing should begin with the selection. Clothing selection can refer to either selecting a clothing item to buy (as in a store) or selecting an already acquired clothe to wear (as from one's wardrobe) (Cosbey, 2001). Everyone should seek to be an intelligent consumer of clothes and know how to choose the clothing s/he buys. Lloyd (1996) presents a list of aspects that should be taken into consideration in sustainable purchase decision:

- 1. Is it really a necessary purchase?
- 2. Does it have a long product life?
- 3. Can it be re-used?
- 4. Does it have minimum packaging?
- 5. Does it have minimum toxicity?

The first point is valid and usable for consumers who plan to acquire clothing in a sustainable way, but some of the other points such as long product life and minimum toxicity are more difficult in practice due to the lack of information. As a rule, buying garments of good quality, well shaped and well fitted may mean a larger initial expense, but it means that they will wear better than fabrics of inferior quality and ill fitting garments that strain and pull, and they will not require cleaning and pressing so often (Cosbey, 2001).

Since clothing selection is the first step in clothing care and management, it should include information about its expected lifespan. And since this is not usually the case, consumers' evaluation of durability is mainly based on cues that do not directly reflect it, such as price or brand (Laitala & Klepp, 2013). Consumers also judge the quality of clothing by the brand of retailer or manufacturer and also by the feel of items, particularly the strength of seams (Fisher, Cooper, Woodward, Hiller, & Goworek, 2008). Designer brands are generally associated with good quality, although there are indications that a designer cachet was part of a rationalisation for the higher price, identified as the 'originality' and 'distinctiveness' provided through a relatively small production run (Fisher et al., 2008).
Laitala and Klepp (2013) asserted that factors such as texture, length, size, colour contrast, fabric and the purpose for buying the cloth, should be considered in order to select quality clothes. Consumers should also make sure: (1) Costume fastens without showing the fastening agents; and (2) buttonholes are fully stitched and finished. Back and front linings should also be checked for flaws in the material such as drawn threads, cuts, soiled spots, among other things. One-way to help keep repair of clothing at a minimum is to check garments carefully before they are purchased. Therefore, the following have been suggested for clothing selection:

- Pick types of garments best suited to your family's needs and to the kind of care these clothes will get.
- 2. Check sizes and fit. Getting the right fit avoids strains that cause damaging rips and tears later.
- Study style features and trimmings to see if they will hold up in use. Some, although satisfactory in dress clothes, are not practical in garments for work or play.
- 4. Look for flaws. Examine the workmanship of a garment, outside and inside; to make sure it is appropriate and serviceable for the material, style, and cut of the garment, as well as for the use and care it will get.

Time should be taken in order to pick the best garment, whether clothes are piled in a stack or hanging from a rack. All clothes of a kind, or even a size, are not of equally good quality (Heaton, 1996; Dedic, 1987). These steps in the long term will aid in the overall care and management of clothes.

Factors affecting the choice of clothing

Isika (2006) pointed out that, fashion is a dynamic collective process yet it influences individuals' lives in a distinctively personal way. According to Frings (1991), buying motives vary from consumer to consumer and from day to day. They include the desire to be fashionable, attractive, impress others, be accepted by friends, peer groups or colleagues and fulfil an emotional need. Bao et al. (2003) also stated that consumer decision-making styles vary across nations. With increasing globalisation of world markets, such variations in consumer decisionmaking styles could be due to environmental variations among nations. Under the influences of different environmental characteristics, consumers' individual characteristics would vary and their perceptions of value and the significance of different product attributes may also be dissimilar (Frings, 1991).

Internal factors refer to the product characteristics that cannot be manipulated without changing the product's physical characteristics. Internal factors are considered to include consumers' individual characteristics and psychological aspects, such as demographics, lifestyle, personal values, selfconcept, and product involvement (Schiffman, Bendnal, Cowley, O'Cass, Watson & Kanuk, 2001). Self-concept are more closely related to individual values and belief systems, and tend to provide an explanation or reasoning for an individual's perception of self as a social object. Piacentini and Mailer (2004) stated that clothing choices are closely tied to self-concept and influences how people expressed themselves while making judgments about others.

Consumers' choice of clothing is often influenced by their perceptions of product attributes in terms of relative importance (Yan, 2009). Viswanathan, da Luz, Raposo, and Stanley (1999) asserted that the perception of product attributes is a basic element influencing consumers' decision-making. Consumers' perception of the importance of these attributes forms the selection criteria in making purchase decisions (Yan, 2009). Viswanathan et al. (1999) also asserted that the perception of product attributes is a basic element influencing consumers' decision-making. Different criteria may have varied importance in the individual consumer's mind.

External factors, on the other hand, are the influences that come from the consumers' environment (Schiffman, et al., 2001). External factors comprised mainly of social grouping and socio-economic status. Social grouping consist of small groups, social roles and status. For example, peers influence fashion and clothing brands' choices, determining the ones that are acceptable by them. When deciding what fashion clothes should be acquired, commonly people prefer to share ideas with peers in advance. Thus, clothing selection is a concept vastly influenced by others (Solomon & Rabolt, 2004). Peers define expectations related to a clothing style and about the brands that should be used by the group members (Chaplin & John, 2007). For this reason, people tend to share ideas with their peers before doing a purchase with the intention to preserve group identity. Wife, husband and children have strong influences on a consumer and thus the family is the most vital consumer-buying organisation in the society (Chaplin & John, 2007).

Socio-economic factors that influence clothing selection include fashion, social class, age, income, religion, educational level, occupation and price. Consumer economic situation has great influence on his/her buying behaviour. The smaller the consumer's family size or dependents, the higher the income and savings of such consumer, which will in turn, influence the consumer to favour products that are more expensive. On the other hand, a person with low income and savings will purchase inexpensive products (Shah, 2010). Educational level also affects clothing consumption patterns. Isika (2006) noted that educational level has a great significant influence on the clothing adoption behaviour as professional women with higher levels of education may have better taste in clothing choice. This is because increased education gradually results in cultural sophistication that makes one a more discriminating shopper out of the average consumer. Therefore, people with higher levels of education may have better taste in clothing selection (Isika, 2006).

The Concept of Clothing Care Management

Clothing suffers assault both from within and without. The human body sheds skin cells and body oils, and exudes sweat, urine, and faeces. From the outside, sun damage, moisture, abrasion and dirt assault garments. Fleas and lice can hide in seams. Worn clothing, if not cleaned and refurbished, itches, looks scruffy, and loses functionality. Clothes with dirt and stains or residuals of detergent many constitute both aesthetic and health problems. Dirt can spread infectious disease, and soap residue in clothing can cause allergic reactions. Clothing care which is also known as preventive conservation is about ensuring

object safety at all times, on the basis that prevention is better than cure (Robinson & Pardoe, 2000).People wash their clothes to remove stains and to prevent them from smelling. Some people wash their clothes after wearing them once, whereas others wash them more infrequently.

Arild, Brusdal, Gunnarsen, Terpstra and Kessel (2003) contend that the way in which people care and manage their clothes could be explained by different factors. Some of them are measurable facts, such as how many clothes you have, whether you get dirty doing your work or sports, what machines and other equipment you have at home etc (Arild et al., 2003).

The principles underlying all collection care activities and clothing care practices includes:

- Respect. Having respect means providing an appropriate level of care to objects. For individual costumes/textiles, especially the finer specimens, it is easy to have respect. It is harder when the object looks like something that is of no use.
- 2. Check. Checking that all is well is an underlying principle of collection care. The most important regular checks to make are of: premises, facilities, containers and condition of the collection, as well as the checks normally described as monitoring of environment and for pests.
- 3. Protect. Protecting collections is another key principle. Typical threats are dust, dirt, air pollution and contact with harmful materials, light (especially ultra-violet light), pests, damp, sticky and careless fingers, accident and theft. The appropriate level of protection must be judged according to the intended

use of individual items. Providing a clean, tidy and well-organised environment is a good start towards protecting collections.

- 4. Support. Every textile must be supported at all times to avoid the risk of it coming apart under its own weight. The basic principle is to give maximum support by laying objects out as close to horizontal as possible. The greatest challenge is providing support to an item of costume or textile so that it appears to hang naturally. Usually, the longer the period it needs to do so, the more support it will need. Good support must always be provided when moving objects such as clothes.
- 5. Avoid unnecessary touching, handling and moving. It is physical forces such as twisting, shaking, pulling, snagging and rubbing that cause materials, already weakened by age and wear; to suffer catastrophic damage.
- 6. Be wary of change. During any period of change, the level of risk increases. Ensure that the environment is stable at all times and minimize the effect of changes through careful planning. This is the final underlying principle of collection care. Lending to other people, setting up exhibitions and moving to new stores are circumstances where change brings risks (Chaplin& John, 2007).

Care Labels

Apparels are soiled during normal use. Aesthetics realities require used items must be cleaned and refurbished for reuse without substantially altering their functional aesthetic properties (Das, 2005). Care labelling outlines how a user should care for a particular clothing or textile product (Autralian Protection

and Consumer Commission [APCC], 2008). Care codes are the internationally recognized symbols that are used for caring of garments in case of cleaning and ironing (Ghosh, Das & Bhattacharyya, 2014). These labels on which these codes are drawn or printed are called care labels. A care label must be easy to find, permanently attached, written in English and remain legible throughout the life of the garment (Ghosh, Das& Bhattacharyya, 2014). According to Ghosh, Das & Bhattacharyya (2014), care labels provide guidelines to consumers and apparel care givers about the best cleaning procedures to be used for that particular combination of fabric, thread, decoration and construction techniques.

Content of label must be adequate and appropriate (Commerce Commission, 2001). Suppliers must ensure that care instructions are adequate and appropriate for the article. Care instructions must be appropriate so that garments are cleaned without damage (Das, 2005).

In general, care labels should cover:

- 1. General cleaning instructions.
- 2. General warnings.
- 3. Drying.
- 4. Ironing.
- 5. Washing.
- 6. Dry-cleaning.
- 7. How to maintain the texture if necessary.
- 8. Warnings against inappropriate treatment (Commerce Commission, 2001).

Care label guidelines deliver a uniform system of symbols for the disclosure of care instruction on textile products such as clothes. The U.S. Federal Trade Commission's care labelling rule requires manufacturers and importers to attach care instructions to garments (Ghosh, Das & Bhattacharyya, 2014). Sometimes symbols may be used in conjunction with words. The label provides things to do and not to do when cleaning or caring for the product. Care labelling provides the public with enough information to:

- 1. Know how to care for clothing and textile products.
- Have prior knowledge of costs such as dry cleaning in the on-going care of clothing and textile products.
- 3. Understand how to clean clothing and textile products properly (e.g. cold hand wash only).
- 4. Maximise the useful life of clothing and textile products.
- 5. Avoid damage such as dyes running (APCC, 2008).

Where an article can be laundered or dry-cleaned or both, care instructions for both treatments must appear on the label. Care instructions may include both specific and prohibited instructions. Specific instructions provide advice on what a user should do with the article. Examples include; dry flat, cool iron, dry-clean only, etc. Prohibited instructions provide advice on what a user should not do with the article. Examples include; do not iron, do not tumble dry, do not wash, etc. Information in addition to care instructions in English, such as care symbols or instructions in other languages may be provided. Table 1 presents some common care label symbols and their corresponding terms.

Symbols	Terms
\bigcirc	Dry-clean
	Professionally dry-clean
	Wash
	Hand wash
斑	Do not wash
\Box	Machine wash
×	Spot clean only
\bigtriangleup	Bleach
*	Do not bleach
0	Tumble dry

Tuble 1. Common Care Laber Symbols and corresponding Terms
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Table 1 cont...

Δ	Line and drip-dry
	Dry
2	Line dry
1	Line drying in shade
—	Flat drying
	Flat drying in the shade
\square	Iron
$\overline{\mathbf{A}}$	No steam

Source: (APCC, 2008; Pullen, 2005)

Considering that the aim of these symbols is to elongate the life of the product, make it more sustainable, and prevent the possible mistreatments and damages to other products, the existence of these instructions might encourage the consumers to buy the product. This is also affected by the comprehension of the existence of these symbols as an indicator of quality (Yan et al., 2008; Barat,

2007). Yan et al. (2008) noted that the more the consumers understand the product information and have the confidence to be able to care for the product after purchase, the more they have the tendency to buy the product with less perturbation about the risks related to the purchased item.

Symbols can be divided into some subgroups, and the ones that include care labels are cognitive/perceptual symbols. Barat (2007) defines the perceptual symbols as a modal because in some cases, they do not form any correlation between their structure and perceptual state or meaning. "They are linked arbitrarily to the perceptual states that produce them" (Barsalou, 1999, p. 6). The triangle form as a "bleach" symbol can be shown as an example here.

The life span of an apparel product is governed by many factors. Character of fibre, fabric construction, weight, and different mechanical and chemical finishing methods are some of them. Though it appears a little complicated to take right care of apparel in laundering due to the non-existence of a uniform capsule, but a systematic and scientific approach can resolve the issue effectively by adopting the appropriate procedure and following the exact technique. Deviation due to ignorance and negligence in some cases often leads to loss in aesthetic and functional significance of an apparel product and ultimately results in dissatisfaction (Das, 2008). It is well known that silk apparel is delicate to laundering and demands scientific approach, appropriate procedure and techniques for proper refurbishing (Das, 2008).

In the past, there were only a few variations of textile fibres most of which were natural and these textiles had set cleaning instructions (Kadolph, 2007).

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However, the textile industry has since drastically changed and created variations of synthetic textiles, fibres, fibre blends, and finishes. This implies that consumers need to address complicated features of textile products, and therefore sometimes find it difficult to follow the continuous textile changes in order to make appropriate textile purchasing and post-purchasing decisions. Textile product labels could assist consumers to make informed decisions and consumer satisfaction regarding care, choice, and use of textile products and can be promoted by the information provided by the textile product label. Therefore, the information on the textile product label should be appropriate, legible, adequate, and understandable for consumers (Mason et al., 2008).

Perceptions of consumers on care labels

Perception is not a singular concept but a complex interactive process that occurs virtually simultaneously (Hawkins et al., 2007). The perceptual process is initiated when the consumer becomes aware of and pays attention to an environmental stimulus (Cantet al., 2006; Babin & Harris, 2009). According to Otienoet al. (2005), perception on care labels can be interpreted positively or negatively by consumers. If consumers have a negative perception regarding a stimulus, it may cause them to avoid and ignore the stimulus (De Klerk & Lubbe, 2008). This might include consumers' perceptions of textile product labels, which emphasizes that consumers' negative perceptions of textile product labels might influence purchasing decisions negatively. A study by Chen-Yu and Kincade (2001) indicates that negative perceptions decreased consumers' satisfaction

towards the textile product, whereas positive perceptions led to improved consumer satisfaction.

