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CLOTHING CARE PRACTICES OF STUDENTS IN

DABOKPA TECHNICAL INSTITUTE AND VITIN SENIOR HIGH SCHOOL
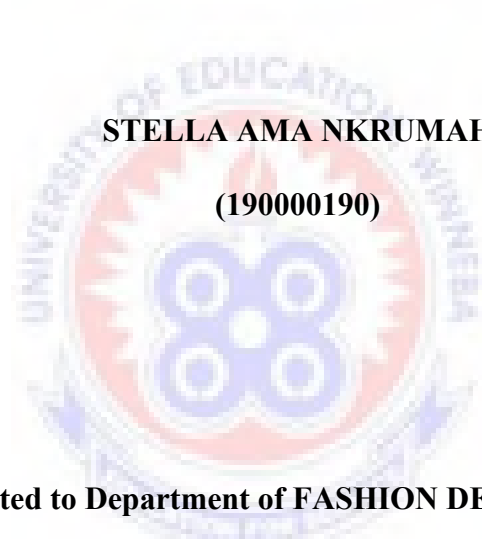
IN TAMALE

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MASTER OF TECHNOLOGY EDUCATION

(FASHION DESIGN AND TEXTILES EDUCATION)

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CLOTHING CARE PRACTICES OF STUDENTS IN

DABOKPA TECHNICAL INSTITUTE AND VITIN SENIOR HIGH SCHOOL

IN TAMALE

BY

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APRIL, 2020

DECLARATION

I, **STELLA AMA NKRUMAH**, declare that this dissertation, with the exception of quotations and references contained in published works which have all been identified and duly acknowledged, is entirely my own original work, and it has not been submitted, either in part or whole, for another degree elsewhere.

SIGNATURE: ………………………………………..

DATE: ………………………………………………..

SUPERVISOR'S DECLARATION

I hereby declare that the preparation and presentation of this work was supervised in accordance with the guidelines for supervision of dissertation laid down by the University of Education, Winneba.

NAME OF SUPERVISOR: DR. WILLIAM K. SENAYAH

SIGNATURE …………………………………………..

DATE …………………………………………………..

iii

ACKNOWLEDGEMENT

DEDICATION

The success of this work is dedicated to my lovely children Hamza Fatuhulai Wumpini

and Hamza Ubeida Nasara.

TABLE OF CONTENTS

LIST OF TABLES

ABSTRACT

The study was conducted at Dabokpa Technical Institute and Vitin Senior High School in Tamale Metropolis. The purpose of the study was to investigate the clothing care and maintenance practices of Dabokpa Technical Institute in Tamale and to assess their awareness of appropriate clothing care and maintenance methods. The descriptive research design was used for the study. One hundred (100) students were sampled from Dabokpa Technical and another one hundred (100) from Vitin Senior High School. The technique used in selecting the samples was the lottery method from both schools and they were analyzed and compared. The instrument used in collecting data was the questionnaire and this was made up in five sections. The study found that students did not have knowledge, and they were not familiar with clothing care label information and that students used inappropriate clothing care methods. Also, it was discovered that students did not know the correct procedure for laundry of clothes. Based on the findings it was therefore recommended that the Clothing and Textiles teachers should organize workshops and seminars for students in order to educate them on skills involved in proper procedures for the laundry of clothes (washing and ironing) procedures, and storage practices. Leaflet which provides information on clothing care label, laundry and storage procedures should be provided alongside with periodic education for all the students. Demonstration lessons on proper clothing care practices and how to repair damage clothes should be organised periodically. Teachers and parents should periodically monitor clothing storage practices of their wards at school and at home and if possible, support them with functional clothing care facilities or devices in the boarding houses for laundry (washing and ironing), drying and storage of clothing.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

All clothing items need proper care in order to maintain their luster texture, shape, appearance and strength (Jone, 2004). Clothing care activities include care during wearing, washing, drying, ironing and storing (Jone, 2004). Proper care of clothes helps to keep them in good condition so that the appearance of the wearer is enhanced. Taking care of clothes would not only make them last longer but it would also make the wearer look better. As expressed by Cock (1981), in order to maintain a good appearance and obtain the most wear out of a garment, it is essential to take good day-to-day care of the clothes

Effective clothing care demands that routine or everyday care processes are carried out on one's clothing (Anyakoha & Eluwa, 2007). Forster (2014) indicated that a high standard of personal cleanliness will make a lot of difference to the freshness of clothes. According to Anyokaha & Eluwa, (2007), stale perspiration, in particular, will spoil clothes by making them smell badly and sometimes by removing the color in some areas.

Laundering is an integral part of clothing care methods which involves the sorting, washing, drying, and finishing of articles to make them look new again. Laundering is important because: dirty clothes can habour germs which could be transferred to the skin when dirty clothes are worn; a person wearing dirty clothes would be avoided by others; and dirt can form a chemical combination with the fabric and weaken it (Anyakoha & Eluwa, 2007).

Storage of clothes is also another factor that has a lot of impact on the care and maintenance of clothes. How and where clothes are stored is very important. Properly packing and storing of textile products will help to prolong their life span. By controlling exposure to light, dust, insects, humidity, temperature extremes, mildew, molds, acids, rust and stress which are the major causes

of damage to stored textiles, the natural aging process will be minimized (The Missouri Historical Society, 2006).

Adolescents' girls are very conscious of the importance of good grooming and expend much time and interest in the care of their hair, hands and general appearance (Neal, 1978). Neal expressed further that the necessity for regular and careful attention to their clothes, either new or well-worn must be appreciated and that it is never too early for girls to begin to take care of their own wardrobes. Clothing care skills are needed to prolong the life of clothes in order to reduce waste. Hence, not adolescent girls alone, but also all age groups, regardless of sex need to be concerned about the freshness of their clothes in order to prevent waste, reduce expenditure on clothes.

However, women who are to teach their children clothing care skills in the home are now employed outside the home and devote less time to clothing care themselves. Fewer adult role models who practice such skills exist in many societies nowadays. Less attention is now placed on home care and clothing in today's society, and also in the informal training of the youth in basic clothing care skills in the home by women.

Little is now known about current norms followed by students in caring for and maintaining their clothes. Most students often lack proper knowledge and skills on proper laundering, storage and mending of clothing, while especially those in boarding institutions who have the skills may lack adequate facilities that could help them in their clothing care practices (Nathan, 2009). Some students in boarding schools are therefore often seen with poorly maintained clothes which smell, itch, look untidy, and lose functionality (WoodWard, 2006). Improper clothing storage practices of the boarding school students can also lead to skin diseases, bad odour, feeling of unwholesome attitude and poor adjustment to social groups as stated by Marshal *et al.* (2000).

It is important to establish a "baseline" of youth clothing care and maintenance practices as a

foundation for programme development. Ohovoriole and Ugeru (2002) stated that knowledge of proper storage is very important. It is therefore necessary to seek ways of helping the students in boarding schools to take good care of their clothes. Acquisition of specialized skills is paramount to all practical oriented skills such as clothing care (Okoro, 1999). Therefore, it is important to seek ways of helping boys and girls in Senior High School to acquire the appropriate clothing care skills to enable them to manage their clothing properly, and reduce waste and cost in their use of clothes now and in the future.

1.2 Statement of the Problem

Clothing care has a significant message of conveying both negative and positive messages about a person to people around. Clothing care practice may have a lasting negative effect on the adolescent student if the skill of managing their clothes is inappropriate. Economically, there is the likelihood that money may be wasted in acquiring new clothes continuously, and causing financial loss to the family just because the freshness of clothes could not be maintained for long. Traditionally, Ghana, mothers and older sisters transmit clothing care skills to younger members of the family and in schools; learners are taught how to take good care of their clothes in the Home Economics class.

When students do not opt for the subject they are not taught such important skills. Home Economics students at the SHS level have the opportunity of studying "clothing care and maintenance" which is a major concept. However, a casual observation of students in Dabokpa Technical Institute in Tamale indicated that most of them did not take proper care of their clothes. Probably they lacked clothing care skills or did not have the necessary material resources to care for their clothes. Hence, it is necessary to identify any weaknesses in the clothing care skills of these students and find out how best they may be helped to develop and use the appropriate skills to cut down on expenditure on clothes and maintain the freshness of what they have for long.

1.3 Purpose of the Study

The purpose of the study was to investigate the clothing care and maintenance practices of Dabokpa Technical Institute in Tamale and to assess their awareness of appropriate clothing care and maintenance methods.

1.4 Objectives of the Study

The study specifically sought to:

1. Assess the procedures used by Dabokpa Technical Institute-Tamale to clean their clothes.

2. Identify the clothing storage practices of the students in the Dabokpa Technical Institute.

3. Identify methods used by the students to repair their damaged clothes in Dabokpa Technical Institute.

1.5 Research Question of the Study

The study sought to answer the following research questions;

1. What procedures are used by the students of the Dabokpa Technical Institute at Tamale to clean their clothes?

2. What are the clothing storage practices of the students in the Dabokpa Technical Institute at Tamale in the Northern Region of Ghana?

3. What methods are adopted by the students of Dabokpa Technical Institute at Tamale to repair their damaged clothes.

1.6 Significance of the Study

The findings of this study will be a good source of information for Home Economics teachers to

4

teach clothing care. Researchers who are interested in clothing care will find information from this study very useful. The findings will also provide clues to help writers of Management-in-Living and Clothing and Textiles books to enable them focus on relevant issues relating to clothing care.

1.7 Limitations of the Study

The current study investigated the clothing care and maintenance practices of Dabokpa Technical Institute in Tamale. Like in most studies, the current study had limitations. Initially, financing the project was a challenge due to the limited resources available to the researcher to carry out the project. Additionally, the sadden outbreak of the corona virus also posed a challenge. The lockdown period was a nightmare when all shops were closed and movement restricted. The laydown protocols to be observed made it difficult to visit the study sites for data collection.

1.8 Delimitations of the study

Geographically, the study is limited to the Dabokpa Technical Institute in the Tamale metropolis.