If consumers' perceptions of textile products influence their pre- and postpurchasing behaviour, their perceptions of textile product labels might also influence their pre- and post-purchasing behaviour. According to Solomon (2011), consumers are selective about what they pay attention to in a purchasing environment, and therefore, consumers may be aware of a stimulus (such as a textile product label) but choose not to pay attention to it. If consumers do not devote attention towards a stimulus, their sensory receptors cannot be used to process the stimulus (Hoyer & MacInnis, 2008). Consumers' attention can be attracted through a stimulus that is clearly communicating and also be memorable in order to form an interpretation.

Only after a consumer becomes aware of a stimulus, pays attention to it and views it as important enough to be processed, can it be interpreted (Cantet al., 2006; Hoyer & MacInnis, 2008; Babin & Harris, 2009). Consumers can either interpret a stimulus as acceptable or dismiss it as unacceptable (Blackwell et al., 2006). Consumers' interpretation of stimuli forms their perceptions, which will influence their actions, use, purchasing behaviour, leisure habits and other purchasing activities (Rousseau & Spoelstra, 2003). Although manufacturers of textile products' labels intend to aid consumers with valuable and necessary information regarding the textile product, consumers often interpret a stimulus differently to what marketers or manufacturers intended (Cantet al., 2006; Schiffman & Kanuk, 2010).

Although a stimulus can draw consumers' attention, it will only be interpreted if the stimulus is important enough for consumers to form a perception (Hoyer & MacInnis, 2008). By comparing stimuli to other previously experienced stimuli, consumers categorise them according to their views of the importance thereof (Michaeliset al., 2008). Based on the positive or negative experience associated with the previous stimulus, consumers will view this stimulus as important or unimportant (Michaelis et al., 2008).

The importance of consumers' association with a stimulus is an essential stage in the perceptual process, especially for marketers wanting consumers to view their stimulus as important enough to enhance resulting purchasing decisions (Babin & Harris, 2009). Therefore, it is necessary to determine, through consumer's views and practices, whether textile product labels are important enough for consumers to process in order to form an interpretation of the labels.

Clothing Laundering Practices

Laundering is a process performed to get textiles clean (Arild et al., 2003). Why laundry should be done is a question that has evoked different answers throughout history. During ancient times, lower class people were not regarded as clean, and laundry was one way to rectify this. To a great extent, cleanliness became a culture, and the use of soap and water was seen as an indication of a civilized society (Frykman & Løfgren, 1979). Washing and changing to freshly laundered clothes was like a purification process. In 1882, the bacillus that carries tuberculosis was discovered, and after this period one important aspect of laundering was the fight against bacteria (Frykman & Løfgren, 1979). During the

first part of the 20th century, major changes took place in the realm of laundry. As the hygienic aspect gained more support (Maartmann, 1998), the amount of laundry increased considerably (Klepp, 2003).

In recent times, knowledge of the technical aspects of laundering has expanded to a much greater extent than previously established. This is evident in the emergence of courses and schools for housewives, as well as in the growth of the detergents industry. Advertising and information campaigns increasingly has become the new arenas for knowledge on how to do laundry, compared to previously when this kind of information was learned in a personal and domestic context (Klepp, 2003).

Apparently, the middle-age generation, regardless of country, has the most remedies to be used for laundry in the house. This could reflect several things. One reason is that members of this generation have experienced a huge growth in the number of possible remedies. This could be seen as an opportunity to use less time and effort on their laundry, and it could also be an expression of great faith in "the wonders of chemistry" (Klepp, 2003, p. 22). Further, the middle-age generation have the financial means that allows them simply to discard remedies they do not like after having tried them once, or in worst case to buy new clothes if the remedy tried did not work quite as anticipated. Another explanation for this collection of remedies could be the fact that people within this age group are responsible for a family. There are simply more people in the household, all with different needs and preferences.

Methods of laundering

One of the most important functions of a laundering process is the wash performance, defined by the elimination of visible soil and stains from textiles (Arild et al., 2003). Humans have developed many specialized methods for laundering, ranging from early methods of pounding clothes against rocks in running streams, to the latest in electronic washing machines and dry cleaning (dissolving dirt in solvents other than water). Hot water washing (boiling), chemical cleaning and ironing are all traditional methods of sterilizing fabrics for hygiene purposes (Laitala, Boks, & Klepp, 2015). In the 19th century and the first part of the 20th century, laundry was done using other methods and other remedies than today (Sundt, 1975; Løfgren, 1979; Rasmussen, 1977).

The many elements involved in the laundering process indicate that the study of laundry is important. How we handle our laundry influences many aspects of society, both today and in the future. The effects on hygiene and health have already been mentioned; how we perceive and present ourselves in a social context is another consideration. Another very important element is the consumption of energy, water and chemical detergents. From the research results of the hygienic study, there are strong indications that the hygiene quality of washed laundry when still wet is related to the washing temperature and the presence of bleaching agents (A.I.S.E., 2001).

According to Arild et al. (2003), almost all micro-organisms are removed from the laundry samples by a 95°C programme using a detergent containing bleach. Washing at low temperatures seems to spread micro-organisms among the

different laundry items in a washing sample rather than removing them. Temperature and hardness of water both affect washing efficiency. Temperature alone is far more decisive than hardness alone. Together there might be a reinforcement of effects, but this must be analyzed further in order to reach a conclusive result.

Recent evidence [APCC], 2008), suggests that many people do not sort their washing – hence increase the risk of colours running, or of washing more delicate fabrics at the wrong temperature. People also wash their clothes frequently, out of habit rather than necessity. Many consumers are unaware of material properties, and therefore do not care for their clothes as effectively as they could: for example, they do not know whether the best way to care for a garment is to hang it up or fold it, dry it flat or on a hanger, use the loops provided or hang it by the shoulders (Wrap, 2012).

Many kinds of clothing are designed to be ironed before they are worn to remove wrinkles. Most modern formal and semi-formal clothing is in this category (for example, dress shirts and suits). Ironed clothes are believed to look clean, fresh, and neat. Much contemporary casual clothing is made of knit materials that do not readily wrinkle, and do not require ironing. Some clothing is permanent press, having been treated with a coating, such as polytetrafluoroethylene that suppresses wrinkles and creates a smooth appearance without ironing. Relevant suggestions for reducing the likelihood of poor performance resulting from laundering include:

1. Reducing the number of times a garment is washed – freshening items up by

airing, as opposed to washing, where possible;

- 2. Sorting laundry into colours and fibre types before washing, to minimise the risk of discolouration or colour run;
- 3. Avoiding tumble-drying;
- 4. Steam-cleaning wool fabrics;
- 5. Considering hand washing or gentle machine washing;
- 6. Removing stains with a liquid detergent rather than washing the whole garment.

Clothing Storage Practices

Once clothes have been laundered and possibly ironed, they are usually hung on clothes hangers or folded, to keep them fresh until they are worn. Clothes are folded to allow them to be stored compactly, to prevent creasing, to preserve creases or to present them in a more pleasing manner. Storage is an important component in the care and maintenance of clothing. However, it is a component frequently overlooked until a problem occurs. Proper storage can and does reduce the time and money involved in upkeep and prolongs the life of your clothing (Heaten, 2002). The storage of clothing affects their lifetime, how often we launder them and how much we use them (Laitala, Boks & Klepp, 2015). This suggests that storage solutions could help in reducing unnecessary laundering.

Storage of clothes provides protection from dust, dirt, insects, fungus and dye transfer (Marshal et al., 2000). Adequate storage space for clothing and the way it is used, however, are management considerations (Wood, 2006). Taking proper storage of clothes in addition to making them look better, also makes them last longer. Improper clothing storage practices can lead to skin diseases, bad

odour, feeling of unwholesome attitude and poor adjustment to social groups (Marshal et al., 2000). Clothing storage can be divided into three distinctive categories with respect to duration: short-term or day-to-day, seasonal and long-term.

Short-term storage is for items stored daily or on a day-to-day basis. It consists of that portion of the wardrobe currently being worn and used. Organization is extremely important to short term clothing storage. Organized closets and drawers permit wardrobes to be more functional and require less last-minute clothing maintenance. Short-term clothing storage must accommodate hanging as well as flat or folded items.

Clothes, that are hung, should be suspended in an appropriate manner from a hanger. Hooks, as hanging devices, have limited use and should generally be avoided. Appropriate clothes hangers and proper hanging techniques should be used. Hanging clothes in wardrobes prevents them from getting creased or rumpled so that they can retain their original shape (Anyakoha & Eluwa, 2007). Flat storage, on the other hand, is required for items that must be folded or stored in a non-hanging condition. There are many items that fit this category and include sweaters and other types of knitwear (such as dresses, jackets), heavy, stretchy clothing, and other delicate or fragile clothing. The following guidelines have been suggested for the storage of clothes (Anyakoha & Eluwa, 2007; Marshal et al., 2000; Wood Word, 2006; Laitala et al., 2015):

1. Select an appropriate clothes hanger for the garment. The type of hanger is determined by garment style and weight.

- 2. Slacks/pants can be suspended from the cuff or hem, or positioned on a hanger's horizontal bar that has been padded or is enlarged and slightly rounded to prevent creasing at the thigh.
- 3. Suspend the garment by the loops to help support garment weight while it is hanging. Loops help distribute garment weight and minimize distortion.
- 4. Avoid using wire hanger unless covered with white paper or cloth. Wire hangers can rust, paint can peel and the metal can snag delicate fabric.
- 5. When hanging, provide space between neighbouring garments/hangers for air movement and easy access without disturbing other garments.
- 6. If the garment has fasteners, keep at least the top one secured to prevent item from sliding off the hanger.
- 7. Keep the storage area clean. Clean, and/or wash it down at least once a year.
- 8. Herbs, scented odour devices and sachets give storage areas a pleasant smell.
- 9. When creasing can be a problem, consider using white tissue paper between garment folds to prevent creasing.
- 10. Fold garments at construction lines or natural wearing lines such as waist or knees.
- 11. Do not fold garment the same way each time. Alternate folding patterns help prevent permanent creasing.
- 12. Paint closet shelves, line drawers or otherwise protect clothing from snags and the natural oil and acid pH of unfinished wood.
- 13. When stacking is necessary, always place the largest, heaviest garments on the bottom.

- 14. Permit clothing to air at least overnight before storing in a closet, drawers or clothes hamper.
- 15. Remove and check for items left in pockets before storing. Secure or close fasteners.
- 16. Before storing clothes after wearing, check for soil as well as spots and stains. Remove spots and stains, and launder or dry-clean as soon as possible after soiling. Delays could shorten the life of the garment.
- 17. Keep items worn most frequently within easy reach and visible in the storage area. Mesh baskets make good storage units.
- 18. Consider storing similar items such as underwear, belts, and scarves, close to each other. This can make accessorizing easier and quicker.
- 19. Be sure laundered items are completely dry before putting them away.
- 20. Leave doors or drawers ajar periodically for several hours. Storage areas should be thoroughly cleaned at least once a year.

Clothing Repairs/Mending

Clothing repair (mending) skills have been lost in recent years and people often lack confidence in their ability to mend or alter clothes (Wrap, 2012). Most can sew buttons on, but fewer are able to alter a hem or darn a hole. As a result, many people simply store or discard items in disrepair or in need of alteration. However, there is growing evidence of interest in learning how to repair clothing.

Clothing repair can cover a rather wide range of activities varying from those requiring very little skill to those demanding a great deal of sewing skill and expertise (Wrap, 2012). The rewards of mending vary from the self-satisfaction

for a job well done to a substantial monetary savings by prolonging the life of a garment. The need for clothing repair comes from various sources. Poor initial garment construction can be a problem with ready-to- wear as well as handmade items.

Everyday wear and tear will also take its toll. Poor garment fit can cause a seam to split or a fastener to break. Still other repairs become part of preventive mending, permitting the garment to be worn longer without the need of major repair or recycling. For example, the amount of clothing a person acquires influences how much each garment is used, and if garments are not properly taken care of, they can end up sooner in the disposal phase (Laitala, Boks, &Klepp, 2015). The cost of clothing continues to rise; however, garment cost or replacement is not the only factor to be considered. Answering the following questions each time clothing repair/mending is required should provide some insight:

- 1. How extensive is the repair or damage?
- 2. Do I have the knowledge and skill to repair it, or do I need to take the garment out for repair?
- 3. Is the garment worth repairing? (Consider garment age, current fashion, fit, and its use in the wardrobe. If for a child, will it soon be outgrown or can it be handed down?)
- 4. What is the time element involved in the repair? (Do I have the time to do it?Do I have the time to look for and see to someone else repairing it?)
- 5. Can I afford to replace the garment at this time?

6. Will the garment be worn after it is mended? (Laitala, Boks, & Klepp, 2015).

Types of mending

Clothing repairs or mending can be grouped into three main categories, including darning, patching, and remodelling (Gwilt, 2014). Darning is the "reweaving" of fabric in a damaged area, and can be done by hand or sewing machine. Machine darning is faster but more noticeable. Hand darning, which can be invisible to the unknowing eye, is time consuming and requires patience and skill (Gwilt, 2014).

Patching is often used when the damaged area is large or is not suited to darning. The repair can be almost invisible, or very decorative in nature. Patching is a sturdy method of garment repair. Before determining which type of patching method to use, consider carefully the damage location, type of garment, individual who wears the garment, type of fabric and how garment is used. The methods of patching include fusing, gluing, hand and machine stitching (Gwilt, 2014).

Remodelling generally requires the removal of a section or part of the garment so that a new portion or part can be installed. Replacement can require a great deal of skill, or just a little time and creative thought. Almost any section of a garment can be replaced depending on the skill of the individual doing the repair and the necessary fabric (matching, coordinating) to complete the task. For example, in order to replace a zipper, one would need to select a replacement zipper similar to the one removed, or the most suitable zipper available. Then carefully remove old zipper from garment, taking note as to how it was sewn. However, it should be noted that zipper replacement on ready to wear garments

differs slightly from directions that may come with the replacement zipper. Frequent replacements on clothing include pockets, knit sleeve cuffs, and linings. Creative and decorative replacement could include such things as collar and sleeves. The belt of a garment may need to be replaced, or a belt may be added to a garment (Gwilt, 2014).

Throughout dress history it frequently appears that when mending did take place it served to mask damage, making it invisible, particularly, in garments that were perceived as valuable or precious. The extent of techniques used to accomplish these repairs varies enormously, depending on the user's accessibility to materials and skill, and the social and cultural norms of the time (Gwilt, 2014).

Mending supplies and tools

Mending supplies and tools can be categorized into many ways. However, all items should be kept together in a designated location. Everyone, male and female alike, who is responsible for the care and maintenance of their clothing needs at least a basic mending kit, including hand needle (package of assorted sizes [3/9]), stainless steel pins, safety pins, scissors, liquid fray preventer (found in lotion section at fabric store), thread, assorted snaps, hooks and eyes, sewing gauge or small 6-inch ruler, seam ripper, needle threader, pin cushion, assorted buttons, and bodkin (Gwilt, 2014). The colour of thread could include white, beige, black, brown, navy or medium shade of grey or other colours similar to colours in wardrobe to match the basic colours of the wardrobe.

There are numerous repair or mending methods. Some requiring creative talent while others are basic and rather fundamental. Determining which one to use depends on the location of the damage on the garment, type and size of damage, shape of the area to be repaired, type of fabric, ease of handling fabric, type of garment, and the garment's use and place in the wardrobe (Gwilt, 2014).

Preventive mending

Preventive mending includes a variety of things that will keep the garment looking good and delay major repair or mending activities. According to Gwilt (2014), preventive mending includes the following:

- 1. Clipping/tying loose threads. Newly purchased garments may have loose threads that need to be secured, hidden and/or removed.
- 2. Securing/reattaching buttons. Attach/reattach buttons securely with an adequate thread shank to accommodate the fabric layers and thickness when button is secured in the buttonhole. Buttons on outerwear garments such as raincoats and jackets are less likely to break, disappear or damage the garment if they have a reinforcement button on the underneath side.
- 3. Securing Snaps, Hook & Eyes. Use needle with double thread. Secure several times in each hole, making stitches neat. Hide and lock stitching on the underneath side.
- Split/Ripped Seams. The easiest method of repair is by re-stitching on sewing machine. Seam may be repaired by hand if machine is not available. Determine cause of rip and reinforce or strengthen.
- 5. **Reinforce Seam/Area.** Seams/areas under strain or stress need reinforcement to prevent splits. Type of reinforcement will depend on location, fabric, and situation. Types include: double row of machine stitching; using a shorter

stitch length; narrowing seam allowance to provide some additional room in garment, and zigzagging edges together; or sewing a small piece of bias tape to the back side, using zigzag or multi-zigzag stitch.

- Ravelling Buttonhole. Repair ravels using liquid fray preventer and/or hand stitching. Check fray preventer (for colour change) on an inconspicuous seam before using.
- 7. **Ravelling/Unsecured Hem.** Emergency repairs can be made using doublefaced tape or fabric glue, if safe for fabric, or safety pins. Permanently repair by needle and thread, fusible web or sewing machine.

Environmental Impacts Related to Clothing

Clothes cause environmental impacts throughout their life cycle, covering a wide range of environmental issues (Terpstra, 2006). Clothing is reported to account for between 2 and 10 percent of our environmental impacts. Clothing and footwear come after food and drink, transport and housing that together are responsible for 70 to 80 percent of the environmental impact of consumption (EIPRO, 2006). Specifically, clothes cleaning processes are a source of various environmental impacts, linked to the consumption of water, energy, detergent and solvents. The life cycle of clothes has associated environmental impacts that are mainly related to resource use, pollution, eutrophication, greenhouse gas emissions and potential toxicity impacts.

Resource use includes energy use for production of raw materials, especially for man-made fibre and for laundry during the use stage (Allwood et al., 2006), and depletion of natural resources for the production of synthetic fibre made from non-renewable fossil fuels (Cherret et al., 2005). Resource use also includes toxicity issues, covering aquatic, sedimentary and soil toxicity due to the use of chemicals during crop cultivation and impacts generated by clothes cleaning, including laundry detergent production and the use of electricity (Terpstra, 2006).

Also, during clothing use stage, the discharge to wastewater of phosphates contained in washing powders and liquids promotes excessive growth of green algae, which can harm some water-based organisms (Allwood et al., 2006). Laundry effluents mainly generate water eutrophication impacts during clothing use phase, wet processes during clothing manufacturing phase, and the use of fertilizers during crop cultivation.

Greenhouse gas emissions, which are mostly linked to the use of fossil fuels produces a negative impact on the environment such as shortage of rainfall or changes in rainfall patterns (Terpstra, 2006). Solid and hazardous waste generation, from the manufacturing stages, use phase (packaging waste from clothes and laundry detergent), and end of life disposal threatens the sustainability of the environment and mankind. For instance, synthetic fabrics based on oil like polyester pose a specific problem when disposed of in landfills since they take a long time to degrade (Allwood et al., 2006).

The extent of these impacts resulting from clothing is of course related to our consumption. The contribution of the use stage, where energy and water are used for washing and drying, compared to the manufacturing stage seems to be highly dependent on the product material (Marks & Spencer, 2002). Allwood et al., (2006) states that for a cotton T-shirt, 60% of the primary energy consumption over the life cycle takes place during the use stage. Clothes made from man-made fibre require more energy during the raw material stage but the savings realized during clothing care can provide energy savings over the whole lifecycle (Defra, 2008).

Reuse of Clothes

While some casual wear garments are damaged and therefore not suitable for re-use, many are discarded when still wearable. There are therefore plenty of opportunities for garments to be resold, passed on to friends or family, donated to charity or taken to events such as swishing. A share of the garments collected by charity organizations or collectors is transferred to second hand shops with the aim of sending used clothes into the market. Large amounts of clothing of adequate quality are shipped abroad for selling to other traders in Eastern Europe or Africa. For example, about 26,000 tons of collected used clothes and shoes in Sweden were donated to Africa and Eastern Europe in 2008 (Palm, 2011). Another example of the reuse of textiles are the new concepts of reselling or swapping second hand clothes through websites and online auctions that have emerged recently with the aim of extending the life span of garments (Cassidy et al., 2013).

The hardwearing material can also be altered or restyled as fashions change, or if parts of an item become unwearable. As well as simple customisation for different tastes, adding patches or embellishments to a secondhand denim item, it is possible to reconfigure items such as jeans into skirts and

dresses, or jackets into waistcoats; and shorten jeans when hems have frayed to create cropped styles or shorts; create a more fitted silhouette by re-seeming to reduce leg width; and create a fuller or looser silhouette by adding inserts on side seams to increase leg width (Wrap, 2012).

Retailers can help raise awareness of this by providing advice on the labels and their websites about options for re-use. Older garments may be used for nonpublic purposes (e.g. gardening) and ultimately recycled: this is something that many consumers are relatively unaware of, and simply assume that items cannot be re-used (Wrap, 2012). Great environmental gains could to be achieved through reducing the amounts of clothing in circulation, and increasing the lifespan of the existing clothing. One of the possibilities consumers have for more sustainable clothing acquisition is to select pre-owned products (Moore & Ausley, 2004; Fletcher, 2008).

Conceptual Framework

The conceptual framework of the study (See Figure 1) was developed, after a thorough review of the literature, by the researcher. The conceptual framework proposes clothing care practices among senior members of the University of Cape Coast. According to the framework, clothing care practices start with the selection of clothes. The care of clothes during selection is facilitated by two important practices: (1) sources of information on selection, and (2) factors affecting choice of clothing, which is further subdivided into socioeconomic, psychological and physical factors.

However, due to the possibility of clothes deteriorating as a result of its' usage, there is a need to manage the rate at which clothes deteriorate. This management process involves mainly proper laundry, storage and repairs or mending. Thorough understanding of care labels should facilitate proper laundry of clothes. It is also believed that if clothes are properly repaired, there should be an increase in its' reuse, and a decrease in its' disposal. One of the important contributions of this model is that it provides a clear relationship of the variables of clothing care practices.



Figure 1: Conceptual model of clothing care and management practices of senior members.

Empirical Review

Clothing selection practices

There has been an extensive research on clothing selection practices as compared to other care practices such as laundering, storage, and care repairs. Riungu (2008) study established that sources of information on clothing among teachers include family members, friends, tailors, and window-shopping and fashion magazines. The various shopping outlets used by teachers include boutiques, tailoring stores, retail stores, open-air markets, second hand clothes and exhibitions. The physical characteristics of the clothes influencing clothing selection include item construction and finishing, fabric quality, work suitability and cleaning and care. Psychological factors such as smart looking, acceptable style, personal beliefs and values, latest style and unique outfit influenced clothing selection.

A study carried by Taylor and Cosenza (2002) argued that fashion/style is the most important quality when doing clothing purchases, seeing brands as the less important attribute. On the contrary, Solomon and Rabolt (2004) defended that brand is the most important factor in clothing. These differences depend of the materialistic behaviour of individuals and their self-esteem. A study by Laitala et al. (2015) also postulated that change in garments as well as size and fit issues dominated in clothes selection, while functional, situational, taste, and fashion related reasons were less common.

Rahman (2012) tested how female consumers evaluate quality and price level of jeans when no brand or price information is given. These consumers

developed expectations of product durability based on visual evaluations of the fabric and stitches, as well as tactile evaluations of hand feel and the stretchiness of the material. In many cases they managed to guess the price level of jeans, and assumed the high price jeans to be of better quality. At the same time, research on fast fashion clothing lifespan showed that most of the informants thought that low price justifies lower clothing quality and shorter lifespan (Collett, Cluver, & Chen, 2013).

In a study by Fisher et al. (2008), different ways of evaluating quality were evident. Some participants associated quality with brand names (of shops or designers), while others indicated that they evaluated the quality of clothes by feeling them. Participants applied a range of criteria in considering their understanding of what represents good clothing, including fashion, price and quality, and highlighted the need to distinguish different types of clothing.

In a survey by Ofori et al. (2014), 68 percent of the respondents made their own clothing choices, their parents influenced 23 percent and friends influenced 9 percent. Colour, fashion, affordability, durability and religion were factors that influenced respondents' clothing selection the most. Moreover, 24 percent of the respondents in that same study indicated that the type of fabric and its texture were the most important physical sub-factor that influenced their clothing selection. Twenty-one percent of the respondents indicated that they considered size, length and fit, while 18 percent considered style of the clothing item. The weather and environment were considered by 13 percent of respondents; 7 percent and 5

percent each said the label and uniqueness respectively influenced their clothing choice. Surprisingly, only 3 percent of respondents mentioned care and maintenance as factors that influenced their clothing selection.

Clothing care labels

It was found by Anderssonet al., (2004) that consumers interpreted some clothing advertisements as distasteful and unacceptable causing them to form a negative perception of that specific brand. This indicates that consumers' interpretation of information and visual characteristics of textile product labels need to be addressed. Furthermore, Maqalika-Mokobori (2005) found that some consumers had negative interpretations regarding the consistency of the positioning of the label on textile products. This may be because the textile product label's placement is not always easy to establish, making it difficult to use. This could create a negative perception of clothing care labels.

Repairs and discarding of clothes

The findings of three studies (Collett et al., 2013; Klepp, 2001; Ungerth & Carlsson, 2011) on clothing disposal had wear and tear as the most important reason for disposing clothes. However, another study on female students' clothing disposal reasons indicates that fashion was a more important reason for them (Chun, 1987). The investigation of clothes by ISO (2015) showed that approximately 40 percent had pilling or fussing to some degree. However, the owners, as disposal reasons, mentioned a small proportion of these. When pilling or fussing was given as disposal reason, the level was evaluated to be on average grade 2 on a scale from 1 to 5, which is very noticeable pilling (ISO, 2015).

Klepp (2001) has studied women's clothing habits and reasons for clothing disposal. She divided the disposal reasons in six main categories. The results show that technical or quality related obsolescence is given as most common reason for clothes disposal, even though a large amount is discarded due to psychological and situational reasons. A recent study from the UK revealed that the respondents discarded clothing mainly due to the condition of clothing, new trends in fashion, lack of space, loss of emotional attachment and changes in body shape (Cooper et al., 2010).

Summary of Related Literature Reviewed

The review of related literature on clothing care indicates that clothes were possibly there not to provide protection against the harsh weather. Embellishing of one's own body was probably seen as an important purpose of clothing, which is believed to provide satisfaction to humans.

In the past, the potential impact of product attributes on consumer decision-making toward different product categories in different consumer markets have been investigated (Cosenza, 1985; Gipson & Francis, 1986; Eckman et al., 1990; Wickliffe &Pysarchik, 1998; Forney et al., 1999; Forsythe et al., 1999). Product characteristics, such as price, style, fabric, fit and brand have been identified as major decision criteria influencing family clothing purchase decisions. Furthermore, product characteristics have been found to be highly correlated with consumer decision-making styles. Consumers' perceptions of the importance of three product attributes, i.e. price, brand, and country of

manufacture, substantially affected all of the consumer decision-making styles identified in the purchase of clothing.

Literature on product disposal practices in general differentiates between absolute and relative obsolescence (Cooper, 2004). Absolute obsolescence means that the product has failed and is no longer usable. Relative obsolescence applies to products that are still functional, but discarded for some other reasons. In the literature, the main categories generally used for distinguishing between reasons for disposal are: (1) functional: replaced by products with improved utility or expression; (2) quality: product failure, or wear and tear; (3) psychological: also called symbolic obsolescence; and (4) new consumer needs or desires (Heiskanen, 1996; Kostecki, 1998; Strandbakken, 1997; van Nes & Cramer, 2006).

Many of the changes in garments were related to laundry related problems such as stains, odour, shrinkage, and colour changes. This shows that the care phase is important for continued use of the garments. As the care phase also has environmental impacts due to energy and water consumption (Bain et al., 2009), extensive care management practices are, therefore, preferable. It is possible to use clothing as well as systems design to reduce the environmental impact related to the use period.

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CHAPTER THREE

RESEARCH METHODS

Overview

This chapter describes the procedure that was adopted in conducting the study. It is divided into six sections. The first section deals with research design, and the second deals with the study area. The third and fourth sections cover the population and sampling procedure, respectively. The fifth section discusses the data collection instrument (including pre-testing procedure) while the sixth section deals with data collection procedures. The last section covers how data collected was processed and analysed.

The main rationale for the study was to find out whether senior members in the University of Cape Coast follow the approved practices for selecting, laundering, storing, and repairing of clothes. The level of knowledge of senior members on care label symbols and terms was also investigated. Finally, the study sought to find out the differences that exist between administrative and academic, and female and male senior members, in terms of the practices used in the selection, laundering, storing and the repairing of clothes.