1.9 Organisation of the Study

This study is organized into five chapters. The first chapter provides the background to the study, statement of the problem, purpose of the study, delimitations and the organization of the study. The second chapter reviews related literature. Chapter three deals with the methods and procedures for data collection and analysis and limitation of the study. Chapter four discusses the results of the study, whilst the last chapter considers summary of the findings of the study, conclusions made and the recommendations based on the research findings.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 The Importance of Clothing and Dressing

Kaiser (1990) identified such environmental dangers as weather (strong sunlight, extreme heat or cold and precipitations), insects, harmful chemicals, weapons and contact with abrasive substances and other hazards. Clothing provides protection against many things that might injure the naked human body. However, the desire to decorate the body appears to be the most compelling motive for wearing clothes (Jimsey, 1973). According to Erwin (1965), clothes give a feeling of self-confidence and a sense of well-being, freeing our mind for the enjoyment and intellectual pursuits. Lyle and Brickley (1984) stated that the primary reason for wearing clothes is protection, the second reason is self-adornment, in addition, clothing has been used to show status, sex, self-expression and cultural difference.

Hurlock (1974) stated that at an early age, the child discovers that his/her clothing attracts the attention of other children as well as adults. Favourable comments by adults and admiration or envy from other children aids in contributing to the child's sense of self importance. A well-dressed child will be confident (Dutta, 1990). Grihalakshmi (1991) reported that a well-dressed child makes a good impression on other children. According to Hurlock (1976), the best dressed are friendlier, more vivacious and more talkative; they have a more active social life; they are more popular and more likely to be selected as leaders.

According to Patil (1990), dress has an important role in getting acceptance in peer groups. Locke (1967) stressed the principles of a "sound mind in a sound body" and pointed out that in order to obtain a sound body, clothing should be the first consideration. Clothing may convey moods and feelings contributing to the person a self-concept or self-regard. Clothes may give a joyous source of motion, vivacity and freedom akin to riding through the air. Being less anxious and more at ease, they are able to act in friendlier and more spontaneous ways. Those who are poorly dressed often

feel awkward and out of place in the company of others. They are actually embarrassed about their appearance and impression they make on others. They tend to be self-conscious and withdrawing. Good taste implies knowledge (Chambers, 1961) and this knowledge includes proper use of cloth.

Dresses directly affect the personality developments of the child because he/she is always eager to know how people feel about his/her dress or what they are saying about him/her. The child always wears dresses like other children. He/she wants to be sure that his/her dress is similar or may be better but not worse. When other children praise his/her dresses, he/she feels delighted. The children whose dresses are worse than those of other children suffer from inferiority complex (Chaube, 1986).

Clothing also derives meaning from the environment in which it is worn. In most cultures brides and grooms as well as wedding guests wear special clothes to celebrate the occasion of a marriage. The clothing worn for rituals such as weddings, graduations, and funerals tends to be formal and governed by unwritten rules that members of the society agree upon. Clothing may also signal participation in leisure activities. Certain types of recreation, especially active sports, may require specialized clothing. For example, football, soccer, and hockey players wear matching jerseys and pants designed to accommodate such accessories as protective pads. People can also communicate with their clothing. Paola and Muller (1980) noted that the language of clothes is influenced by the person's culture.

Clothing can give important information about one's occupation, origin, personality, opinion, tastes, and current moods. However, misinformation can also be communicated as clothing can be used, to create illusions as noted by Forster (2014). Hence, what we wear speaks volumes of what we think of ourselves and the world around us. The concept of self is usually considered in terms of self-image that is the type of a person you are, especially the way you normally behave, look or feel. Hence, clothing as part of the body image acts as second skin in establishing the physical

boundaries of the self (Storm, 1987).

Clothing is a significant force in the enhancement of the self and when used positively, it contributes to one's feelings of self-acceptance; it conveys to others our impression of what one is, does and believes (Horn, 1975). Clothes then become a part of the body image and the same concerns that are attached to the body are often attached to the clothing. Roach-Higgins and Eicher (1992) investigated whether individuals actually perceived their clothing to be close to phenomenal self. Their findings suggested that, the degree and kind of closeness of clothing to the real self-varies from individual to individual and the nature of the link between clothing and self-varies with sex and may be related to social roles and norms. For example, at early stage of development, clothing helps to establish the identity of individual. A baby boy is dressed in blue while a baby girl in pink. Thus, clothing can help to identify different sexes.

Clothing is a form of non-verbal communication that consists of an individual's outward assemblage of apparel on the body as well as all alterations and additions to the body (Roach-Higgins & Eicher, 1992). Depaulo and Friedman (1998) defined non-verbal communication as sending and receiving thoughts and feelings without words. People who have special relationship might have special sensitivities of understanding the non-verbal communication cues interactions (Buckley, 1983). On an individual level, clothing can provide information about the wearer's values, attitudes, interests, lifestyle and social and personal relationships. Clothing and appearance are highly visible and allow others to formulate opinions or derives cues about the wearer including personal information.

Personal and social values are communicated through clothing and the manner in which an individual dresses expresses personal values (Damhorst, 1999). Individual's impressions may be created by use of dress and once formed, tend to remain stable and resistant to change. Negative first impressions have been found to inhibit future interaction between individuals,

which adversely affects one's performance in many ways even at work. Physical attractiveness greatly influences the personal attributes ascribed to an individual upon first impression. Persons who are perceived as more attractive are generally initially highly regarded and are judged as more intelligent, kind, sociable, competent and successful, than those less attractive (Fowler-Hermes, 2001).

Clothing helps people of all age groups to express personal identity, relationships with others and the types of situations in which the wearer is involved. Clothing that fits well does not only look more attractive but it also feels more comfortable to wear (Kefgan & Touchie-Spect, 1986). In clothing, values also guide ones perception and purchasing trends of clothing in relation to one's self concept. For example, an individual uses clothing to communicate a particular self-image to others as is appropriate for a particular situation or role he or she undertakes in society or group. As Jensen and Ostergaard (1998) pointed out dressing contributes to express individuality as well as the need to conform to others.

Several researchers have explored the effects of clothing on social interaction and characteristics perception. Jensen (1998) found that fashionable clothing resulted in perception of greater sociability than did unfashionable clothing. Benssusen (1985) also found that clothing fashion ability was a factor in interpersonal distance. A person wearing fashionable clothing receives more positive interactions with others than a person wearing out of date clothing. If the clothing worn does not reflect current fashions, the wearer may be considered as "different". This indicates that interpersonal distance in social interaction could be modifiable through the manipulation of clothing.

Paek (1986) tested the impressions of personal traits formed by perceivers of person wearing conservative, daring, casual or dress styles. Results indicated that a person wearing a conservative or casual style was perceived to be more understanding and dependable than a

person in other styles. A person in daring style was seen to be more attractive and individualistic than a person in other styles. A person in dressy style was regarded to be conventional and dependent on others.

Today clothing can literally make the man. It can make him unemployed man or, by modifying something as simple as dress, can make him a successful business tycoon, because people are willing to co-operate with others whom they find attractive (Mulford, *et al*., 1998). Molloy (1980) asserted that the colour, pattern and style of a teacher's clothes affect the attitude, attention span and conduct in the classroom. For instance, dress may create or rob off teachers' authority such that the teacher is unable to control students in class. This then erodes one's self-esteem and confidence, thus negatively affecting performance at work. Clothes make a person; therefore, the socially accepted code in dressing becomes a useful devise for a teacher to mask his or her identity. By manipulating clothes to disguise ones identity, it is not only manipulating the system of signification, but also transgressing the boundary of class and gender (Mulford *et al*., 1998).

Psychological factors that are useful in determining appearance are typically those that are found in dress and appearance research. Psychological factors include self-consciousness, self-confidence, and fashion leadership, shopping enjoyment and spending behavior. Self-confidence and self-consciousness are two personality characteristics that are capable of providing understanding regarding the individual in relation to self. Apparel and fashion are means through which individuals may express their unique personalities and views of themselves (Goldsmith *et al*., 1996).

Clothing is a significant force in the enhancement of the self and when used positively it contributes to one's feeling of self-acceptance and self-respect. Storm (1987) suggested that self-concept is the individual's mental system of organizing his or her perception and concept

about self. The self-concept involves a person's perception of his or her abilities, weakness, personal character, personal worth, appearance and attractiveness in relation to himself and other people. It is in this perspective of self that the individual uses clothing to portray a particular image to others. Clothes are also used to boost or enhance one's self-esteem. Self-esteem involves feelings of self-worth which are based upon cognition and self-concept. According to Horn (1975), clothing provides a positive means of satisfying the need for self-enhancement. It can enhance the appearance, make the physical self-more desirable, increase acceptance by the group or present rejection.

Persons who emphasize their own individuality and personal interest in order to set themselves apart from others are inner-directed. An inner-directed person has an inclination to internalize standards in an effort to be a non-conformist in dress and appearance, a follower of a sub-cultural style, or a fashion leader (Mulford *et al.,* 1998). Those individuals who strive to meet dress and appearance expectations of others are other-directed. Other-directed individuals adopt fashion in an effort to conform to others in dress (Miller, 1999, p. 208) and in doing so become a conformist or a fashion follower.

Isika (2006) noted that educational level has a great significant on the clothing adoption behavior as professional women with higher levels of education may have better taste in clothing choice. Income plays a significant role in one's clothing selection patterns. The higher the income, the more the expenditure on personal clothing by teachers than their unemployed counter parts (Tweten, 1980). Frisbee (1985) found that age has a significant influence on the amount of money spent on clothing by a household, such that a household with persons of teenager and young adults spend more money on clothing as the clothing demands of this age groups were higher than any other.

Teens are in the midst of preparing themselves for adult roles and establishing their personal identities (Daters, 1990) and dress can play a large role in establishing an identity. This time when conforming to peers it is important to establishing identity (Damhorst *et al.,*2005). Conformity among teenagers is extremely high, especially when it comes to conforming to the norms of their peer group (Horn, 1981). The willingness to conform to peer groups usually occurs as a result of trying to fit in. Fitting in provides a sense of security because of the encouragement of others in the group (Anderson & Meyer, 2000). One of the most visible ways to fit in is by dressing similar to the peer group (Kelley & Eicher, 1970; Littrell & Eicher, 1970). Compared to their male counterparts, teen girls use clothing more to gain approval, feel good about themselves, and to earn validation (MacGillivray & Wilson, 1997).