Research Design

The research objectives and questions posed necessitate the collection of quantitative data from selected individuals at a single point in time. Thus, the research design adopted for this study is the cross-sectional survey design. "A

cross-sectional survey is one in which data are collected from selected individuals at a single point in time" (Gay, Mills & Airasian, 2009, p. 176). Cross-sectional survey is adopted for this study in order to make generalization statements about the clothing care practices of senior members and the differences in clothing care practices that exist between administrative and academic senior members, and female and male senior members.

Frankel and Wallen (1993) noted "obtaining answers from a large group of people to a set of carefully designed and administered question, lies at the heart of survey research" (p. 17). Polit and Hungler (1995) stated that the aim of descriptive studies, such as survey research, is to describe, observe and document aspects of a situation as it naturally occurs rather than explaining them. A descriptive study provides a more accurate picture of events and seeks to explain people's perception and behaviour on the basis of data gathered at a point (Anhwere, 2009).

Cross-sectional designs have the advantage of providing a snapshot of the current behaviours, attitudes, knowledge and beliefs among a group of people. It also provides data relatively quickly as the researcher does not have to wait for a certain period of time before data can be gathered, analysed, and conclusions made as in the case of longitudinal survey designs (Gay et al., 2009). Furthermore, cross-sectional approach is used with more or less sophistication in many areas of human activity. Moreover, the descriptive design was used because according to Frankel and Wallen (2000), the big advantage of the design is the

potential to provide a lot of information obtained from quite a large sample of individuals.

However, cross-sectional designs are not without disadvantages or difficulties. Specifically, it is not an effective design if the goal of the research is to understand trends or developments over time. Moreover, a single point in time often does not provide a broad enough perspective to inform decisions about changes in processes and systems reliably (Gay et al., 2009). Seifert and Hoffnung (1994) and Frankel and Wallen (1993) noted further that there is the difficulty of ensuring that the questions to be answered using the descriptive design are clear and not misleading because survey results can vary significantly depending on the exact wording of questions. It may also produce untrustworthy results because they delve into private matters people may not be completely truthful about.

Study Area

The research was conducted in the University of Cape Coast. The University of Cape Coast is one of the 8 public universities in Ghana. Initially, the University of Cape Coast was mandated to train teachers for second-cycle educational institutions in Ghana. Presently, the university offers courses in education, in addition to other fields such as science, business, medicine, arts, and law. The University employs over 5,000 workers, who are categorized into senior members, senior staff, junior staff, and support services.

According to Tate (1967), higher education appears to be associated with better personal appearance; this made the University of Cape Coast a preferred

area for an investigation into clothing care practices. Again, my familiarity with the region's landscape facilitated the collection of the data within the limited stipulated time for the submission of the final work.

Population

In this study, the target population consisted of all staff at the University of Cape Coast. This was made up of 5,631 employees of the various departments of the University of Cape Coast. The staff of the University of Cape Coast can be categorised into four main groups. They are senior members, senior staff, junior staff and the support services. Senior members are defined as those employees of the university who are members of convocation and who are key elements of how universities are set up. Senior members are further classified into two main groups: academic and administrative senior members.

For the purpose of the study, the accessible population consisted of all senior members of the University of Cape Coast, including both academic and administrative senior members. This was made up of 624 senior members in academic and 107 senior members in administration respectively (Staff Statistics, 2014). The clothing care practices of this category of staffs, in the University of Cape Coast community are considered capable in providing a broader scope of information in achieving the purpose of the study.

Sampling Procedure

Best and Kahn (1989) defined a sample as a small proportion of a population selected for observation and analysis. According to Sarantakos (as cited in Oduro-Okyireh, 2008), a sample enables the researcher to study a

relatively smaller number of units in place of the target population and to obtain data that are representative of the target population. In this study, a sample size of 254 senior members was selected in order to make generalizations about the clothing care and management practices of senior members. This was based on the Krejcie and Morgan sample determination table, which states that for a population size of 750, a sample of 254 should be selected for the study. The sample was made up of 216 academic and 38 administrative senior members, respectively.

The sampling procedure adopted for the study was the proportionate random sampling. Proportional sampling technique involves selecting a sample in accordance with the proportion of each group in the study's population (Gay et al., 2009). The 254 senior members were randomly selected from the 6 Colleges, and administrative department of the University. Random sampling with replacement was used, as shown in Table 2.

Name of	Academic Senior	Administrative	Total Senior	
College/Administration	Members	Senior Members	Members	
	Sampled	Sampled	Sampled	
College of Education				
Studies	36	8	44	
College of Agriculture and				
Natural Sciences	40	6	46	
College of Humanities and				
Legal Studies	50	9	59	
College of Distance				
Education	26	3	29	
College of Health and				
Allied Sciences	44	7	51	
School of Graduate Studies				
and Research	20	5	25	
Total	216	38	254	

Table 2: Distribution of sampled senior members in each College, and Administration

Source: Field survey (2017)

The proportionate number of academic and administrative senior members sampled for this study was determined by dividing the total number of senior members in the University (i.e. 731) by the total number of academic and administrative senior members in the University, which were 624 and 107 respectively. This gave a proportion of 0.85 (85%) and 0.15 (15%) for academic and administrative senior members respectively. Then the total numbers of senior members to be sampled for the study (i.e. 254) was multiplied by the proportion of 0.85 to arrive at a sample size of 216 academic senior members sampled for the

study. The same procedure was repeated for the administrative senior members by multiplying 254 by 0.15 to arrive at 38 administrative senior members sampled for the study.

The names of all senior members in the University were solicited from the University's directorate of human resource. The names were then written on pieces of paper and put in a box. The researcher shook the box and randomly picked up to determine the name of the senior member selected. The slips of paper were picked one after the other without looking into the pool. Once a name of a senior member was selected, it was recorded as a sample with the box shaken while the chosen piece of paper was put back into the urn and reshuffled. This was done in order to maintain the same probability of being chosen for all senior members identified for the study.

Data Collection Instruments

Questionnaire was used to collect data in order to answer the research questions. A five-section questionnaire (See Appendix A), made up of mainly closed-ended items, with a few open-ended items, was developed for the study.

The first section (i.e. Section A) was concerned with some general issues connected with the clothing selection practices of senior members in UCC. The items mainly sought information on factors considered by senior members during clothing selection. This section comprised of eight items (i.e. items 1 to 8).

Section B of the questionnaire, which comprised of 35 items, dealt with senior members' current level of knowledge, perceptions and practices concerning care label symbols, as well as, their laundering practices. Items 9a to 13a and 9b

to 13b in this section sought information on whether or not respondents seek clarification on some basic care label symbols at the point of purchase while Items 14a to 19a and 14b to 19b sought information on senior members' practices concerning care label symbols. In addition, information on senior members' perception of care label symbols were sought with items 20 to 24. Lastly, this section also contained items (i.e. items 25 to 32) that elicited information on respondents laundering practices.

Section C covered the clothing storage practices of senior members in the University of Cape Coast. This section was made up of 15 items to be responded to by the senior members. Information mainly sought for in this section was the conditions under which senior members store their clothes after laundry or purchase. Issues discussed in this section also included methods used by senior members in freshening up stored clothes.

Section D of the questionnaire instrument comprised of 6 items. These items sought for information on senior members practices concerning clothing repair or mending. Information sought for in this section also included uses made of torn or worn clothes of senior members.

The last section of the questionnaire (i.e. Section E), which contained two items requested information on the background of the respondents for the study. The information sought for in this section included whether the respondent is an academic or administrative senior member. Also, information on respondents' gender was elicited in this section.

The questionnaire described above was developed after reviewing the related literature on the concept of clothing care practices. Items on the questionnaire were dichotomously scored, and multiple-scored on a four-point and five-point Likert scale. The items on the four-point Likert type scale were scored ranging from "always" (scored 4) to "never" (scored 1) while those on a five-point Likert type scale were scored ranging from "strongly agree" (scored 5) to "strongly disagree" (scored 1). The Likert type scale was chosen because according to Gyimah (as cited in Oduro-Okyireh, 2008), in measuring the views and impressions of teachers on an on-going practice, it is the most simple, but equally efficient approach when compared to social-distance scales, Thurstone scales and the scalogram analysis. The questionnaire is preferred due to the large size of respondents that will be sampled in order to make generalization statements, and therefore, makes it not appropriate, in terms of time and funds, to interview every respondent (Osuola, 2001).

The researcher's supervisors at the University of Cape Coast, who are experts in clothing and research methods, helped establish the validity (i.e. content and construct validity) of the questionnaire. Specifically, they read through the questionnaire to check the construct validity of the instrument.

The reliability of the instrument was also estimated using Cronbach's coefficient alpha. Co-efficient alpha was preferred in estimating the instrument's reliability index due to the presence of both dichotomously and polytomously scored items (Nitko, 2001). The questionnaire had a Cronbach's alpha of 0.828 as an estimate of its reliability index (See Appendix B). This is considered

appropriate as it is above a co-efficient alpha of 0.70(Pavet, Diener, Colvin & Sandvick, 1991).

The questionnaire was considered as the most appropriate instrument for this study due to the large size of the respondents that were sampled in order to make generalization statements about the research's findings. It would have been uneconomical, in terms of time and funds, to interview every senior member sampled for this study (Osuola, 2001). It also reduced chance of biases on my part since the same questions were asked of all respondents. Nevertheless, a limitation of using questionnaire was that it generated large amounts of data that took long time to analyse. However, for the reason that many statistical software are available for numeric data, the advantages of adopting a questionnaire also included the fact that, they are cost effective; cheap to administer; and easy to analyse. Moreover, the researcher was unable to probe for further information from the respondents, through the use of the questionnaire (Gay et al., 2009).

Pre-testing procedure

The questionnaire was pre-tested with senior members in the University of Cape Coast, who did not participate in the actual study. The sample for the pretesting was 50 senior members, comprising 35 academic and 15 administrative senior members, respectively. The 50 senior members sampled for pre-testing were selected from the various Colleges and Administration department of the University of Cape Coast. Moreover, these senior members had similar qualifications and characteristics with teachers in the accessible population of the study. They included both female and male senior members with educational

qualifications, including diploma, degree and other professional certificates.

The questionnaires were personally administered to the 50 senior members in the University of Cape Coast. Respondents were given the opportunity to express their views in writing on the clarity and ambiguity of the items on the questionnaire. Analysis of such views helped to improve the construct validity of the instrument, as several items on the questionnaire were reworded and clarified. Moreover, the items on the instrument were reduced from 96 items on the pilot test instrument to 68 items on the final instrument. This was done to improve the instruments' appropriateness, and the practicality of the data collection procedure.

Data Collection Procedure

In this study, information was solicited from both primary and secondary sources. Secondary sources of data were collected through sources such as books, journals, thesis and dissertations, and other relevant literature. Primary source of data were collected on the responses to the questionnaire items. The questionnaires were administered to the 254 senior members of the University of Cape Coast with the help of a team of research assistants. Six (6) students from the Department of Vocational and Technical Education, University of Cape Coast were recruited and trained by the researcher to assist in the administration of the questionnaire. The training session took the form of an hour briefing on the purpose of the study and an explanation of the specific information sought by the questionnaire.

Permission was also sought from the heads of the various Colleges and administrative departments in administering the questionnaire; after an

introductory letter had been delivered to them. The introductory letter (See Appendix C) spelt out the objectives of the study. As part of the researcher's ethical considerations, information about the purpose of the study was also provided to all participants prior to data collection.

The research assistants further provided opportunities for respondents to seek clarification on items on the questionnaire that were not clear to them before responding to the questionnaire. This helped to erase respondents' biases and prejudices (Trochim, 2000). This also ensured good rapport with the senior members to further explain the purpose of the study so that the respondents' commitment towards responding to items on the questionnaire and submitting them in good time was assured. As a measure to ensure anonymity and confidentiality of the results, participants were instructed not to write their names on the instrument. Participants were also informed of their right to withdraw, at any stage, from the study.

The data collection process started on July 10, and ended on August 30, 2016, thus, spanning a period of 7 weeks. Out of the 254 questionnaires administered, 176 were retrieved. This resulted in a response rate of 69%. It should be noted that the researcher made several follow-ups to many of the senior members to collect the completed questionnaires.

Data Processing and Analysis

Quantitative data obtained through responses to the administered questionnaires were edited, coded, and entered into the Statistical Product for

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Service Solution (SPSS) computer software for analysis. Descriptive and inferential statistics were employed to analyse data.

The items on the questionnaire comprised of Likertscale items, dichotomous items, multiple response items, and open-ended items. Items: 1 - 8, 14a - 19a, and 25 - 52 were measured on four point Likert scales indicating, "Always" (scored 4) to "Never" (scored 1). Items 20 to 24 were measured on five point Likert scales indicating, "Strongly agree" (scored 5) to "Strongly disagree" (scored 1). Items 9a - 13a and 14b - 19b were also measured and coded as "yes" (scored 2) and "no" (scored 1). Item 53 was a multiple-scored item. However, in order to analyse such an item, each option or response to the item was treated as an item on its own, and scored categorically as "yes" (scored 2) and "no" (scored 1).

Moreover, item 9b – 13b were open-ended items. Finally, item 54 was coded as follows: "Academic senior member" (scored 2) and "Administrative senior member" (scored 1) whereas item 55 was coded as "Male" (scored 2) and "Female" (scored 1). It must be emphasized that negatively worded items, including items; 25, 26, 28, 30, and 35, had coding weights reversed directly for them.

Section E of the questionnaire was on background information of the senior members. These responses were analysed using frequency and percentage tables.

Research question one

How is care considered in the clothing selection practices of senior

members?

The scores of respondents' responses to items 1 to 8 of the questionnaire instrument, which represented clothing selection practices of senior members, were used in answering this research question. The data on this research question were analysed using means and standard deviations.

Research question two

What is senior members' level of knowledge or understanding of care labels?

Using a frequency and percentage distribution table, research question two was answered by analyzing the scores of respondents' responses to items 9a to 13a of the questionnaire instrument.

Research question three

Which clothing care label symbols do senior members adhere to during laundering?

The scores of respondents' responses to items 14a to 19a of the questionnaire instrument, which represented clothing care label symbols adhered to by senior members, were used in answering this research question. The data on this research question were analysed using means and standard deviations.

Research question four

What differences exist between female and male senior members' practices concerning care label symbols?

The scores for the respondents' responses to items 14a to 19a of the questionnaire instrument were used to answer this research question. An

independent sample t-test for equality of means was computed between senior members who are females and those who are males. The t test examined whether there was any statistically significant difference in senior members practices concerning care label symbols. The level of significance was 0.05.

Research question five

How do senior members perceive care labels?

The scores of respondents' responses to items 14b to 19b and 20 to 24 of the questionnaire instrument, which represented the perceptions of senior members on care label symbols were used in answering this research question. The data on this research question were analysed using frequency and percentage tables, and means and standard deviations.

Research question six

What differences in their perception of care labels exist between female senior members and male senior members?

The scores for the respondents' responses to items 20to 24 of the questionnaire instrument were used to answer this research question. Independent samples t-test for equality of means was computed between senior members who are females and those who are males. The t test examined whether there was any statistically significant difference in senior members perceptions concerning care label symbols. The level of significance was 0.05.

Research question seven

Which clothing laundry practices do senior members adhere to? Means and standard deviations were used to analyse the scores of respondents' responses to items 25 to 32 of the questionnaire instrument, which represented 8 practices that senior members adhered to during clothing laundry.

Research question eight

Which clothing storage practices do senior members adhere to?

The scores of the respondents' responses to items 33 to 47 of the questionnaire instrument, which represented clothing storage practices adhered to by senior members, were used in answering this research question. The data on this research question were analysed using means and standard deviations.

Research question nine

What differences in clothing storage practices exist between male and female senior members?

This question was answered by analyzing the data on items 25 to 32, using an independent samples t-test for equality of means. The test compared the group mean scores for senior members who are females and those who are males, with respect to practices adopted by senior members in the laundering of clothes. The level of significance was 0.05.

Research question ten

What are the clothing repair practices of senior members?

Means and standard deviations were used to analyse the scores of respondents' responses to items 48 to 52 of the questionnaire instrument with respect to clothing repair practices of senior members.

Research question eleven

What differences in clothing repair practices exist between male and

female senior members?

The scores for the respondents' responses to items 48to 52 of the questionnaire instrument were used to answer this research question. An independent sample t-test for equality of means was computed between senior members who are female and those who are males. The t test examined whether there was any statistically significant difference in senior members clothing repair practices. The level of significance was 0.05.

Research question twelve

What are the clothing discarding practices of senior members?

Using a frequency and percentage distribution table, research question thirteen was answered by analyzing the scores of respondents' responses to item 53 of the questionnaire instrument.

Chapter Summary

Chapter Three discussed the methodology that was necessary to answer the research questions that this study sought to address. This study adopted a quantitative methodological approach to research. It involved the use of questionnaires to collect data from 254 senior members randomly selected from the University of Cape Coast. The data collected and processed were analyzed using means and standard deviations, independent-samples t test, and frequency and percentages.

The use of questionnaires makes it difficult to judge the honesty and truthfulness of such responses made by respondents. Furthermore, the use of questionnaires did not allow the researcher to probe further on the research

questions.

CHAPTER FOUR

RESULTS AND DISCUSSION

Overview

The main purpose of the study was to investigate the clothing care and management practices of senior members in the University of Cape Coast, Ghana. Specifically, data was sought on practices concerning the selection of clothes, care labels and laundering of clothes, storing of clothes, and clothes repair and reuse/discarding of clothes.

The study employed purely quantitative approach to research and draws extensively on positivist philosophy. Positivism emphasizes the use of the scientific method through observation to empirically test hypotheses explaining and predicting what, where, why, how, and when phenomena occurred. Positivist philosophy claims that reality is fixed, knowable and it is directly measurable. They emphasize that, reality can be described from an objective point of view without interfering with the phenomena being studied and attempt to measure reality by operationalizing concepts in order to measure them as well as formulate hypothesis about them. Quantitative data obtained from responses on the questionnaire items were analysed using frequency and percentage tables, means and standard deviations, and independent samples t-test. The results are presented and discussed in relation to empirical literature on clothing management practices.

Results

Background information

The study was carried out with senior members in the University of Cape Coast, with a sample size of 254 senior members. The senior members were selected from all the Colleges and Administrative departments of the University of Cape Coast. The number of senior members from each college/administrative department ranged from 59 to 25. (See Table 2 for the distribution of senior members according to colleges or administrative departments). The 176 senior members sampled were made of both females and males who hold either an academic or an administrative position in the University.

Gender distribution of respondents

Item 55 of the questionnaire sought to find out the gender of the senior members sampled for the study. The result is presented in Table 3.

 Table 3: Gender Distribution of Respondents

Gender	Frequency	Percentage
Female	77	43.8
Male	99	56.3
Total	176	100

Source: Field survey (2017)

From Table 3, out of a proportionate random sampled size of 176 senior members, 77 of them, representing 43.8%, were females while the remaining 99, representing 56.3%, were males.

Research question one

How is care considered in the clothing selection practices of senior

members?

Research question 1 sought to find out the frequency of practices adopted by senior members in the selection of their clothes. Items 1 to 8 of the questionnaire were used in answering this question. The items comprised of 8 factors that need to be considered in order to select quality clothes. The items were scored, using a four point Likert scale, as "always" (scored 4) to "never" (scored 1).

Two cut-off points "rarely" (scored within a mean of below 2.5) and "mostly" (scored within a mean of above 2.5) were used in discussing the results as shown in Table 4.

Clothing Selection Practices	Ν	Mean	Std. Deviation
I look out for the texture of the cloth	176	3.41	.743
I look out for the colour combination	176	3.27	.758
I look out for buttons that are fully stitched and			
fastened	176	3.03	.834
I look out for hems that are well fixed	176	2.86	.860
I look out for the strength of seams	176	2.74	.974
I consider my ability to care for the costume	176	2.64	.998
I look out for trimmings that will hold up in use	176	2.52	1.058
I consider care instructions	176	2.35	1.008
Mean of means	176	2.85	.904

Table 4: Means and Standard Deviations on Clothing Selection Practices

Source: Field survey (2017)

The results in Table 4, with a mean of means of 2.86 and a standard deviation of .904, in summary, showed that senior members, most of the time, look out for the physical characteristics of clothes during purchase.

Senior members looked out for the texture of the cloth (M=3.41, SD=.743) colour combination and secured fastenings. Care instructions, (M=2.35, SD= 1.008) is the factor that was rarely considered at the point of purchase by senior members. Texture is a feel factor and influences the comfort and drape of a fabric. According to Li (2010) comfort is increasingly becoming an integral part of consumers when it comes to choice of clothing since clothing and textile products materials that people use to obtain physiological and psychological comfort. The results therefore show that the respondents are more interested in the comfort and hang of their clothes than how they will care for it. It is however important to consider the care instructions at the point of purchase (Mason et al., 2008).

This result supports the findings of Ofori et al. (2014) that respondents in their study indicated the type of fabric and its texture were the most important physical sub-factors that influenced their clothing selection. Rahman (2012) also found that consumers, especially female consumers developed expectations of product durability based on visual evaluations of the fabric and stitches, as well as tactile evaluations of hand feel and the stretchiness of the material.

Research question two

What is senior members' level of knowledge or understanding of care labels?

Care labels are attached to clothes to help consumers know how to care for them and to prolong the lifespan of its usage. Items 9a to 13a and 9b to 13b of the questionnaire sought to find out the level of knowledge or understanding of care labels among senior members in the University of Cape Coast. The responses

were categorized as "yes" (scored 2) and "no" (scored 1). The distribution of the senior members' responses is shown in Table 5.

Table 5: Frequency Distribution of Senior Members Level of Knowledge ofCareLabel Symbols