The occurrence of conformity among teenagers is extremely high, and this age group spends a great deal of time working on their appearance and learning what their peers wear and how they can present the same image (Horn, 1981). Teenagers put more emphasis on appearance than any other age group (Rosenblad-Wallin, 1985).

2.2 Clothing Management

According to Nickel and Dorsey (1960), the purpose of clothing management is to further the physical, social and psychological well-being of each member of the family in each state of the family's life. Clark (1978) stated that one must plan what he wants to buy in order to avoid waste and get the best value. Clothing is one of the family's expenditures which must be budgeted for carefully (Pollard, 1961). Pollard added that the amount spent for clothing, depends on the family situation, number of members and their needs. Gramodyog (1965) indicated that there is an important relationship between income and wardrobe content.

12

According to Nickell and Dorsey (1960), clothing management is primarily a psychological problem because the choice of clothing markedly affects the development and happiness of people, the clothing one wears plays an important part in one's adjustment to social group. Latzke (1968) stated that with wise planning, one can acquire the type of wardrobe needed. As the income increases, the amount spent on clothing increases. One must consider quality rather than number, while purchasing clothes. Craig and Rush (1954) stated that a two or three year clothing plan will save time, energy and money.

Wardrobe collection should not only be beautiful, fashionable and suitable for the body, but it should also be comfortable (Sreedhar, 1991). But people give more importance to fashion than comfort as observed by Ratnam (1991). Latzke (1963) listed the factors affecting clothing management as follows: family income, clothing needs, activities of family members, size of family, and where one lives. Lewis (1960) stated that the extent of students managing their clothes depends on their family income, their social activities and the personality. Thomas (1994) noticed that most parents are conscious of their children's dresses, so they spend a lot of money on children's clothing. Hence, parents are interested in dressing their children in good clothes.

2.3 Clothing Care Methods

Clothing care refers to the keeping of fabric or a garment in a satisfactory condition. Clothing care activities include: laundering, storage and mending the clothes when they are torn or when they develop faults (Anyakoha & Eluwa, 2007). Clothing care is also connected to lifespan of clothing. Maintenance is often the most energy-demanding stage during clothes' life cycle. Even though clothing maintenance has a substantial environmental impact, consumers connect environmental issues related to clothing mainly to the end of the use period when clothes are either given or thrown away (Laitala & Klepp, 2011). Less consideration is given to clothing maintenance and purchase stages. Many of the changes in garments were related to laundry related problems such

as stains, odour, shrinkage, and colour changes. This shows that successful care phase is important for continued use of the garments.

2.3.1 Laundry

Laundry and life cycle of garment: a garment goes through a number of alternate wear and laundering cycles during its use. A typical laundry process includes the following stages: -loading of clothes, detergents and water → wash mode → draining → rinse mode → spin-mode. Each stage of a washing cycle and related parameters have a contribution to the change in dimensional properties of the knitted textiles (Anand *et al.,* 2002). A single laundry cycle does not have a significant effect on fabric drape, shear or bending properties. However, after a repeated laundry cycles, drape values increased overall, while shear and bending modulus and hysteresis decreased, resulting in a more drapable, pliable fabric after five laundry cycles (Orzada*et al*., 2009). The level of change in handle of the fabric due to laundry depends on the number of wash cycles fabric had gone through and laundry parameters. Hence, an overview of life cycle of a garment during use and the laundry parameters is being given in the next sections. There is good evidence that washing processes generally contribute more to fabric damage than do use or wear.

Rigby (2011) has researched which types of clothing items are seldom washed, and designed a clothing line based on that information. She identified different themes that affect the washing behaviour, including material choice, use area and fit. For example, woollen materials, home wear and loose- fitting clothing were washed more seldom than other types of garments. As odour is one of the important reasons for laundering, material selection is an important way to reduce this need, for example wool can be aired to remove odours and to freshen it up (Rigby, 2011). Also, the design of loose fit and airier arm-pits that reduce sweat stains, or the use of in-lays that could be removed and washed would reduce the need for laundering.

Research suggests several measures that consumers can take to decrease the environmental burden caused by textile maintenance (Uitdenbogerd, 2007; Bain, *et al*., 2009; Laitala *et al.,* 2011). They can lower washing temperatures, use eco-programmes, fill the machine to capacity, decrease washing frequency and assure correct detergent dosing. They can also avoid tumble-drying and ironing, and practice alternative freshening methods such as airing. How to best realize this desired behaviour is, however, not straightforward but may be informed by recent research into design for sustainable behaviour. Some design solutions may involve simply providing information or putting the user in control, while other design directions may focus on making undesirable behaviour impossible (Zachrisson & Boks, 2010). In-between solutions may persuade or seduce users towards sustainable behaviour, like the use of eco-buttons or detergent tablets that should secure optimal dosage in wash (Lilley *et al*., 2005).

Lockton *et al*. (2010) collected a wide range of mechanisms which were often used in the period (Madsen *et al*., 2007; Otto *et al.*, 2007). Technological improvements in washing machines and detergents have reduced the total environmental impact per wash, but the total time that consumers spend on laundering has not been reduced (Klepp, 2003). Further information regarding consumer clothing maintenance habits and the reasons for their choices is required in order to study the possibilities for influencing consumer behaviour towards more sustainable practices. Laundering practices are constantly changing, influenced by social, cultural and moral norms (Shove, 2003).

They must, therefore, be understood over time and across cultures. Before the industrial revolution, labour intensive practices such as washing textiles outside or boiling them on a stove were common. Such labour-intensive practices are disappearing as a result of new technology such as the advent of the electric washing machine. Efficiency in spreading information from professionals has also been a factor; washing temperatures have dropped considerably since World War II, first from boiling down to 60°C in the 1980s (Klepp, 2003).

At this stage, the change was increasingly led by new washing technologies; materials in garments that did not tolerate being washed at high temperatures; and the consumers themselves reducing the washing temperature to 40°C and lower, despite the experts' advice to continue washing at 60°C (Klepp, 2007).

In recent years, experts' advice has varied depending on whether they have a hygienic or environmental argument on a basis. However, most experts agree that low washing temperatures can be used in home laundering, except in cases of epidemics or especially vulnerable user groups. Throughout history, the level of washing and acceptance of body odours has varied greatly. Today, body odour is considered appalling, and daily washes and use of artificial perfumes is almost a norm (Ashenburg, 2007). These changes in social norms have led to increased washing frequency of our bodies and clothing (Shove, 2003).

These examples show that habits have changed relatively fast through different mechanisms and have been affected by new technologies, available information, as well as changes in society and its norms. Steering these processes of change will require a consideration of integrated socio-technical systems and will therefore be complicated. A number of studies have shown that changes in attitudes and values may have limited effect on everyday behaviour (Ajzen & Fishbein, 1980) and that there are several barriers for change (Throne-Holst *et al*., 2008). The importance of cleanliness in the Western cultures is an example of a cultural-normative barrier where individuals' fear of having a body odour that might be caused by unsatisfactory laundering may inhibit the change to lower washing temperatures. Other barriers may be individual, psychological, and on earlier experiences or upbringing. Understanding these and other barriers is essential for successfully choosing and applying design for sustainable behaviour strategies.

Life Cycle Assessment (LCA) studies on clothing and products used in laundering, such as detergents and washing machines, show that the use period is usually the most energy-demanding period during these products' life cycle (Madsen *et al*., 2007; Otto *et al*., 2006; Saouter *et al*., 2002). Bain *et al*. (2009) pointed out the potential of using eco-friendly cleaning technologies as well as correct detergent dosing. In their report they evaluated some up-coming new technologies such as washing machines that use steam, ultra-sound, ozone, or silver ions, but they did not mention some of the alternative products to traditional detergents that are already readily available on the market, such as different laundry balls, washing pellets, soap nuts, and magnets. Results from these studies indicate that laundering with these products do have a cleaning effect, increased durability, or reduced need of ironing (Bruce & Thulin, 2010; Pusic *et al.*, 2011). Lighter colours had less colour change during rubbing and washing than darker shades, and had therefore potentially longer aesthetic lifespans.

Laundering practices are constantly changing and influenced by social, cultural and moral norms (Pettersen *et al*., 2013; Shove, 2003). These changes occur relatively fast through different mechanisms and have been affected by new technologies, available information, as well as changes in society and its norms. Washing textiles outside or boiling them on a stove were common practices before the industrial revolution. These practices started to disappear as new technologies such as the electric washing machines became more common. The average washing temperatures have dropped considerably since World War II, first from boiling down to 60C in the 1980's, and recently even lower (Klepp, 2003b).

According to Klepp (2007a), the change was first led by new washing technologies and the advice given by Home Economics experts. Then, new textile materials that did not tolerate high temperatures became more common in use, and consumers continued to lower the washing temperatures, despite the experts' advice to keep on washing at 60C. During the past decade the washing technologies have improved further as new detergent formulations that function

better at lower temperatures have being introduced (Ryom, 2003), as well as more efficient washing machines that consume less water and energy (Pakula & Stamminger, 2010). Despite the great improvement in cleaning technologies, the time that consumers use for washing clothes has not been reduced.

These changes in social norms have led to increased washing frequency of the body and clothing (Gram-Hanssen, 2007; Pettersen, 2013; Shove, 2003). According to Klepp (2003a), consumers own more clothing, and wash them more frequently. This increased amount of washing can counteract the technological improvements that have occurred in laundering. Steering these processes of change will require a consideration of integrated socio-technical systems (Gram-Hanssen, 2008). Rigby (2011) has interviewed consumers on which types of clothing they wash more seldom than others, and designed a clothing line based on that information. Rigby identified different themes in clothing that affect the washing behaviour, such as material choice, use area, for example, home wear, and fit.

In their review of laundering literature, Bain *et al*. (2009) pointed out a general lack of data on consumer behaviour related to clothing maintenance. However, laundering practices have been studied in several countries during the past two decades, including Australia (Jack, 2013b), Finland (Aalto, 2003; Järvi & Paloviita, 2007; Timonen, 2002), France (Kaufmann, 1998), Germany (Kruschwitz & Stamminger, 2011; Stamminger, 2009), Norway (Klepp, 2009), UK (Fisher *et al*., 2008; Pink, 2005), US (Hustvedt, 2011; Hustvedt *et al*., 2013), and even compared internationally (A.I.S.E., 2009a; Arild et al., 2003; Pakula & Stamminger, 2010). These studies show that there are great national variations in used washing machine types, laundering temperatures, frequencies, and in drying and ironing practices. However, many of these studies are quite old, taking into consideration the rapid developments in washing technologies and potential changes in practices.

18

In addition, most of these studies are not very detailed in specifying the variations in existing laundering practices, for example they seldom report laundering frequencies of households of different sizes. In addition, they often fail to take into account that consumers use several washing temperatures and methods depending on the product type in question. This kind of detailed data on clothing lifespans and selected maintenance methods is needed, for example when LCA studies aim to include the use phase to the calculations, and it has been shown that most LCA studies focus on the early stages (Madsen *et al*., 2007). Very few studies make a connection between the research on consumer's laundering practices and design for sustainable behavior actively select clothing that is somehow favourable from the environmental point of view compared to alternative products. Examples of preferable alternatives are textiles with the eco-label, pre-owned products, products made of specific fibres, recycled materials, materials that need less laundering during use, or has good quality, fit and design that enables long lifespan.

Earlier research has shown that one of the common reasons today to the high laundering frequency of clothing is based on the fear of body odour and resulting social consequences, as well as the attraction of "fresh" clothes (Fisher *et al*., 2008; Klepp, 2006). A German study has shown that the most common reason for using fabric softeners was a more comfortable feeling and softer touch, but their property to give good scent to textiles was the second most important reason (Braun & Stamminger, 2011). The main active ingredient of today's fabric softeners are esterquats (cationic surfactants), which show better biodegradability than the surfactants as used in the past (Braun & Stamminger, 2011). They also have low toxicity to aquatic organisms, and do not cause concern to human health with regard to regular consumer use (Housing and Economic Recovery Act: HERA of 2008, 2009).

As odour is one of the important reasons for laundering clothing. Laundering practices are constantly changing and influenced by social, cultural and moral norms (Pettersen et *al*., 2013;

19

Shove, 2003). These changes occur relatively fast through different mechanisms and have been affected by new technologies, available information, as well as changes in society and its norms.

The average washing temperatures have dropped considerably since World War II, first from boiling down to 60C in the 1980's, and recently even lower (Klepp, 2003b). Then, new textile materials that did not tolerate high temperatures became more common in use, and consumers continued to lower the washing temperatures, despite the experts' advice to keep on washing at 60C (Klepp, 2007a). Knitted cotton fabrics were found to shrink more with increase in temperature while silk gave maximum area shrinkage at 35°C (Quaynor, 2000). Washing products do significantly modify the physical effects of the mechanical action applied during washing. The effect of using detergent during laundry is minimal during the first five laundry cycles but for prolonged wash, ageing and the use of detergent may have significant influence on the dimensional stability and fabric shrinkage (Higgins *et al*., 2003).

Laundry during this time period is increasingly being represented as an exercise in restoring clothes after having been contaminated by the wearer. Moving on to the late nineteenth century, increasing knowledge about microbes and bacteria impacted the laundry habits. The recommendation was now to boil underwear for at least 10 minutes (Shove,2003). Often today, clothes are not primarily washed due to soiling but rather to keep up a fresh appearance. There have been changes in what is considered dirty. The norm seems to be to wear the items for one day and then wash them (Shove, 2003). Respondents from a study by Lindén *et al*. (2006) stated that for some a shirt is always put in the laundry bin after one day of use regardless of whether or not unpleasant smells or stains are present. It is not common to use airing instead of washing and more than 60% declared that they never or almost never did air their used clothes (Lindén *et al*., 2006).

There are examples of the washing machine being used rather than finding space and time to hang and sort the items. No public campaign has focused on the need of washing, or on how often clothes should be washed (Gram-Hanssen, 2008). This trend can also be discerned by the range of programs of the washing machine that focus more on refreshing the garments instead of cleaning them from dirt (Shove, 2003).

Age and gender impact clothing care practices. Barnes (1955) reported that girls assume some responsibility for laundry (washing, ironing), and mending and deciding on dry cleaning needs of their own clothing, but were less likely to darn socks. Girls whose mothers were employed outside the home assume more responsibility for their clothing care (washing, ironing and mending), than girls whose mothers were not employed. Koester and May (1985) found that as age increased, adolescents were more likely to repair, wash and iron their own clothes, and needed fewer remainders to do so. Adolescents were also likely to wash family clothing as age increased. Gender differences existed with adolescent girls being more likely to care for and family clothing than boys. When there are adolescent boys and girls in the same family, boys are even less likely to care for family clothing.

2.3.2 Laundry Agents

Laundry issues often turn out to be problematic. One reason is the significance of different types of laundry agents. Hauthal and Wagner (2004:13) presented some requirements for modern laundry agents as: good cleaning performance, favourable price, care of materials, environmentally friendly, consumer safety, hygienic together with such additional features as pleasant fragrance, convenience and 2-in-1 products". Aalto (1996) identified the following attitudes in cleaning: sporal; cleaning; evasive cleaning, routine cleaning and cleaning procedure development. It can be assumed that the choices of cleaning agents also reflect these attitudes. The components that caused allergy turned out to belong to this group. Niva *et al.*

(1996) and Aalto (2002) have found that in decision making, scent as well as allergy factors are very important.

Laundry softeners can be classified into three categories according to method of applying softeners to textiles: - (a) water cycle softeners – softeners that are used in the wash cycle, (b) rinse cycle softeners – softeners that are used in the final rinse, and (c) dryer sheet fabric softeners – softeners that are used in the dryer. The orientation of non-ionic softeners depends upon the nature of the fibre surface, with the hydrophilic portion of the softener being attracted to hydrophilic surfaces and the hydrophobic portion being attracted to hydrophobic surface (Schindler, 2004).

2.3.3 Drying Method

In most countries, drying is still done mainly by hanging the clothing in the open air (line drying), but in western countries, drying is increasingly being done using tumble dryers. In tumble drying, fabric is further subjected to the mechanical action which causes changes in dimensional characteristics of the fabrics. Studies of the relaxation process of cotton woven and knit fabrics have shown that tumble drying causes greater levels of shrinkage than line drying in the first few laundry cycles (Hearle, 1971). The level of shrinkage continues to increase if the fabrics are tumble dried below normal moisture regain (Higgins *et al*., 2001). Tumble drying is beneficial in reducing the level of wrinkling but it increases damage to the fabrics as evident from the increased lint loss as compared to line drying.

The over drying of the textiles in tumble dryers was found to be beneficial to the appearance of the fabrics, with lower levels of wrinkling being exhibited after tumble drying for 45 minutes as compared with 30 minutes (Higgins *et al*., 2003). Tumble drying also has influence on the handling of the acrylic knitted fabrics. Tumbled fabrics have softer hands and a limper drape. It was also noted that fabric hands would become progressively soft if the fabric is tumbled at

22

temperatures above 60°C (Brown, 1970). Textiles made with synthetic fibers tend to get charged with static electricity during tumble drying causing static cling (American Association of Textile Chemists and Colorists: AATCC Technical Manual, 2010). According to a report from the Swedish Energy Agency (2004), tumble dryers account for approximately 8% of the electricity use in Swedish households. To dry the clothes out of doors on lines has been the way of drying clothes for centuries. However, nowadays an increasing number of households dry their clothes artificially in drying cabinets or tumble dryers.

2.3.4 Clothing Storage

Storage of clothes is an important aspect of clothing care practices. Clothing storage decisions include, among others, storage facilities, ways of storing specific items, factors that influence the procedures to adopt. Proper storage of clothes involves decision making. Decision making is the action taken in selecting from alternative courses of action (Anyakoha & Eluwa, 2007). Pitts (2006) stated that special fabric needs special care and that moth often damage articles that are not stored properly. Marshal (2000) indicated that the components of storage to include facilities, equipment and storage process. Kathleen (2005) pointed out that clothes can be stored in boxes; wardrobes, shelves, drawer, hangers, closets, shelves, drawer space, storage spaces, cartons, ropes, tight wrappers, pots hangers, insect repellers, mildews and moth proof, camphor acid free tissue mothballs and cedar. Knitted wear, under wear, domestic and drappers can be stored in flat drawers, closet drawers, closet, and shelves.

Proper care and storage of clothes help to keep them in good condition so that appearance of the wearer is enhanced. 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 (WoodWord, 2006). Everyone needs suitable places to store clothes – a closet or place to hang some garments and shelves or other articles

(Marshal *et al*., 2000). Hanging clothes in a wardrobe prevents them from getting creased or rumpled so that they can retain their original shape (Anyakoha & Eluwa, 2007). Taking proper storage of clothes in addition to making them look better also makes them last longer.

2.3.5 Clothing Repair

Poor initial garment workmanship or construction can be a problem with ready-to-wear as well as hand-made items. Every day wear and tear will also take its toll. Clothing repair and mending 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. 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.

Textiles age through different mechanisms, such as mechanical stress, photo-chemical degradation, thermal degradation, physical structural changes, or chemical attack (Bresee, 1986). Natural ageing is usually a combination of several ageing mechanisms, and can cause holes, rifts, broken seams, loose buttons or faded colours. Mending, re-design and altering are alternatives users have for prolonging the use period of clothing that is damaged, has poor fit or is not used for some other aesthetic reasons. Consumers may alter the garments' original appearance for several reasons, such as problems with fit, unwanted colour, lack of personal characteristics, or just to remove unwanted decorations. Studies on clothing sizes have shown that trouser length is one of the common clothing fit problems that can be altered by consumers (Laitala *et al*., 2012a).

The scale, focus and techniques in clothing mending have changed the past decades from very specialized, time consuming and invisible mending methods to far simpler techniques where the potential to unique aesthetic expression has become more important (Klepp, 2000).

24

Creativity has become an increasingly more important reason for home-sewing instead of the economic reasons that were more important before (Johnson, 1960). The time consumed on repair, handicrafts and making own clothing has reduced significantly in the past decades (Aalto, 2003; Vaage, 2012).