$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Care Label Symbol	Yes (%)	No (%)	Total (%)
$ \begin{array}{c} (13\%) & (87\%) & (100\%) \\ & & & & & \\ & & & & \\$	$\overline{\bigcirc}$	23	153	176
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	(Dry Cleaning)	(13%)	(87%)	(100%)
	~~~~	40	136	176
$ \begin{array}{c ccccc} & & & & & 17 & 159 & 176 \\ \hline & & & & & (10\%) & (90\%) & (100\%) \\ & & & & & 14 & 162 & 176 \\ \hline & & & & & (10\%) & (100\%) \\ \hline & & & & & & (100\%) \\ \hline & & & & & & (100\%) \\ \hline & & & & & & & (100\%) \end{array} $	(Washing)	(23%)	(77%)	(100%)
(Bleaching)       (10%)       (90%)       (100%)         14       162       176         (Drying)       (8%)       (92%)       (100%)         (Ironing)       81       95       176         (46%)       (54%)       (100%)	$\wedge$	17	159	176
14       162       176         (Drying)       (8%)       (92%)       (100%)         81       95       176         (Ironing)       (46%)       (54%)       (100%)	(Bleaching)	(10%)	(90%)	(100%)
(Drying) (Drying) (Ironing) (8%) (92%) (100%) 81 95 176 (46%) (54%) (100%)		14	162	176
8195176(Ironing)(46%)(54%)(100%)	(Drying)	(8%)	(92%)	(100%)
(Ironing) (46%) (54%) (100%)	=	81	95	176
	(Ironing)	(46%)	(54%)	(100%)

Sources: Field survey (2017)

Overall, the responses of the senior members indicated that more than 50% of the respondents in this study did not have knowledge in all the five basic care label symbols specified on the questionnaire. This result confirms earlier finding in table 4 that senior members did not look out for care instructions during purchase of clothes. Table 5 further shows that the symbol that had the highest number of senior member identifying it (46%) has the symbol of an iron so probably it is easy to guess what it means.

Moreover, when asked about the meaning of these care label symbols, as in the case where the respondent's initial response was a yes, majority of such

respondents were able to get the meaning/terms right. Nonetheless, a few (8 to 13%) of such respondents gave very interesting meanings to these care label symbols, including "Drying symbol" (Unequal whole); "Bleaching" (Hanger, Trinity); "Dry Cleaning" (An all rounded person/situation); "Washing" (Crown, Machine wash); and "Ironing" (Power, Hot, Warmth). It could be said that such responses were guessed works based on the shape of the care label symbol.

The fact that senior members of the university do not take interest in care labels is serious since the care labels are meant to help in the proper management of clothing. Probably this is the case because in Ghana, often, fabrics are bought for clothes to be made. As such, care labels are not taken seriously.

## **Research question three**

Which clothing care label symbols do senior members adhere to during laundering?

Items 14a to 19a of the questionnaire asked senior members to indicate the extent to which they adhered to clothing care symbols during laundering. The responses were assessed using a four-point Likert scale with categories from "always" (scored 4) to "never" (scored 1). The results, as presented in Table 7, were discussed using two cut-off points ranging from "never" (scored within a mean of below 2.5) to "always" (scored within a mean of above 2.5).

Table 6:	Means	and	Standard	Deviations	on	Senior	Members	adherence	to
Care La	bel Syml	bols							

Care Label Symbol	Ν	Mean	Std. Deviation
(Do not iron)	176	2.22	1.200
(Do not wash)	176	1.92	1.039
(Spot clean only)	176	1.82	.957
(Do not bleach)	176	1.75	.989
(Dry in shade)	176	1.71	.969
(Dry flat)	176	1.66	.973
Mean of means	176	1.85	1.021

Sources: Field survey (2017)

From Table 6 above, with a mean of means of 1.85 and a standard deviation of 1.021, responses to the questionnaire items, in summary, indicated that senior members scarcely adhered to any of the care label symbols. From the table, only 2 out of the 6 care label symbols, including "Do not iron" ( $\underline{M} = 2.22$ ,  $\underline{SD} = 1.200$ ) and "Do not wash" ( $\underline{M} = 1.92$ ,  $\underline{SD} = 1.039$ ) symbols were always adhered to by senior members. The majority of the care label symbols, i.e. 4 out of 6 symbols with means less than 2.5 were scarcely adhered to by the senior members. The worst adhered symbol or instruction was "Dry flat" with a mean score of 1.66 and a far less standard deviation of .973.

This result further confirm previous finding that senior members in this

study do not consider care label symbols in their clothing care and management practices. Also, the symbol that senior members are most conversant with is the iron symbol. Senior members cannot adhere to symbols if they do not understand the symbol in the first place as shown in Table 5. Not adhering to care symbols has serious implications for the life span of the garment since care labels are meant to protect clothing and prolong their life-span (Heaten, 2002; Laitala, Boks, & Klepp, 2015).

## **Research question four**

What differences exist between female and male senior members' laundering practices concerning care label symbols?

This research question sought to find out whether there were any significant differences in laundering practices concerning care label symbols between senior members who are females and those who are males. To address this question, the responses to items 14a to 19a on clothing care symbols for laundry were used. Using senior members' gender as independent variable and laundering practices concerning care label symbols as dependent variable, an independent sample t-test of equality of means was conducted to determine whether the sex of senior members had any significant influence on their laundering practices concerning care label symbols. The result is shown in Table

7.

Group	Ν	Mean	SD	Т	Df	p-value
Females	77	1.93	.831			
				1.125	174	.262
Males	99	1.78	.886			
~	_					

## Table 7: Test for Equality of Means on Laundry Practices of Female Senior

Members and Male Senior Members in terms of Care Label Symbols

Sources: Field survey (2017)

From Table 7, the result indicated that based on the responses, the independent samples t-test for equality of means is not statistically significant ( $\underline{t}(174) = 1.125, \underline{p} > 0.05$ ). This indicates that there was no statistically significant difference in laundering practices concerning care label symbols between senior members who are females and those who are males.

#### **Research question five**

How do senior members perceive care label symbols?

This question sought to investigate two major issues involved in senior members' perceptions of care label symbols. These are senior members' perceptions of care label symbols that deter them from purchasing clothes and their perceptions concerning the actual meaning of care label symbols in general.

Items 14b to 19b of the questionnaire were used to determine care label symbols that deter senior members and influence their purchases. The responses were categorized as "yes" (scored 2) and "no" (scored 1). The distribution of the senior members' responses is shown in Table 8.

Care Label Symbol	Yes (%)	No (%)	Total (%)
X	26	150	176
(Spot clean only)	(15%)	(85%)	(100%)
***	34	142	176
(Do not wash)	(19%)	(81%)	(100%)
	27	149	176
(Do not bleach)	(15%)	(85%)	(100%)
	18	158	176
(Dry in shade)	(10%)	(90%)	(100%)
$\overline{}$	42	134	176
(Do not iron)	(24%)	(76%)	(100%)
	26	150	176
(Dry flat)	(15%)	(85%)	(100%)

Table 8: Frequency Distribution of Senior Members Perceptions of CareLabel Symbols that Influence their Clothing Purchase

Sources: Field survey (2017)

From Table 8, the responses of the senior members indicated that, in general, less than 70% of the respondents in this study are not deterred by care label symbol that conveys either specific or prohibited instructions. The prohibited instructions included "Do not wash" (19%); "Do not bleach" (15%); and "Do not iron" (24%). On the other hand, the specific instructions included "Spot clean only" (15%); "Dry in shade" (10%); and "Dry flat" (15%).

Items 20 to 24 of the questionnaire sought to find out senior members' perceptions of the physical properties of care label symbols. The items contained statements to be responded to using a five-point Likert scale with categories from "strongly agree" (scored 5) to "strongly disagree" (scored 1). Two cut-off points

ranging from "disagree" (scored within a mean of below 3.0) to "agree" (scored within a mean of above 3.0) have been used in discussing the results as shown in Table 9.

Table 9: Means and Standard Deviations on Senior Members' Perception onthe Physical Properties of Care Labels

Perceptions	Ν	Mean	Std. Deviation
The appropriate use of care instructions			
maximizes the useful life of clothes	176	3.36	.652
Care instructions can be easily performed	176	3.07	.614
Care label is easy to locate	176	2.99	.632
Care instructions are legible	176	2.89	.672
Care label is permanently attached to clothes	176	2.87	.907
Mean of means	176	3.04	.695

Sources: Field survey (2017)

The results in Table 10, with a mean of means of 3.04 and a standard deviation of .695, in general, showed that senior members, somewhat perceive the adequacy and relevance of care label symbols.

Based on the cut-off points, responses indicate that senior members strongly agreed to the following perceptions about care labels: "The appropriate use of care instructions maximizes the useful life of clothes" ( $\underline{M}$ = 3.36,  $\underline{SD}$ = .652); and "Care instructions can be easily performed" ( $\underline{M}$ = 3.07,  $\underline{SD}$ = .614). Other perceptions about care labels including, "Care label is easy to locate" ( $\underline{M}$ = 2.99,  $\underline{SD}$ = .632); "Care instructions are legible" ( $\underline{M}$ = 2.89,  $\underline{SD}$ = .672); and "Care label is permanently attached to clothes" ( $\underline{M}$ = 2.87,  $\underline{SD}$ = .907) were disagreed to by senior members in the study. This result supports the findings of Maqalika-Mokobori (2005) that some consumers had negative interpretations regarding the consistency of the positioning of the care label on textile products, and thus, creates negative perception of care labels.

#### **Research question six**

What differences in the perception of care labels exist between female and male senior members?

This research question sought to find out whether there was any significant difference in perceptions about the physical properties of care labels between senior members who are females and those who are males. To answer this question, the responses to items 20 to 24 on perceptions on physical qualities of care labels were used.

Using the gender of senior members as independent variable and perceptions on care labels as dependent variable, an independent sample t-test of equality of means was conducted to determine whether there is significant difference in the means of female and male senior members in terms of their perception on care labels. The result is shown in Table 10.

Table 10: Test for Equality of Means on Perceptions of Female SeniorMembers and Male Senior Members in terms of Physical Qualities of CareLabels

Group	N	Mean	SD	Т	Df	p-value
Females	77	3.07	.419			
				.886	174	.377
Males	99	3.01	.465			

Sources: Field survey (2017)

The result indicated that based on the responses, the independent samples t-test for equality of means is not statistically significant ( $\underline{t}(174) = .886, \underline{p} > .05$ ). This indicates that there was no statistically significant difference between senior members who are females and those who are males in terms of perceptions on physical qualities of care labels. Thus, how female senior members perceive care labels does not differ from the perception of male senior members.

## **Research question seven**

Which clothing laundry practices do senior members adhere to?

Items 25 to 32 of the questionnaire asked senior members to indicate the extent to which they practice some statements regarding the laundering of their clothes. The responses were assessed using a four-point Likert scale with categories from "always" (scored 4) to "never" (scored 1).

The results, as presented in Table 12, were discussed using two cut-off points ranging from "scarcely" (scored within a mean of below 2.5) to "always" (scored within a mean of above 2.5).

Table	11:	Means	and	Standard	Deviations	on	Senior	Members'	Clothing
Laund	erin	g Practi	ices						

Laundering Practices	Ν	Mean	Std. Deviation
I wash all types of clothes with bleaching			
agents	176	3.43	.767
My clothes are ironed at appropriate			
temperature	176	3.07	.966
Worn clothes that are not dirty are freshen up			
by airing before I store them	176	2.73	1.000
All clothes washed are dried directly under			
the sun	176	2.62	.779
My clothes are washed after every wear	176	2.46	.913
I read and follow clothing care instructions	176	2.26	.932
All clothes are aired directly under the sun	176	2.21	.948
I clean only stained areas of clothes that are			
not completely dirty	176	1.80	.907
Mean of means	176	2.57	.902

Sources: Field survey (2017)

The results in Table 11, with a mean of means of 2.57 and a standard deviation of .902, in summary, showed that senior members, most of the time, engaged in the laundering practices stipulated on the questionnaire.

From Table 12, practices that were always adopted by senior members in the laundering of clothes were as follows; "I wash all types of clothes with bleaching agents" (M= 3.43, SD= .767); "My clothes are ironed at appropriate temperature" ( $\underline{M}$ = 3.07,  $\underline{SD}$ = .966); "Worn clothes that are not dirty are freshen up by airing before I store them" (M= 2.73, SD= 1.000); and "All clothes washed are dried directly under the sun" (M= 2.62, SD= .779). Laundering practices that were

scarcely adopted by senior members included; "My clothes are washed after every wear" ( $\underline{M}$ = 2.46,  $\underline{SD}$ = .913); "I read and follow clothing care instructions" ( $\underline{M}$ = 2.26,  $\underline{SD}$ = .932); "All clothes are aired directly under the sun" ( $\underline{M}$ = 2.21,  $\underline{SD}$ = .948); and "I clean only stained areas of clothes that are not completely dirty" ( $\underline{M}$ = 1.80,  $\underline{SD}$ = .907). The above results revealed that senior members have a range of practices that they usually follow and a range of practice that they rarely follow. It was revealed that, the two most common practices that senior members always follow are washing all clothes (irrespective of type of fabric) with bleach agents and also ironing clothes at appropriate temperature. On the other hand, the two most scarcely practices followed by senior members are airing all clothes directly under the sun and cleaning only stained areas of clothes that are not dirty.

This result supports earlier findings that people do not sort out clothes for washing; hence increase the risk of colours running or decolouration (Wrap, 2012). However, the finding that people wash their clothes frequently, out of habit rather than necessity is not supported by this study's finding as reported by Wrap (2012).

In addition, I sought to test what differences in clothing laundry practices exist between academic and administrative senior members. This research question also sought to find out whether there was any significant difference in the means of academic senior members and administrative senior members in relation to practices adopted in the laundering of clothes.

Table 12 shows the results of the independent samples t-test of the equality of means of the responses of the senior members and the extent of

significant differences between the two groups of senior members with regards to practices adopted in the laundering of clothes.

# Table 12: Test for Equality of Means on Laundering Practices of Academic Senior Members and Administrative Senior Members

Group	N	Mean	SD	Т	df	p-value
Administrative	38	2.55	.387			
				1.396	174	.164
Academic	138	2.45	.409			

Sources: Field survey (2017)

The result indicated that based on the responses of the senior members, the independent-samples t test for equality of means is not statistically significant ( $\underline{t}(174) = 3.767, \underline{p} > .05$ ). This indicates that there was no statistically significant difference between senior members who are administrators and those who are lecturers in terms of clothing laundering practices.

#### **Research question eight**

Which clothing storage practices do senior members adhere to? Items 33 to 47 of the questionnaire asked senior members to indicate their level of practice on a number of practices regarding how they store their clothes. The responses were assessed using a four-point Likert scale with categories from "always" (scored 4) to "never" (scored 1).

The results were discussed using two cut-off points ranging from "never" (scored within a mean of below 2.5) to "always" (scored within a mean of above 2.5), as presented in Table 14.

Storage Practices		Mean	Std.
			Deviation
I keep clothes worn most frequently within easy reach		3.33	.817
I remove or check for items left in pockets before			
storing	176	3.25	.838
Similar items are stored close to each other		3.13	.920
Largest/heaviest clothes are placed at bottom when			
stacking becomes necessary	176	2.84	.984
I place camphor in the closet	176	2.67	1.033
Storage area for clothes is cleaned at least once a year	176	2.65	1.069
I fold garment the same way each time	176	2.63	.930
I hang clothes on hooks such as nails and other metals		2.61	.949
I select hangers depending on garments style and			
Weight	176	2.60	.963
Space is provided between neighbouring clothes	176	2.57	1.028
I secure or close fasteners before storing	176	2.56	.893
Leave drawers ajar periodically for several hours	176	2.48	.907
I place herbs in storage closet	176	2.38	1.129
I cover wire hangers with white papers	176	1.88	.999
White tissue paper is placed between garment folds		1.70	1.017
Mean of means	176	2.62	.943
Sources: Field survey (2017)			

<b>T</b> 11 42 14		<b>D</b>	<b>CI (1)</b>	a.	<b>D</b>
Table 13: Means and	i Standard	Deviations on	Clothing	Storage	Practices
	- 10 000000 00000 000				

Table 13 showed that senior members always engaged in the storage practices stipulated on the questionnaire. This is because the mean of means for the storage practices adopted by senior members was 2.62, with a standard deviation of .943.

From Table 13, based on the cut-off points, respondents' responses

indicate that the following storage practices were adopted by senior members in the University of Cape Coast: "I keep clothes worn most frequently within easy reach" (M = 3.33, SD = .817); "I remove or check for items left in pockets before storing" (M = 3.25, SD = .838); "Similar items are stored close to each other" (M= 3.13, SD = .930); "Largest/heaviest clothes are placed at bottom when stacking becomes necessary" (M = 2.84, SD = .984); "I place camphor in the closet" (M =2.67, SD = 1.033); "Storage area for clothes is cleaned at least once a year" (M =2.65, SD = 1.069); "I fold garment the same way each time" (M = 2.63, SD =.930); "I hang clothes on hooks such as nails and other metals" (M = 2.61, SD =.949); "I select hangers depending on garments style and weight" (M = 2.60, SD =.963); "Space is provided between neighbouring clothes" (M = 2.56, SD = .893).

Other clothing storage practices including "Leave door or drawers ajar periodically for several hours" (M = 2.48, SD = .907); "I place herbs in storage closet" (M = 2.38, SD = 1.129); "I cover wire hangers with white papers" (M = 1.88, SD = .999); and "White tissue paper is placed between garment folds" (M = 1.70, SD = 1.017) were scarcely adopted by senior members.

### **Research question nine**

What differences in clothing storage practices exist between male and female senior members?

This research question sought to find out whether there was any significant difference in the means of senior members who are females and those who are males in terms of clothing storage practices. Table 15 shows the results
of the independent samples t-test of the equality of means of the responses of the senior members and the extent of significant differences between the two groups of senior members with regards to practices adopted in the storing of clothes

Table 14: Test for Equality of Means on Clothing Storage Practices ofFemale Senior Members and Male Senior Members

Group	Ν	Mean	SD	Т	df	p-value
Females	77	2.67	.371			
				1.417	173.2	.158
Males	99	2.58	.513			
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Sources: Field survey (2017)

Degrees of freedom reduced because Levene's test shows violation of homogeneity of variances assumption.

The independent samples t-test for equality of means shows no statistically significant difference, ( $\underline{t}(173.2) = 1.417$ ,  $\underline{p} > 0.05$ ). This implies that there was no statistically significant difference in clothing storage practices between senior members who are females and those who are males. Thus, the analysis revealed that gender has not significant influence on clothing storage practices of senior members. In other words, how female senior members store their clothes is not significantly different from how male senior members store their clothes.