A survey in the UK showed that about 62% of the respondents owned clothing that could be used if it was repaired (Gracey & Moon, 2012). Some studies that include consumers' clothing repair and altering practices have been made during the past years (Cooper *et al.*, 2010; Ekström *et al.*, 2012; Fisher *et al.*, 2008; Gracey & Moon, 2012; Klepp, 2001). In general, these studies show that at least some repairs are still performed, but also several obstacles for repairing are recognized. However, none of the aforementioned studies specified to more detail the situations of when people decide to mend or alter their clothing, which types of clothing are repaired, the specified demographics of people that repair clothing, nor discussed the potential of design.
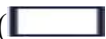
2.4 Care Label Information

Care labels are notes on pieces of fabric, sewn onto the wrong side of an article, and they spell out specific clothing care requirements determined by the fibre, fabric, finish, trimming and use of the article (Forster, 2014). They may be attached to the neckline, the side seam, or the waist seam. She further explained that information on the labels normally include the fibre type, fibre content, brand name, country of origin, the manufacturer, dry cleaning, drying and bleaching instructions, which help to make better clothing choices and maintenance based on clothing care requirements. A care label is a pictogram for example a wash tub with hand symbol showing hand washing. According to Maguire (1978), five symbols arranged in the same order, form the basis for care labelling in the United Kingdom and in other countries. Although the presentation of the guide varies from country to country, the message conveyed provides the same information to the consumer of textile products. The care instruction

symbols are applicable to the whole garment including trimmings, zippers, linings, buttons, and embroidery or decorative embellishment.

The wash symbol is represented by the wash tub ( ). The symbol indicates that water washing either by hand or by machine is acceptable. The number in the washtub is the guide for maximum temperature. A line below the wash tub indicates a less severe process (gentle wash). A broken line indicates an especially gentle treatment. The line beaneath the wash tub indicates a gentle programme. The tub signifies 30°C washing temperature. A tub with a line below indicates a gentle wash programme. The symbol indicates that water washing either by hand or by machine is acceptable. The number in the washtub is the guide for maximum temperature. A line below the wash tub indicates a less severe process (gentle wash). A broken line indicates an especially gentle treatment. Two lines below the tub indicate an even gentler programme.

A wash tub symbol with a hand inside means the article should be hand washed only. Do not machine wash (Lauw, 1984). The fabric should be handled with care for example normal wool, silk; dry cleaning is the preferred method of caring for silk products. The crossed wash tub says do not wash. Do not wash very delicate wool. Gohl and Vilensky (1979) stated that the tenacity of wool drops drastically when wet. The authorities point out that the low tensile strength is due to relatively few hydrogen bonds that are formed in the polymer which is highly amorphous and is acerbated after wool absorbs moisture. Therefore, the articles must be dry cleaned.

The iron ( ) is a symbol of the domestic ironing process. The dots in the iron symbol indicate the maximum recommended temperature (Joseph, 1988). Lauw (1984) and Mishira (2000) explained that the ironing symbol with three dots indicates maximum temperature of 210 °C may be used. The symbol for drying is rectangle ( ) (Holland, 1987). The symbol of bleaching is a triangle ( ) (Taylor, 1990). The bleaching symbol is important for domestic stain removal and commercial laundries where bleach may be used.

According to Joseph (1998), care labels on textile products act as a guide in the care of textiles. The aim is for textile products to retain their quality during usage. Enforcement of the law on care labeling ensures that retailers sell textiles with actual names of fibres and not trade names (Joseph, 1988). This helps the consumer to make use of actual names of fibres in selection and care instead of relying on the general appearance of the textile product for determining care and performance (Eberle *et al*., 1995). The provision of care symbols indicates the recommended procedures which avoid risk causing damage to the textile product being treated (Mohler, 1988). The care symbols usually show the harshest procedure which is acceptable for the product (Joseph, 1988). Joseph (1988) defined a care label as a permanent label or tag containing regular care information and instructions.

Joseph (1988) was of the view that the act protects the consumer from false advertising and also ensures that the consumer is provided with basic information on what they are buying and how to care for it. McArthur et al (1997) were of the view that a good care label should contain fibre content, any special treatments or finish, cleaning instructions and size of garment. According to Joseph (1998), the symbols are meant to be used in the permanent marking of textile products to provide information for their care according to SAZS ISO 3758 (2000). Care labels should be made of material resistant to the care treatment indicated in the label (Wingate, 1984). This ensures that the care label will last the lifetime of the article. The care label code should be simple enough to be understood by users in all countries irrespective of language and at the same time providing as much information as possible.

A disregard for the care labels can result in deterioration of textile products which will make them unattractive. Lauw (1989) advised that it is wise for one to follow care labels all the time. This is supported by Cooper (1985) when he stated the best rule is always to follow care labels because these care instructions are for the best treatment of the garment. It is important for consumers to care for their textile products according to care labels (Lauw, 1983). This ensures

that the correct treatment is applied on each garment. Correct treatment contributes towards preserving the textile product in the best condition during use.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter presents the research methodology as adopted to guide the conduct of this study. The chapter is sectioned into the research design, population, sampling and sampling technique, data collection instruments, ethical considerations as well as data analysis procedure.

3.1 Research Design

Babbie and Mouton (2004) described research design as a plan or structure for investigation or a list of specifications and procedures for conducting a research project. In other words, research design can be described as a master plan which indicates the strategies for conducting a research. A research design serves as a master plan of the methods and descriptive that should be used to collect and analyze data needed by the researcher. The researcher employed a quantitative research method in this study.

Quantitative research according to Leavy (2017), makes use of questionnaires, surveys and experiments to gather data that is revised and tabulated in numbers, which allows the data to be characterised by the use of statistical analysis. Quantitative researchers measure variables on a sample of subjects and express the relationship between variables using effect statistics such as correlations, relative frequencies, or differences between means. Mujere (2016) describes three major differences in qualitative and quantitative emphasis, noting a distinction between explanation and understanding as the purpose of the inquiry; the personal and impersonal role of the researcher; and knowledge discovered and knowledge constructed.

3.3 Population

A population can be defined as a group of individuals or people with the same characteristics and in whom the researcher is interested (Kusi, 2012). The target population for this study was made up of the entire clothing and textiles students of Dabokpa Technical Institute and Vitin Secondary School in the Tamale Metropolis. The total population of the clothing and textiles students in Dabokpa Technical School is one hundred and eighty-four (184) and that of Vitin Secondary School is one hundred and twelve (112). This population is used for the study because Dabokpa Technical the school the researcher teaches and Vitin Secondary is a technical school which can be used for the same purpose for easy comparison and the schools are also accessible in Tamale town where the researcher resides.

3.4 Sample Size and Sampling Techniques

The sample used for the study was made up of one hundred (100) students from Dabokpa Technical School and one hundred (100) students from Vitin Secondary School. They sample was randomly selected from the clothing and textiles students in both schools and analyzed separately for comparison. This sample size in each school gives a confidence level of 95%, and a margin of error (degree of accuracy) of 0.05 based on Research Advisors (2006) sample size selection. The technique used in selecting the samples was the lottery method. Pieces of paper were numbered from one (1) to one hundred and eighty four (184) scrambled and kept in a box for students to come and pick. The students were then told if you pick from one to hundred you will take part in the study and hence any students who picked within one and hundred was used for the study. This method gave equal opportunity for all the students to take part in selection sample size based on luck. This is easy to conduct and clear from being biased in selecting the sample size for the study.

3.5 Instrument for Data Collection

The instruments used for the study were questionnaires. The questionnaire was used to enable large collection of data from the study area and also, it allows you to address a large number of issues in a standardized way. Questionnaires are convenience, flexibility and scalability. (See Appendix A) and this was made up of five sections. Section A was on demographic of the respondents, Section B – General Knowledge in Clothing Care, Section C – Clothing Laundry Practices, Section D –Ironing and Storage of Clothing Practices and Section E – Repair, Mending and Replacement of Damaged Clothing Practices. Responding to the questionnaire was made up of a five-point Likert scale rating ranging from: strongly agree (SA) = 4; Agree (A) = 3; Disagree (D) = 2; Strongly Disagree (SD) = 1, and Uncertain (U) = 0. Also, dichotomous questions which require Yes or No answers were used.

3.6 Data Collection Procedure

The questionnaires were personally administered to the students. The students who took part in the study were met in the dormitory or in class to respond to the questionnaire. Some were given the questionnaire to respond and bring it back before close of class or they bring it the following day. Names of students who collected questionnaires were written down and their dormitory to enable easy tracing in case they do not bring it in time. This was done to ensure high coverage, completion, and return rate. The administration of the questionnaire was done after consent was sought from the principal of the school.

3.7 Validity and Reliability of Instruments

The instrument was first scrutinized by the researcher's supervisor for the suitability of the items before pre-test. All the necessary corrections in the items were made and declared valid by the supervisor. This was done to establish construct validity. Content validity was also

ensured by critically developing it within an established theoretical framework. Reliability of a study instrument is the consistency of the instrument in producing the same or similar results given the same condition on different occasions (Seidu, 2007). To ensure reliability of the research instrument, it was pre-tested on five (5) students of Dabokpa Technical students in Tamale. The same five (5) students were asked to answer the same questions.

3.8 Ethical Considerations

The researcher explains to the respondents the purpose of the study before getting the participants who constituted the sample size for the study. The researcher explained the purpose of the study and procedure for responding to the questionnaire for the study participants. Participants were assured of the necessary confidentiality.

3.9 Data Analysis and presentation

Descriptive statistics, using mainly frequencies and percentages were used to present data. The descriptive statistics, such as frequency, percentage tables, bar and pie charts were used to present data on demographic profile of the respondents and to evaluate clothing care of the students in the school.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents results and discussion of findings. The quantitative data was analyzed and presented in tables as frequency counts and percentages. Section 'A' focuses on the demographic data of the respondents. Section 'B' covers analysis of the responses on the general knowledge of the students on clothing care practices. Section 'C' discusses responses on clothing laundry practices; section 'D' looks at the responses on ironing and clothing storage practices; and section 'E' contains responses on repair of damaged clothes. The data were organized under themes in relation to the research questions.