# **Research question ten**

What are the clothing repair practices of senior members?

Items 48 to 52 of the questionnaire asked senior members to indicate their level of practice on a number of statements regarding how they repair their clothes. The responses were assessed using a four-point Likert scale with categories from

"always" (scored 4) to "never" (scored 1).

The results were discussed using two cut-off points ranging from "never" (scored within a mean of below 2.5) to "always" (scored within a mean of above 2.5), as presented in Table 15.

Repair Practices	N	Mean	Std. Deviation
I have spoilt zippers replaced with new ones on			
my clothes	176	3.01	.959
I have removed buttons replaced with new ones			
on my clothes	176	2.89	1.082
I have clothes that do not fit altered	176	2.77	1.017
I have torn areas of my clothes patched	176	2.22	1.014
I have a section of my clothes replaced with a			
new one	176	1.98	1.006
Mean of means	176	2.57	.906

**Table 15: Means and Standard Deviations on Clothing Repair Practices** 

Sources: Field survey (2017)

The results in Table 15, with a mean of means of 2.57 and a standard deviation of .906, in summary, showed that senior members, most of the time, engaged in the repair practices stipulated on the questionnaire.

From Table 15, based on the cut-off points, responses to the items on the questionnaire indicate that senior members, most of the time, engage in the following clothing repair practices: "I have spoilt zippers replaced with new ones on my clothes" ( $\underline{M}$ = 3.01,  $\underline{SD}$ = .959); "I have removed buttons replaced with new ones on my clothes" ( $\underline{M}$ = 2.89,  $\underline{SD}$ = 1.082); and "I have clothes that do not fit altered" ( $\underline{M}$ = 2.77,  $\underline{SD}$ = 1.017). Other practices concerning clothing repairs including "I have torn areas of my clothes patched" ( $\underline{M}$ = 2.22,  $\underline{SD}$ = 1.014); and "I

have a section of my clothes replaced with a new one" ( $\underline{M}$ = 1.98,  $\underline{SD}$ = 1.006); were scarcely adopted by senior members in this study.

#### **Research question eleven**

What differences in clothing repair practices exist between male and female senior members? This question was asked to assess whether gender has any influence on clothing repair practices or not.

To answer this question, the responses to items 48 to 52 on clothing repair practices were used.

Using the gender of senior members as independent variable and clothing repair practices as dependent variable, an independent sample t-test of equality of means was conducted to determine whether there is significant difference in the means of female and male senior members in terms of practices adopted in repairing their clothes. The result is shown in Table 16.

 Table 16: Test for Equality of Means on Clothing Repair Practices of Female

 Senior Members and Male Senior Members

Group	Ν	Mean	SD	Т	df	p-value
Females	77	2.73	.596			
				2.842	174	.005
Males	99	2.45	.658			
a	-					

Sources: Field survey (2017)

From Table 16, the result indicated that based on the responses of the senior members, the independent-samples t test for equality of means is statistically significant ( $\underline{t}(174) = 2.842$ ,  $\underline{p} < .05$ ). This indicates that there was a statistically significant difference between senior members who are females and

those who are males in terms of clothing repair practices. Therefore, it could be concluded that female senior members engage more in repair practices ( $\underline{M}$ = 2.73,  $\underline{SD}$ = .596) than male senior members ( $\underline{M}$ = 2.45,  $\underline{SD}$ = .658).

# **Research question twelve**

What are the clothing discarding practices of senior members?

This question sought to investigate the uses to which senior members put clothes that are no more needed into. These included 8 items to be responded to by senior members in this study. The responses to item 53 of the questionnaire were used to answer this question.

The responses were categorized as "yes" (scored 2) and "no" (scored 1)for each response. The distribution of the senior members' responses is shown in Table 17.

Clothing Discarding Practice	Yes (%)	No (%)	Total (%)
Remodel clothes into other			
items, that can still be worn	65 (37%)	111 (63%)	176 (100%)
Resell clothes	16 (9%)	160 (91%)	176 (100%)
Pass on to friends	103 (58%)	73 (42%)	176 (100%)
Pass on to family or relatives	110 (63%)	66 (37%)	176 (100%)
Donates to charity	114 (65%)	61 (35%)	176 (100%)
Use older clothes for non- public			
purposes such as gardening, etc.	73 (41%)	103 (59%)	176 (100%)
Use as rags	65 (37%)	111 (63%)	176 (100%)
Pack in to storage for a long time	70 (40%)	106 (60%)	176 (100%)

# Table 17: Frequency Distribution of Senior Members' Clothing Discarding Practices

# Sources: Field survey (2017)

Overall, the responses of the senior members indicated that majority (i.e. more than 50%) of the respondents in this study pass on discarded clothes to other individuals such as; "Donates to charity" (65%); "Pass on to family or relatives" (63%); and "Pass on to friends" (58%). The other discarding practices of the senior members, which involved the use of discarded clothes for other functional activities, are "Remodel clothes into other items, which can still be worn" (37%); "Use older clothes for non- public purposes such as gardening, etc." (41%); and "Use as rags" (37%).

Moreover, only 16% of the respondents put discarded clothes into uses that generate income for the owner by reselling discarded clothes to other individuals. Lastly, 40% of the respondents did not make any use of discarded clothes by packing them in to storage for a long time.

# **Discussion of Results**

This section presents the discussions of the study's results. It involves the discussion of the results of the study in relation to published literature and empirical findings on clothing care and management practices. Clothing suffers assault both from within and without. The body of the wearer sheds skin cells and body oils, and exudes sweat, urine, and faeces. From the environment, sun damage, moisture, abrasion and dirt assault clothes. Fleas and lice also damage clothes. These assaults constitute both aesthetic and health problems. Dirt can spread infectious disease, and soap residue in clothing can cause allergic reactions. As such, care labels are put on garments to guide laundry practices and prolong the life span of clothes.

However, carefully following standard practices for caring and managing clothes help to prolong the lifespan and functionality of clothes. Clothing care and management serves as preventive conservation that ensures clothing items are rid of disease causing germs and ensures its safety at all times, on the premise that prevention is better than cure (Robinson & Pardoe, 2000). Based on the objectives of the study, the discussion is outlined as follows:

- 1. Clothing selection practices of senior members.
- 2. Senior members' levels of knowledge on care labels.

- 3. Senior members' perceptions concerning care instructions.
- 4. Senior members' practices concerning care labels.
- 5. Laundry practices of senior members.
- 6. Clothing storage practices of senior members.
- 7. Clothing repair practices of senior members.
- 8. Reuse or discarding of old clothes.

# **Clothing selection practices of senior members**

Section A of the questionnaire sought to investigate the clothing selection practices of senior members in the University of Cape Coast. Analysis of senior members' responses to the eight questionnaire items indicated that senior members always engage in seven out of the eight selection practices stipulated on the questionnaire. These selection practices included looking out for the; texture of the cloth; colour combination; buttons that are fully stitched and fastened; hems that are well fixed; strength of seams; and trimmings that will hold up in use. The other selection practice adopted by the senior members included considering one's ability to care for the costume.

These findings support the statement that consumer's judge the quality of clothing by the feel of items, particularly the strength of seams (Fisher et al., 2008).Viswanathan et al. (1999) also asserted that the perception of product attributes, such as physical characteristics, is a basic element influencing consumers' decision to buy clothes. The clothing selection practices of senior members point to the fact that they look out for quality in the garments in terms of fabric and construction. Also, the clothing selection practices of senior members

may seem more expensive in terms of time and money but it means that these clothes will last longer than fabrics of inferior quality and ill-fitting garments that strain and pull, and they will not require repairs so often. Time should be taken in order to pick the best garment, whether clothes are piled in a stack or hanging from a rack (Cosbey, 2001). Laitala and Klepp (2013) asserted that factors such as texture, length, size, colour contrast, and fabric should be considered in order to select quality clothes.

Moreover, checking clothes carefully before they are purchased will help keep repair of clothing at a minimum, and therefore help save time and money that would have been spent on repairs that could have been avoided. However, most senior members fail to consider care instructions and often do not take into consideration the quality of clothes purchased. This finding obviously violates the principle of respect in clothing care and management practices, and therefore, will affect the appropriate level of care provided for clothes. This finding is particularly worrying as some clothes require sophisticated care and management practices such as machine washing and tumble drying.

# Senior members' level of knowledge on care labels

According to APCC (2008), care labelling outlines how a user should care for particular clothing. They provide guidelines to consumers and apparel care givers about the best cleaning procedures to be used for that particular combination of fabric, thread, decoration and construction techniques (Ghosh et al., 2014). Analysis of the questionnaire data indicated that less than 50% of senior members in this study lack knowledge on 4 out of the 5 basic care label

symbols specified on the questionnaire. These four basic care label symbols included; dry, bleach, dry Clean, wash, and iron. Care symbol on garments represent valuable information regarding each garment and ensure that adequate procedure can be followed in taking care of clothes. However, the results in this study showed that, the only care label symbol recognised by senior members was ironing. This might explain earlier findings that senior members in this study did not consider care instruction during purchase because they lack basic knowledge about care labels.

Moreover, the finding indicates that senior members in this study buy clothes without due consideration of the physical characteristics associated with the clothes, even though these characteristics are most of the time spelt out on care labels. Considering that the aim of these symbols is to elongate the life of clothes, make it more sustainable in terms of its original features and prevent the possible mistreatments and damages to other products, the ability of senior members to care for their clothes is greatly reduced by their lack of knowledge on care symbols.

#### Senior members' perceptions concerning care instructions

In addition to their level of knowledge on care label symbols, the perception of care labels among senior members was investigated. According to Mason et al. (2008), the information on care labels should be appropriate, legible, adequate, and understandable for consumers. Suppliers must ensure that care instructions are adequate and appropriate for the article. Care instructions must be appropriate so that garments are cleaned without damage (Das, 2005).

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Nonetheless, an analysis of the questionnaire data indicated that both female and male senior members in this study perceive care instructions as not legible, easy to locate, and permanently attached to clothes, even though they also perceive that care instructions maximize the useful life of clothing, and they can be easily performed. These findings explain that even though senior members agreed to the usefulness of care instructions, their inability to locate and decipher the information it contains might have accounted for their lack of knowledge on care labels. Care labelling is not part of the garment making culture in Ghana more so when custom construction of clothes is the norm. It is likely that it is not one the things most Ghanaians pay attention to and care locating on a garment. Care labels are actually not hidden in garments. They are placed in seams which can easily be located. Since care instructions are not part of the Ghanaian culture, care symbols are not taught nor learnt unlike traffic light symbols for example, which are taught to children even in kindergarten.

An analysis of the data further revealed that less than 50% of the senior members in this study are influenced by both specific and prohibited care instructions during clothing purchase. This finding could be explained by the inability of senior members to comprehend the existence of care instructions as an indicator of quality (Barat, 2007). According to Yan and Watchravesringkan, (2008), the more consumers understand the product information and have the confidence to be able to care for the product after purchase, the more they have the tendency to buy the product with less perturbation about the risks related to the purchased item. It has been noted that prohibitive care instructions are

especially very important for care of garments and not adhering to them could lead to the clothes becoming prematurely unserviceable.

#### Senior members' practices concerning care labels

Another main finding arrived at in this study was an answer to research question three and four which sought to find out whether both female and male senior members adhered to care instructions during laundering. The results showed that senior members in this study never adhered to any of the care instructions specified on the questionnaire.

In addition, the results of the independent-samples t test indicated that there was no significant difference in the care practices of both female and male senior members in terms of their adherence to care instructions during laundering. This implied that care practices of both female and male senior members were influenced by their lack of knowledge and perceptions on care instructions. This finding further indicated that senior members in this study do not strictly adhere to the instructions on care labels. Ghosh, Das and Bhattacharyya (2014) noted that, care labels provide guidelines to consumers and apparel care givers about the best cleaning procedures to be used for a particular combination of fabric, thread, decoration and construction techniques. As such, it is important to adhere to care labels in order to derive the full benefits associated with each garment (Das, 2005).

Simple care instruction like ironing temperature could render a fabric unusable or destroy its beauty (Commerce Commission, 2001). It is not uncommon for people who do not read care labels nor understand the

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characteristics of different fibres to assume during ironing, especially when they are in a hurry, that the fastest way to straighten creases is by using the highest temperature setting on an iron. This attitude may lead to most synthetic fibres getting burnt and thus rendering the garment unusable or getting a sheen which destroys the beauty of the garment thus reducing its serviceability. Once any of these happens a garment is either discarded or used for another purpose which it was not originally bought for (Cassidy et al., 2013).

#### Laundry practices of senior members

Worn clothing, if not cleaned and refurbished, itches, looks scruffy, and loses functionality, and therefore, clothes need to be laundered in order to restore their functionality. However, analysis of the quantitative data showed mixed results. On one hand, senior members' responses to the questionnaire items indicated good laundering practices, including ironing of clothes at appropriate temperature, and airing of worn clothes before they are stored, were always adopted by the senior members. In addition, the senior members never adopted inappropriate laundering practices, including clothes being washed after every wear, and clothes being aired directly under the sun. For instance, there are strong indications that the hygiene quality of washed laundry is related to the washing temperature (A.I.S.E., 2001). Arild et al. (2003), asserted that, almost all microorganisms are removed from the laundry samples with a washing temperature of 95°C. Both hand and machine washing at low temperatures seems to spread microorganisms among the different laundry items in a washing sample rather than removing them.

On the other hand, the data also showed good laundering practices, including "I read and follow clothing care instructions", and "I clean only stained areas of clothes that are not completely dirty", were scarcely adopted by the senior members. Moreover, the senior members always adopted some inappropriate laundering practices, including "all types of clothes being washed with bleaching agents", (including detergents) and "all clothes washed being dried directly under the sun. Such practices shorten the useful lifespan of clothes. Increasing the number of times a cloth is washed increases the risk of discolouration.

Furthermore, the results of the independent-samples t test indicated that there was no significant difference in the clothing laundering practices of senior members in terms of their job description. This indicates that there was no statistically significant difference between senior members who are administrators and those who are lecturers in terms of clothing laundering practices.

# **Clothing storage practices of senior members**

Storage is an important component in the care and maintenance of clothing. Proper storage can and does reduce the time and money involved in upkeep and prolongs the life of your clothing (Heaten, 2002). An analysis of the data revealed that majority (i.e. 10 out of 14) of the proper storage practices stipulated on the questionnaire was usually ensured by the senior members. These are:

1. I keep clothes worn most frequently within easy reach.

2. I remove or check for items left in pockets before storing.

- 3. Similar items are stored close to each other.
- 4. Largest/heaviest clothes are placed at bottom when stacking becomes necessary.
- 5. I place camphor in the closet.
- 6. Storage area for clothes is cleaned at least once a year.
- 7. I fold garment the same way each time.
- 8. I select hangers depending on garments style and weight.
- 9. Space is provided between neighbouring clothes.
- 10. I secure or close fasteners before storing.

Such storage practices affect clothing lifetime and how often we launder them (Laitala et al., 2015).Hanging clothes in wardrobes prevents them from getting creased or rumpled so that they can retain their original shape (Anyakoha & Eluwa, 2007). Proper storage of clothes provides protection from dust, dirt, insects, fungus and dye transfer (Marshal et al, 2000). Taking proper storage of clothes in addition to making them look better, also makes them last longer.

Nonetheless, improper clothing storage practices, such as hanging clothes on hooks like nails and other metals, as indicated by the responses of the senior members, can lead to staining of these clothes which results in feeling of unwholesome attitude and poor adjustment to social groups (Marshal et al., 2000). Hooks, as hanging devices, have limited use since they can easily stain clothing when rusted and can also lead to accidental damage to the cloth. As such, they should generally be avoided. They should only be used to hang jewellery, neck ties, belts and not clothes as they can damage them accidentally through tearing

and staining. Appropriate clothes hangers and proper hanging techniques should be adopted. According to Laitala et al., (2015), these techniques include; 1.No more use of wire hangers, 2.Use padded, wooden or plastic hangers 3. Use skirt hangers to hang both skirts and pants 4. Use wooden/plastic hangers to hang clothes since they are kind to all kind of fabrics including knits and wools 5. Use suits hangers with pants/skirts bar to hang suits. The analysis further revealed that senior members never adopted other proper storage practices, including leaving door or drawers ajar periodically for several hours, placing herbs in storage closet, covering wire hangers with white papers, and placing white tissue paper between garment folds.