Table 4.1 Demographic Data of Respondents (n = 100)

Variable	Variable Category	Freq	(%)
Gender	Male	54	54.0
	Female	46	46.0
Total		**100**	**100**
Age (yrs.)	13-15	39	41.0
	16-18	33	35.0
	19-21	14	15.0
	22& above	9	9.0
			100
Form (Class)	SHS 1	33	33.0
	SHS 2	33	33.0
	SHS 3	34	34.0
			100

Source: Field Data (2020)

The demographic data gathered from the study area shows that the sample comprised 54 (54.0%) male and 46 (46.0%) female respondents. Most of the respondents were males which was amazing because there is a misconception that most students at the Vocational and Technical Institutions are females. Forty-one percent (41%) of the respondents were within the age range of 13-15 years and this is because all the students came from Junior High School and not from other institutions where by their ages may be higher. The age between 16 and 18 years of age recorded 35%. Fifteen percent 15% of the respondents were between 19 and 21 years of age, while 9% of them were 22 years of age and above. From the survey, majority (76%) of the respondents were of senior high school-going age, which is age 15-18. Also, 33% of the respondents were in SHS 1; 33% of them were in SHS 2; and 34% of the respondents were in SHS 3.

4.2 General Knowledge of Respondents in Clothing Care

Table 4.2 Factors that Determine Clothing Care Practices of the Respondents

Factor	Freq	%	Rank
Money	31	24.8	1st
Gender	25	20.0	2nd
Interests, attitudes & values	21	16.8	3rd
Age	16	12.8	4th
Self-concept/esteem	13	10.4	5th
Parents	12	9.6	6th
Experience	7	5.6	7th
Total	**125**	**100**	

n = 100; Multiple Responses; Source: Field data (2020).

Table 4.2 above gives information on the factors that determine the clothing care practices of the respondents. The data shows that money (24.8%) was the most influential factor which determined

34

the clothing care practices of the students. This means that money is an important variable when it comes to clothing care practices. This is because you will definitely need money to buy detergents and if possible, starch to iron the cloth well before storing. This was followed by gender (20%); interest, attitudes and values (16.8%); and age (12.8%). Gender, attitude, interest and values plays a significant role in clothing care because most females are known to be good in terms of clothing care in our homes.

They wash, iron and store their clothes better than their male counterparts hence the second highest. The interest, values and attitudes help shape the individual in liking to care for the clothes. If you have interest in your clothes you will definitely take good care of it, our values and attitudes shape our way of life and hence it gives us direction as to what to do and this can affect the way we care for our clothes hence. Other factors include self-concept/esteem (10.4%), and parents (9.6%). The least factor was experience (5.6%). The finding that money was the most influential factor which determined clothing care practices supports Gramodyog (1965) who indicated that there is an important relationship between income and wardrobe content. This also confirms Pollard's (1961) assertion that the amount spent for clothing, depends on the family situation, number of members and their needs.

Table 4.3 Respondents' Reasons for Clothing Care Practices

Reason	Freq	%
Remove dirt and stains	95	37.3
Remove odour	95	37.3
Prevent colour change	34	13.3
Other	31	12.2
Total	**255**	**100**

n = 100; Multiple Responses; Source: Field Data (2020).

Table 4.3 gives information on the reasons for which respondents cared for their clothing. Respondents mainly cared for their clothing in order to remove dirt and stains (37.3%) remove odour (37.3%). This means that the majority of the respondents indicated that, they care for their clothing mainly to remove dirt, stains and odour. This result supports Rigby (2011) who observed that odour is one of the important reasons for laundering, and material. Other studies by Ashenburg (2007) revealed that body odour is considered appalling, and daily washes and use of artificial perfumes is almost a norm. According to Shove (2003), these changes in social norms have led to increased washing frequency of our bodies and clothing. This was followed by prevention of colour change (13.3%). Other respondents cared for their clothing to achieve self-confidence, self-esteem, and a sense of well-being (12.2%). The prevention of colour change and other reasons was considered insignificant.

Table 4.4 Clothing Care Methods which are Frequently Used by the Respondents

Method	Freq	%	Rank
Manual washing & ironing	95	34.5	1st
Repair or mending	62	22.5	2nd
Drying the clothes by hanging them in the open air (line drying)	62	22.5	3rd
Airing the clothes	53	19.3	4th
Storage of clothes in wardrobes & other storage facilities	32	11.6	5th
Laundry (washing & ironing) by machine	10	3.6	6th
Brushing the clothes	4	1.5	7th
Dry cleaning the clothes	2	0.7	8th
Total	**275**	**100**	

 n = 100; Multiple Responses; Source: Field Data (2020)

Table 4.4 presents responses to clothing care methods frequently used by the respondents. The most used clothing care methods included manual washing and ironing (34.5%); also repair or mending of clothes showed (22.5%) repairing and mending of their clothes. The issue of drying the clothes by hanging them in the open air (line drying) revealed (22.5%) of them doing that, and airing the clothes after wear as clothing care practice was affirmed by (19.3%). This was followed by the storage of clothes in wardrobes and other storage facilities (11.6%); and laundering (washing and ironing) by machine (3.6%). The least preferred and used clothing care methods were brushing (1.5%) and dry cleaning   the clothes (0.7%).

This survey indicates that students mostly cared for their clothes by manual washing and ironing. This implies that they did not resort to the use of washing machines, and other technologies of washing and caring for their clothes. This might be linked to the fact that boarding schools in Ghana do not have technological facilities for laundry and other clothing care practices. This result is consistent with the finding by Pakula and Stamminger (2010) who stated that the time that consumers use for washing clothes has not been reduced despite the

great improvement in cleaning technologies. The result further substantiates Hearle's (1971) claim that in most countries, drying is still done mainly by hanging the clothing in the open air (line drying), but in western countries, drying is increasingly being done using tumble dryers.

Table 4.5 Familiarity with Clothing Care Label Information by Respondents

Response	Freq	%
Yes	16	16.0
No	84	84.0
Total	**100**	**100**

Source: Field Data (2020)

The study on familiarity of clothing care labels information by respondents in Table 4.5 shows a substantial number, which is 83.2%, of the respondents did not have knowledge about clothing care label information whereas few (16.8%) of the respondents had knowledge, and were familiar with clothing care label information.

4.3 Assessment of Laundry Procedures by Dabokpa Technical Students to Clean

their Clothes

To measure this objective, responses to items (questions) 9 - 29 in the questionnaire were

analyzed. This is presented as frequency counts and percentages in Table 4.6.

Table 4.6 The Stages of the Laundry Processes

Laundry Processes	Freq	%
1. Add water and detergents → loading of clothes → wash mode → draining → rinse mode → drying mode	35	33.7
2. Loading of clothes → add detergents and water → wash mode → draining → rinse mode → drying mode	27	25.9
3. Loading of clothes → add detergents and water → wash mode → draining → rinse mode → spin-mode → drying mode	19	18.3
	23	22.1
4. Loading of clothes → wash mode → draining → rinse mode → drying mode→Add water and detergents		
Total	**104**	**100**

n = 100; Multiple Responses; Source: Field Data (2020).

Table 4.6 presents respondents' knowledge of the stages of the laundry process by hand

(manual or machine. The data gathered it is obvious that a significant number (66.3%) of the

respondents did not know the laundry procedure whereas 33.7% of the respondents had a clear

knowledge of a typical laundry process which includes the following stages: loading of cloths,

detergents and water → wash mode → draining → rinse mode → spin-mode. This means that

the majority of the respondents could not care for their clothes well using the right stages of

laundry processes. This can have a serious damaging effect on their clothes since some will be

processed with the wrong process.

Table 4.7 Clothing Laundry Practices of the Respondents (n = 100)

Statement		SA	A	U	D	SD
				Responses		
I collect clothes separately for laundry	Freq	12	17	0	32	39
	%	12.0	17.0	0.0	32.0	39.0
I store dirty laundry for long periods	Freq	26	43	0	19	12
	%	26.0	43.0	0.0	19.0	12.0
I bring dirty laundry into contact with clean laundry	Freq	35	47	0	13	5
	%	35.0	47.0	0.0	13.0	5.0
I sort clothes by colour before washing, drying, ironing and storage	Freq	11	14	2	28	45
	%	11.0	14.0	2.0	28.0	45.0
I sort clothes by fabric and construction	Freq	5	8	0	37	45
	%	5.0	8.0	0.0	37.0	45.0
I sort clothes by degree of soil/stain before washing	Freq	0	3	0	43	54
	%	0.0	3.0	0.0	43.0	54.0
I avoid risk of damage to items by being sure to shake out loose dirt from cuffs	Freq	8	13	0	35	44
	%	8.0	13.0	0.0	35.0	44.0
I avoid risk of damage to items by being sure to close zippers, hooks, and eyes, etc	Freq	13	19	0	37	31
	%	13.0	19.0	0.0	37.0	31.0
I avoid risk of damage to items by being sure to mend rips or tears before laundering	Freq	11	17	0	35	37
	%	11.0	17.0	0.0	35.0	37.0
I avoid risk of damage to items by being sure to tie strings loosely to avoid tangling	Freq	10	14	0	42	34
	%	10.0	14.0	0.0	44.0	34.0
I avoid risk of damage to items by being sure to remove belts, pins/trims that are not washable	Freq	7	18	0	48	27
	%	7.0	18.0	0.0	48.0	27.0
I use adequate amount of detergent during washing	Freq	9	12	5	44	30
	%	9.0	12.0	5.0	44.0	30.0
I do not overload the washer/washing basin with clothes	Freq	12	23	0	39	26
	%	12.0	23.0	0.0	39.0	26.0

I always add the clothes after agitation begin	**Freq**	6	17	3	36	38
	%	6.0	17.0	3.0	36.0	38.0
When using bleach, I add the proper amount at the correct time	**Freq**	11	21	2	37	29
	%	11.0	21.0	2.0	37.0	29.0
I shake out the clothes before putting them in dryer or on rack/line	**Freq**	12	19	0	38	31
	%	12.0	19.0	0.0	38.0	31.0
I over dry the clothes because of the shrinkage and wrinkling	**Freq**	14	22	0.0	42	22
	%	14.0	22.0	0.0	42.0	22.0
I place clothes on hangers and smooth them as needed	**Freq**	12	22	0.0	37	29
	%	12.0	22.0	0.0	37.0	29.0

Source: Field data (2020)

Table 4.7 presents responses on cloth laundry practices of the respondents. The data indicates that 29% of the respondents affirmed that they collected clothes separately for laundry. However, 71% of the respondents held contrary views. This shows that the majority of the respondents do not follow the right laundry processes which can lead to them damaging their clothes. Sixty-nine percent (69%) of the respondents concurred while 31% of them disagreed that they stored dirty laundry for long periods. Also, 82% asserted while 18% of them disagreed that they did not bring dirty laundry into contact with clean laundry. This means that when clothes are laundered proper care is taken not to mix with unclean clothes since they can make them dirty or stain the clean ones. It can even transfer odour from the dirty clothes onto the clean ones.