Finally, the results of the independent-samples t test indicated that there was no significant difference in the clothing storage practices of senior members in terms of gender. This implies that there was no statistically significant difference between senior members who are females and those who are males with regards to clothing storage practices.

# **Clothing repair practices of senior members**

The need for clothing repair comes from various sources, including poor initial garment construction. Another main finding of the study was answers to research question eleven, which sought to find out the kind of practices adopted by senior members in repairing their clothes. The results showed that senior members engage in three out of the five repair practices outlined on the questionnaire. These are; the replacement of spoilt zippers with new ones, replacement of removed buttons with new ones, and alterations of clothes that do not fit.

It must be emphasized that these repair practices require basic and rather fundamental skills. However, senior members in this study rarely did some repair practices requiring creative talent. These are re-stitching of torn areas of clothes and replacing a torn area of a garment e.g. collar with a new one. Moreover, the independent-samples t test statistics showed that there was a statistically significant difference between senior members who are females and those who are males in terms of clothing repair practices. Therefore, it was concluded that female senior members engaged more in repair practices than male senior members. This is because according to Anyakoha and Eluwa (2007), needlework is a symbolic representation of women in their legitimate and domestic spheres. It may also be possibly due to the fact that women generally play caring role at the domestic level and so they tend to transmit such caring roles into repairing of cloths. Women are emotionally attached to things than men. As such, when they are emotionally attached to any of their clothing, they are likely to keep it as long as possible, resulting in repair works when they are damaged. The same cannot be said with regards to men.

# **Reuse or discard of old clothes**

The last research question sought to find out uses made of worn-clothes or the discarding practices of senior members. The findings indicated that, in general, majority of the senior members in this study pass on worn-out clothes to other individuals such as friends, family and charity homes. The other discarding practices of minority of the senior members involved the use of discarded clothes

for other functional activities. This findings support the statement that older clothes may be used for non-public purposes and ultimately recycled, however, this is something that many consumers are relatively unaware of, and simply assume that items cannot be re-used (Wrap, 2012). Great environmental gains could have been achieved through reducing the amounts of clothing in circulation, and increasing the lifespan of the existing clothing by using them for other non-public purposes.

# **Conclusions of Key Findings**

An analysis of the data collected, processed and analysed showed that majority of the clothing selection practices adopted by senior members were considered appropriate, and ensured that clothes are cared for right at the point of purchase. The results further showed that senior members did not have adequate knowledge about care label symbols, had some negative perceptions about the legibility, location and durability of care instructions, and eventually, were not influenced by care instructions during purchase and laundry.

It was also found that both female and male senior members adopt both appropriate and inappropriate clothing laundering practices. In addition, majority of the proper storage practices adopted by both female and male senior members does reduce the time and money involved in upkeep of clothes, and thus, prolongs the life of their clothes. In terms of clothing repair practices, senior members' responses indicated that they engage mostly in basic and fundamental repair practices, and this was more prominent among female senior members than their male colleagues were.

The data further indicated that majority of the senior members in this study did not generate income from the selling of worn-clothes, but rather pass on worn-clothes to other individuals such as friends, family and charity homes.

#### **CHAPTER FIVE**

# SUMMARY, CONCLUSION, AND RECOMMENDATIONS Overview of Research Problem and Methodology

The primary objective of the study was to investigate the clothing care and management practices of senior members in the University of Cape Coast, Ghana. Specifically, I sought to examine the practices concerning the selection of clothes, care labels and laundering of clothes, storing of clothes, and clothes repair and reuse/discharging of clothes. The design adopted for the study was a crosssectional survey design. A simple random sampling method was utilized in selecting 176 senior members to participate in the study. The 176 senior members sampled included both females and males who hold either an academic or administrative position in the university. Clothing care and management practices of senior members were sought through the use of structured questionnaire. Statistical procedures used in data analysis were mainly means and standard deviations, independent-samples t test, and frequency and percentages.

# **Summary of Results**

Analysis of Senior Members' responses to the items on the questionnaires showed that more than half of the respondents were males (56.3%) as compared to their female counterparts (43.8%). In addition, the majority of the senior members sampled for this study, representing approximately 78.4% were classified as academic staffs while 22% were classified as administrative senior members.

On clothing selection practices, responses of the senior members indicated that they engaged in seven out of the eight appropriate selection practices stipulated on the questionnaire, and these are; I look out for the texture of the cloth; I look out for the colour combination; I look out for buttons that are fully stitched and fastened; I look out for hems that are well fixed; I look out for the strength of seams; I consider my ability to care for the costume; and I look out for trimmings that will hold up in use.

Also senior members' knowledge of care label symbols, more than 50% of the respondents in this study did not have knowledge about 4 out of the 5 basic care label symbols specified on the questionnaire. These included symbols such as drying, bleaching, dry Cleaning, and washing. Moreover, majority of the respondents were able to get the meaning/terms of these care label symbols right.

Again senior members' adherence to care instructions during purchase and laundry, the responses of senior members' indicated that they never adhered to any of the care label symbols during laundry. The study also found that less than 70% of the respondents in this study are not deterred, during purchase, by care label symbols that conveys either specific or prohibited instructions. It was also found that there is no statistical significant difference in laundry practices of male and female senior members in terms of care label symbols.

With regards to senior members' perceptions of the properties of care label symbols, it was found that senior members strongly agreed to the perceptions that the appropriate use of care instructions maximizes the useful life of clothes and care instructions can be easily performed. Other perceptions about

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care labels, including care label is easy to locate; care instructions are legible; and care label is permanently attached to clothes were disagreed to by senior members in the study. There was also no statistically significant difference between senior members who are females and those who are males in terms of perceptions on physical qualities of care labels.

The clothing laundering, the responses of the senior members indicated that they engage in two appropriate laundry practices. These are; ironing of clothes at appropriate temperature, and airing of worn clothes that are not dirty. Inappropriate clothing laundry practices that were never practiced by senior members included; my clothes are washed after every wear and all clothes are aired directly under the sun. Moreover, the findings indicated that other inappropriate laundry practices, such as I wash all types of clothes with bleaching agents and all clothes washed are dried directly under the sun, are always practiced by senior members, while other appropriate laundry practices, such as I read and follow clothing care instructions and I clean only stained areas of clothes that are not completely dirty were never practiced by senior members. The findings further indicated that there is no statistically significant difference between senior members who are administrators and those who are lecturers in terms of clothing laundering practices

Under clothing storage practices, the responses of the senior members indicated that they engaged in 11 out of 15 appropriate clothing storage practices, including I keep clothes worn most frequently within easy reach; I remove or check for items left in pockets before storing; Similar items are stored close to

each other; Largest/heaviest clothes are placed at bottom when stacking becomes necessary; I place camphor in the closet; Storage area for clothes is cleaned at least once a year; I fold garment the same way each time; I hang clothes on hooks such as nails and other metals; I select hangers depending on garments style and weight; Space is provided between neighbouring clothes; and I secure or close fasteners before storing. Results from an independent samples t-test analysis revealed that there was no statistically significant difference in clothing storage practices between senior members who are females and those who are males.

With regards to clothing repair practices, it was revealed that senior members, most of the time, engage in the following clothing repair practices: I have spoilt zippers replaced with new ones on my clothes; I have removed buttons replaced with new ones on my clothes; and I have clothes that do not fit altered. Other practices concerning clothing repairs, including I have torn areas of my clothes patched, and I have a section of my clothes replaced with a new one, were never adopted by senior members in this study. An independent sample t-test analysis found that there was a statistically significant difference between senior members who are females and those who are males in terms of clothing repair practices.

Finally, the responses of the senior members indicated that majority (i.e. more than 50%) of the respondents in this study pass on discarded clothes to other individuals or organisations such as charity, family or relatives, and friends. In addition, only 16% of the respondents put discarded clothes into uses that generate income by reselling discarded clothes to other individuals.

# Conclusions

The study has come out with several comprehensive empirical evidence on the clothing care and management practices of senior members in the University of Cape Coast, Ghana. Based on the major findings, the following conclusions are drawn:

Senior members in this study generally engage in practices that are deemed appropriate, (ie. Apart from the clothing care labels) thus, prolonging the lifespan of their clothes. In terms of selection, they often consider the texture of cloth and buttons that are fully stitched and fastened, which in turn prevents frequent repairs. Moreover, the appropriate storage practices adopted by senior members ensure that stored clothes are not negatively affected by bacterial and poor weather conditions. Senior members' knowledge and adherence to care labels were generally found to be poor even though laundry practices among senior members showed a mix result.

Senior members generally agreed that appropriate use of clothing through adherence to care labels and instructions can have positive influence on the lifespan of garments. However, they are often not able to adhere to such practices since they could not adequately interpret and understand care symbols.

# 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 clothing care and management practices of senior members in the University of Cape

Coast, the University's authorities in collaboration with the Department of Vocation and Technical Education should organize seminars on clothing care and management practices for senior members in the University of Cape Coast in order to improve their knowledge on clothing care labels.

2. Secondly, an instructional manual on clothing care and management practices could be designed by the Department of Technical and Vocational Education, and distributed to senior members at an affordable prize. This manual will provide adequate and appropriate explanations, with illustrations, on care labels in simple language.

# **Suggestions for Future Research**

The following are suggested for future research:

- The Clothing Practices Survey could be administered to non-senior members for example junior members of the University to develop Clothing Practice Profiles for all levels of workers in the University. These profiles could be compared with the profiles in this study to see if differences exist in the clothing practices of senior members and junior members in general.
- 2. A qualitative study can be conducted on the clothing management and care practices of senior members in order to obtain in-depth understanding of the issues and provide further explanations to the findings from this study.
- 3. This study can be replicated in other Universities to see whether there are variations in terms of clothing care and management practices of senior members in Ghanaian Universities. This will allow for a general conclusion to be drawn.

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#### APPENDIX A

#### **UNIVERSITY OF CAPE COAST**

### **INSTRUMENT FOR SENIOR MEMBERS' SURVEY**

#### **Respondent's Consent:**

The purpose of this questionnaire is to elicit information on the clothing care practices of senior members at the University of Cape Coast. Your full participation will help make informed conclusions on the knowledge gap in terms of clothing care practices. 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 and/or school with your responses to the survey questions. Therefore, you **should not**, under any circumstances, write your name, and/or department 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 the education process for senior members in UCC, and Ghana as a whole.

Again, questions on this survey instrument have gone through a thorough review by professionals at the University of Cape Coast, and have been declared **ethical** for educational research.

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

### **SECTION A**

### **CLOTHING SELECTION PRACTICES**

**DIRECTIONS**: Indicate with a tick  $[\sqrt{}]$  your level of practice on the following considerations regarding how <u>you buy clothes</u>. Where: A = Always, VO = Very often, NO = Not often, and N = Never.

		A	VO	NO	N
1.	I look out for the texture of the cloth.				
2.	I look out for the colour combination.				
3.	I look out for buttons that are fully stitched and fastened.				
4.	I look out for hems that are well fixed.				
5.	I look out for the strength of seams.				
6.	I consider care instructions.				
7.	I consider my ability to care for the costume.				
8.	I look out for trimmings that will hold up in				
	use.				

### **SECTION B**

#### **CARE LABELS AND LAUNDERING**

**DIRECTIONS**: Indicate with a tick  $[\sqrt{}]$  your response to the following questions in the tables concerning <u>care label symbols</u>? Where appropriate: A = Always, VO = Very often, NO = Not often, and N = Never.

	A. Have you tried to			If	yes,	what	is	the
	find the meaning			me	aning	?		
	to any of these							
	symbols	?						
Care Symbols	Yes	No			Me	aning		

9. O		
10.		
11.		
12.		
13.		

	A. T y	A. To what extent do you adhere to these symbols from			of these deter you purchasing	
	d	luring la	aunder	ring?	clothes?	
Care Symbols	A	VO	NO	Ν	Yes	No
14.						
15. 🔁						
16.						
17.						
19.						

**DIRECTIONS**: Indicate with a tick  $[\sqrt{}]$  the level of agreement on the following statements regarding your <u>perceptions of clothes care labels</u>. Where:SA = Strongly agree, A = Agree, N = Neutral, D = Disagree, and SD = Strongly disagree.

	SA	Α	N	D	SD
20. Care instructions can be easily					
performed.					
21. Care instructions are legible.					
22. Care label is easy to locate.					
23. Care label is permanently attached to					
clothes.					
24. The appropriate use of care instruction					
24. The appropriate use of care instruction maximizes the useful life of clothing.					

**DIRECTIONS**: Indicate with a tick  $[\sqrt{}]$  the extent to which you agree with the following statements regarding the <u>laundering of your clothes</u>. Where:A = Always, VO = Very often, NO = Not often, and N = Never.

	A	VO	NO	N
25. I wash all types of clothes with bleaching				
agents.				
26. My clothes are washed after every wear.				
27. I clean only stained areas of clothes that are not completely dirty.				
28. All clothes washed are dried directly under the				
sun.				
29. Worn clothes are freshen up by airing before I store them.				
30. All clothes are aired directly under the sun.				
31. My clothes are ironed at appropriate				
temperature.				
32. I read and follow clothing care instructions				

# **SECTION C**

# **CLOTHING STORAGE**

**DIRECTIONS**: Indicate with a tick  $[\sqrt{}]$  your level of practice on the following activities regarding how <u>your clothes are stored</u>. Where: A = Always, VO = Very often, O = Not often, and N = Never.

	Α	VO	NO	N
33. I remove or check for items left in pockets before storing.				
34. I secure or close fasteners before storing.				
35. I hang clothes on hooks such as nails and other metals.				
36. I select hangers depending on garment style and weight.				
37. I cover wire hangers with white paper				
38. Space is provided between neighbouring clothes.				
39. I fold garment the same way each time.				
40. White tissue paper is placed between garment				
folds.				
41. Largest or heaviest clothes are placed at bottom when stacking becomes necessary.				
42. Similar items are stored close to each other.				
43. I keep clothes worn most frequently within easy reach.				
44. I placed herbs or other scented odor devices in storage closet.				
45. I place camphor or naphthalene balls in the				
closet.				
46. Leave door or drawers ajar periodically for several hours.				
47. Storage area for clothes is cleaned at least once a year.				

### **SECTION D**

#### **CLOTHING REPAIR AND REUSE**

**DIRECTIONS**: Indicate with a tick  $[\sqrt{}]$  your practices concerning the frequency of the following statements on <u>clothing repair</u>. Where:A = Always, VO = Very often, O = Not often, and N = Never.

	Α	VO	NO	Ν
48. I have removed buttons replaced with new				
ones on my clothes.				
49. I have spoilt zippers replaced with new ones on my clothes.				
50. I have clothes that do not fit altered.				
51. I have torn areas of my clothes patched.				
52. I have a section or part of my clothes (e.g. collar, pocket, sleeves) replaced with a new one.				

53. Indicate with a tick  $[\sqrt{}]$  what uses are made of torn or worn clothes.(Please

you may tick more than one, if applicable)

- [ ] Remodel clothes into other items, that can still be worn.
- [ ] Resell clothes.
- [ ] Pass on to friends.
- [ ] Pass on to family or relatives.
- [ ] Donates to charity.
- [ ] Use older clothes for non- public purposes such as gardening, etc.
- [ ] Use as rags.
- [ ] Pack in to storage for a long time
- [ ] Other(s), please specify .....

.....

### **SECTION E**

### **BACKGROUND INFORMATION**

**DIRECTIONS**: Please tick  $[\sqrt{}]$  the box that best describes your response.

54. Please indicate with a  $[\sqrt{}]$  your type of senior membership in UCC.

[ ] Administrative senior member.

[ ] Academic senior member.

- 55. Please indicate with a  $[\sqrt{}]$  your type of gender.
  - [ ] Female.
  - [ ] Male.

Thank You Very Much For Your Time, and Contributions.

## **APPENDIX B**

# CRONBACH'S ALPHA RELIABILITY TEST

## **Reliability Statistics**

		Ν	%
	Valid	176	100.0
Cases	Excluded ^a	0	.0
	Total	176	100.0

Case Processing Summary

a. List wise deletion based on all variables in the procedure.

## **Reliability Statistics**

Cronbach's Alpha	N of Items
.828	55