Twenty-five percent (25%) of the respondents admitted while 73% of them disclaimed that they sorted clothes/laundry by colour before washing, drying, ironing and storage. Only two percent (2%) of the respondents were uncertain. Thirteen percent (13%) respondents agreed while 87%of them denied that they sorted clothes by fabric and construction. Only three percent (3%) of the respondents agreed that they sorted clothes by degree of soil or stain before washing. Conversely, 97%of the respondents did not do so.

Twenty-one percent (21%) of the respondents consented while 79% of the respondents disclaimed that they avoided the risk of damage to items by being sure to shake out loose dirt from cuffs. Thirty-two percent (32%) of the respondents agreed that they avoided the risk of damage to items by being sure to close, among others, zippers, hooks and eyes of clothes. In contrast, 68%of the respondents disagreed. Twenty-eight percent (28%) of the respondents avoided the risk of damage to items by being sure to mend rips or tears before laundering. The majority (72%) of respondents did not perform these clothing care practices.

Twenty-four percent (24%) of the respondents avoided the risk of damage to items by being sure to tie strings loosely to avoid tangling, yet 76% of them never did so. More so, 25%of the respondents avoided the risk of damage to items by being sure to remove belts, pins/trims that were not washable. However, 75% of the respondents did not carry out these clothing care practices or activities. Twenty-one percent (21%) respondents used the proper amount of detergent during washing, 74% of them disagreed while five percent (5%) of the respondents were undecided. A few of the respondents (34%) often placed clothes on hangers and smoothened them as needed. The majority (66%) of them never did it.

Table 4.8 How and Where Respondents Dried their Clothes after Washing

Responses		SA	A	U	D	SD
By hanging them in the open air/sun (line drying)	Freq	57	43	0	0	0
	%	57.0	43.0	0.0	0.0	0.0
By hanging them in the open air/sun on grass/plants/trees	Freq	31	25	0	44	0
	%	31.0	25.0	0.0	44.0	0.0
By hanging them on table, hangers, racks in the room	Freq	16	27	0	42	15
	%	16.0	27.0	0.0	42.0	15.0
By putting them in shady but airy place	Freq	15	31	0	37	17
	%	15.0	31.0	0.0	37.0	17.0
By tumble drying	Freq	0	0	0	59	41
	%	0.0	0.0	0.0	59.0	41.0
Others	Freq	0	6	0	63	31
	%	0.0	6.0	0.0	63.0	31.0

Source: Field data (2020).

Table 4.8 shows results on how or where respondents dried clothes after washing. All (100%) the respondents dried their clothes by hanging them in the open air or sun (line drying) after washing. This is very true because during the weekend at the school premises students wash and dry their clothes on the dry line. They do not send their clothes to the laundry services to launder for them. Fifty-six percent (56%) of respondents also dried their clothes by hanging them in the open air/sun on grass/plants/trees. However, 44% of the respondents never did so. A few, numbering 43%, dried their clothes by hanging them on tables, hangers, racks in a room. A large number (57%) of respondents did not use this method.

A lesser number (46%) of the respondents dried their clothes by putting them in shady but airy places. Conversely, 54%of the respondents never did so. All (100%) of the respondents never dried their clothes by tumble drying. Only six percent (6%) of respondents dried their clothes by other methods. A majority number (94%) of the respondents never used other methods. The results in Tables 4.6, 4.7 and 4.8 established that a significant number (66%) of the respondents did not know the correct procedure for laundry of clothes. It was also observed that between 64% and 97% of the respondents did not collect clothes separately for laundry.

43

They also failed to sort out clothes by colour, fabric and construction before washing, drying, ironing and storage. Again, they did not use an adequate amount of detergent during washing; they always overloaded the washing basin with clothes during laundry; and they often over-dried their clothes. The exposure is that most of the respondents lacked or had inadequate knowledge of clothing care procedures. It could be that clothing care practices are changing due to technological changes, hence the deficiency in knowledge. This revelation corroborates Shove (2003) who stated that laundering practices are constantly changing, influenced by social, cultural and moral norms. Anyakoha and Eluwa (2007) indicated that clothing care activities include laundering, storage and mending the clothes when they are torn or when they develop faults. Ohovoriole and Ugeru (2002) echoed that the knowledge of proper storage is very important.

It was also found that most of the respondents dried their clothes by either hanging them in the open air or sun (line drying) or by hanging them in the open air/sun on grass/plants/trees after washing. Nevertheless, 64% of the respondents often over dried their clothes. Generally, a large number (54% to97%) of the respondents considered their clothing care methods and practices as inappropriate.

4.4 Clothing Storage Methods of the Students

Data for this section of the study were from responses of items 30 to 46 in the questionnaire and are presented in Table 4.9 below as frequency counts and percentages.

Table 4.9 Ironing and Storage of Clothing by the Respondents (n = 100)

Statement		Responses				
		SA	A	U	D	SD
I iron clothes as needed, using the recommended heat setting	Freq	8	15	2	52	23
	%	8.0	15.0	2.0	52.0	23.0
I often air my clothes after use and before storing	Freq	29	40	0	26	5
	%	29.0	40.0	0.0	26.0	5.0
I store under clothes and night garments in drawers	Freq	15	30	0	39	16
	%	15.0	30.0	0.0	39.0	16.0
I store tops and shirt on hangers	Freq	28	32	0	23	17
	%	28.0	32.0	0.0	23.0	17.0
I fold shirts and put them in chop boxes	Freq	18	39	0	25	18
	%	18.0	39.0	0.0	25.0	18.0
I store sweater in closet shelf	Freq	7	8	0	46	39
	%	7.0	8.0	0.0	46.0	39.0
I store daily used articles in top chop boxes	Freq	5	13	0	47	35
	%	5.0	13.0	0.0	47.0	35.0
I clean all outfits thoroughly before packing	Freq	25	32	0	27	16
	%	25.0	32.0	0.0	27.0	16.0
I use cupboard/boxes for temporal storage	Freq	6	12	0	39	43
	%	6.0	12.0	0.0	39.0	43.0
I use new clean boxes to avoid staining	Freq	0	8	0	53	39
	%	0.0	8.0	0.0	53.0	39.0
I line containers with tissue before clothes storage	Freq	3	14	0	51	32
	%	3.0	14.0	0.0	51.0	32.0
I fold knitted items and place them into storage container	Freq	7	14	0	46	33
	%	7.0	14.0	0.0	46.0	33.0
I wrap clothing in something breathable, for example, plastic baskets	Freq	4	11	0	47	38
	%	4.0	11.0	0.0	47.0	38.0
I store clothes in plastic bags to avoid bug larvae	Freq	32	38	0	25	5
	%	32.0	38.0	0.0	25.0	5.0
I store clothes in clean, cool, dark and dry area to protect clothes	Freq	31	37	0	20	12
	%	31.0	37.0	0.0	20.0	12.0
I store clothing in/on wardrobes, shelves & other storage spaces with insect/pest repellents	Freq	13	28	0	30	29
	%	13.0	28.0	0.0	30.0	29.0

Source: Field data (2020)

Table 4.9 gives information on the ironing and storage of clothing practices of the respondents. Twenty-three percent (23%) of the respondents ironed clothes as needed, using the recommended heat setting. A large number (75%) of them did not use the recommended heat

setting to iron clothes, while 2% of respondents were in doubt. A significant number (69%) of the respondents often aired their clothes after use, and before storing. A few (31%) of the respondents never practiced this activity. Forty-five percent (45%) of the respondents stored under clothes and night garments in drawers. However, 55%of them did not. A greater number (60%) of the respondents stored tops and shirts on hangers. Conversely, 40% of them did not.

The majority (57%) of the respondents often folded shirts and put them in drawers. Nevertheless, 43% of them never did so. A small number (18%) of the respondents always stored sweaters on the closet shelf. Conversely, 82 of the respondents did not. Also, 57% of the respondents stored daily used articles in top drawers, yet 43% of them did not. Eighteen percent (18%) of the respondents often cleaned all outfits thoroughly before packing. Conversely, 82%of the respondents failed to do so. Only 8% of the respondents often used new clean boxes to avoid staining. However, 92% of them never did so. A lesser number (17%) of respondents lined containers with tissue, before clothe storage. In contrast, 83% of them did not.

A few (21%) of the respondents mostly folded knitted items and placed them into storage containers. The majority (79%) of them failed to do so. A lesser number (15%) of the respondents habitually wrapped clothing in something breathable. A substantial number (85%) of the respondents rarely did it. Also, 70%of the respondents did not regularly store clothes in plastic bags to avoid bug larvae. A few (30%) of the respondents hardly ever practiced it. A considerable number (68%) of the respondents usually stored clothes in clean, cool, dark and dry areas to protect the clothes. A lesser number (32%) of the respondents barely did so. Forty-one percent (41%) of the respondents mostly stored clothing in/on wardrobes, shelves and other storage spaces with insect/pest repellents. A greater number (59%) of the respondents failed to do so.

The survey established that a reasonable number (over 52%) of the respondents engaged in improper ironing and storage of clothing. It was found that most of the respondents (75%) did not use the recommended heat setting as needed for ironing clothes. Some respondents also failed to fold clothes before storage while other respondents stored clothes in inappropriate storage facilities. The relatively poor ironing and clothing storage practices could, among others, damage and reduce the lifespan of clothes. These could also lead to bad odour and skin infection. These findings seem to be in consonance with Marshal *et al .*(2000) who found that improper clothing storage practices of boarding school students can lead to skin diseases, bad odour, feeling of unwholesome attitude and poor adjustment to social groups.

4.5 Methods Used by the Respondents to Repair their Clothes

Responses to items (questions) 48 - 49 in the questionnaire were used to provide data for this section. Table 10 below shows the responses to the items.

Table 4.10 How the Respondents Repair, Mend and Replace their Damaged Clothes

Responses		SA	A	U	D	SD
I manually repair and mend my damaged clothes, zippers,	Freq	26	31	0	35	8
	%	26.0	31.0	0.0	35.0	8.0
and buttons by hemming, stitching, patching,	Freq	28	35	0	32	5
darning by self	%	28.0	35.0	0.0	32.0	5.0
I use materials to manually hem, stitch, patch or darn my damaged clothes, zippers, button						
I give it to people who manually repair and mend	Freq	11	15	0	43	31
them by hemming, stitching, patching, darning	%	11.0	15.0	0.0	43.0	31.0
I personally use sewing machine to repair and	Freq	7	12	0	50	31
mend (hem, stitch, patch, darn) my damaged (torn, cut, loose) clothes, zippers, button	%	7.0	12.0	0.0	50.0	31.0
I repair and mend my damaged clothes, zippers,	Freq	9	16	0	43	32
buttons by patching, hemming, stitching &	%	9.0	16.0	0.0	43.0	32.0
darning either by hand or machine	Freq	35	28	0	32	5
I give my damaged clothes, zippers& buttons to	%	35.0	28.0	0.0	32.0	5.0
a dressmaker who repair and mend them by hand or sewing machine						
I consider my clothing care and maintenance	Freq	47	32	2	14	5
practices as inappropriate	%	47.0	32.0	2.0	14.0	5.0

 Source: Field data (2020).

Table 4.10 provides responses to the opinions of the respondents on how they repaired, mended and replaced their damaged clothes. The majority (57%) of the respondents manually repaired and mended their damaged clothes, zippers as well as buttons by hemming, stitching, patching, and darning by themselves. They mend them because they have the skill to do it and sometimes due to economic situations, they are forced to do it to prevent them from spending much on it. Forty-three percent (43%) of them never did it by themselves. A significant number (63%) of the respondents used materials to manually hem, stitch, patch or darn their damaged clothes, zippers and buttons. However, 37% of them did not.

A lesser number (26%) of the respondents gave their damaged clothing to people who manually repaired and mended them by hemming, stitching, patching, and darning. A large number (74% of the respondents never gave their damaged clothes for repair by other people. A few (19%) of the respondents personally used sewing machines to repair and mend (hem, stitch, patch, darn) their damaged (torn, cut, loose) clothes, zippers, and buttons. A greater number (81%) of the respondents did not use sewing machines to repair and mend their damaged clothes. Twenty-five percent (25%) of the respondents repaired and mended their damaged clothes, zippers, buttons by patching, hemming, stitching and darning either by hand or machine. Majority of the respondents (75%) did not.

A large number (63%) of the respondents gave their damaged clothes, zippers and buttons to dressmakers who repaired and mended them by hand or sewing machine. A few (37%) of them did not give it dressmakers. Generally, the majority (79%) of the respondents considered their clothing care and maintenance practices as inappropriate. However, 19%of the respondents held divergent views while 2% of them were indecisive.

The majority (57%) of the respondents routinely repaired and mended their damaged clothes, zippers as well as buttons by manually hemming, stitching, patching, and darning by

themselves. This finding supports Anyakoha and Eluwa (2007) who claimed that clothing care demands some routine or everyday care processes on clothing. Other respondents gave their damaged clothes, zippers and buttons to dressmakers who repaired and mended them by hand or sewing machine. This means that they spent less time on repairing their clothes by themselves. This revelation is congruent with the views of Vaage (2012) and Aalto (2003) who stated that the time consumed on repair, handicrafts and making their own clothing has significantly reduced.

Table 4.11 Factors that Determine Clothing Care Practices of the Respondents

Factor	Freq	%	Rank
Money	30	30	1st
Gender	20	20	2nd
Interests, attitudes & values	10	10	3rd
Age	10	10	3rd
Self-concept/esteem	10	10	3rd
Parents	10	10	3rd
Experience	10	10	3rd
Total	**100**	**100**	

n = 100; Multiple Responses; Source: Field data (2020).

The study conducted in Vitin Secondary Technical School revealed the majority of the students indicating money as a determiner in clothing care practices. This was ranked first and this was the same in Dabokpa Technical. Gender was ranked second as and this was the same in Dabokpa Technical students' responses. This means that both schools ranked money first and gender second in clothing care practices. The study further revealed students' responses ranking interest, attitudes and values, age, self-concept/esteem, parents, experience as third. This was amazing as compared with the response from the Dabokpa students. They had varying rankings for them.

Table 4.12 Respondents' Reasons for Clothing Care Practices

Reason	Freq	%
Remove dirt and stains	98	36
Remove odour	97	36
Prevent colour change	70	26
Other	6	2
Total	**271**	**100**

n = 100; Multiple Responses; Source: Field Data (2020).

The study revealed the majority of the students care for their clothing to remove dirt and stains. Also, some care for their clothes to remove odor. The study further revealed some also caring for their clothes to prevent colour change. Whereas few care for their clothes for other reasons apart from the stated ones. Comparing the responses, Vitin secondary students ranked removing dirt, stains and odour the same whereas Dabokpa students had a different view on their responses. Analyzing responses from Vitin students there was an increase in percentage with regards to clothing care with respect to colour change.

Table 4.13 Clothing Care Methods which are Frequently Used by the Respondents

Method	Freq	%	Rank
Manual washing & ironing	98	37.9	1st
Drying the clothes by hanging them in the open air (line drying)	95	36.8	2nd
Repair or mending	30	11.6	3rd
Airing the clothes	25	9.6	4th
Storage of clothes in wardrobes & other storage facilities	10	3.8	5th
Laundry (washing & ironing) by machine	0	0	6th
Brushing the clothes	0	0	6th
Dry cleaning the clothes	0	0	6th
Total	**258**	**100**	

n = 100; Multiple Responses; Source: Field Data (2020).

Clothing care methods which are frequently used by the students in Vitin secondary school is the manual washing and ironing of clothing. The method of drying which is mostly used by the students is the open air drying by hanging the clothes on a dry line outside. The issue of repairing of clothes was solicited and the responses indicated about few of them repairing their clothes. Airing of clothes after wearing was ranked fourth which means many of the students do not air their clothes after wearing them.

The students do not also store their clothes in wardrobes and other storage facilities after collating the responses. Comparing the ranking of items of Vitin Secondary students and Dabokpa students' responses to clothing care methods frequently used. It is obvious that there was variation, at Dabokpa school most students open dry their clothes followed by manual washing whereas in Vitin Secondary school it is not the same. Also, at Dabokpa secondary school few of the students used a laundry machine, they also brush and dry clean clothes and use whereas at the Vitin secondary school they do not do it.

Table 4.14 Familiarity with Clothing Care Label Information by Respondents

Response	Freq	%
Yes	30	30.0
No	70	70.0
Total	**100**	**100**

Source: Field Data (2020)

The study showed the majority of the students saying they are not familiar with care label information with regards to clothing care. This response is similar to that of the Dabokpa students which also indicates that they are not familiar with clothing care label information.

Table 4.15 Clothing Laundry Practices of the Respondents (n = 100)

Statement		Responses				
		SA	A	U	D	SD
I collect clothes separately for laundry	Freq	15.0	17.0	0	32.0	36.0
	%	15.0	17.0	0.0	32.0	36.0
I store dirty laundry for long periods	Freq	20.0	15.0	0.0	40.0	25.0
	%	20.0	15.0	0.0	40.0	25.0
I bring dirty laundry into contact with clean laundry	Freq	20.0	10.0	0.0	20.0	50.0
	%	20.0	10.0	0.0	20.0	50.0
I sort clothes by colour before washing, drying, ironing and storage	Freq	5.0	10.0	2.0	30.0	55.0
	%	5.0	10.0	2.0	30.0	55.0
I sort clothes by fabric and construction	Freq	0.0	8.0	0.0	42.0	50.0
	%	0.0	8.0	0.0	42.0	50.0
I sort clothes by degree of soil/stain before washing	Freq	40.0	30.0	0.0	20.0	10.0
	%	40.0	30.0	0.0	20.0	10.0
I avoid risk of damage to items by being sure to shake out loose dirt from cuffs	Freq	8.0	13.0	0.0	35.0	44.0
	%	8.0	13.0	0.0	35.0	44.0
I avoid risk of damage to items by being sure to close zippers, hooks, and eyes, etc	Freq	15.0	19.0	0.0	35.0	31.0
	%	15.0	19.0	0.0	35.0	31.0
I avoid risk of damage to items by being sure to mend rips or tears before laundering	Freq	15.0	15.0	0.0	35.0	35.0
	%	15.0	15.0	0.0	35.0	35.0
I avoid risk of damage to items by being sure to tie strings loosely to avoid tangling	Freq	10.0	14.0	0.0	42.0	34.0
	%	10.0	14.0	0.0	44.0	34.0
I avoid risk of damage to items by being sure to remove belts, pins/trims that are not washable	Freq	7.0	18.0	0.0	48.0	27.0
	%	7.0	18.0	0.0	48.0	27.0
I use adequate amount of detergent during washing	Freq	10.0	14.0	2.0	44.0	30.0
	%	10.0	14.0	2.0	44.0	30.0
I do not overload the washer/washing basin with clothes	Freq	12.0	23.0	0.0	39.0	26.0
	%	12.0	23.0	0.0	39.0	26.0
I always add the clothes after agitation begin	Freq	6.0	20.0	0.0	36.0	38.0
	%	6.0	20.0	0.0	36.0	38.0
When using bleach, I add the proper amount at the correct time	Freq	11.0	21.0	2.0	37.0	29.0
	%	11.0	21.0	2.0	37.0	29.0
I shake out the clothes before putting them in dryer or on rack/line	Freq	10.0	8.0	0.0	40.0	42.0
	%	10.0	8.0	0.0	40.0	42.0
I over dry the clothes because of the shrinkage and wrinkling	Freq	6.0	4.0	0.0	42.0	48.0
	%	6.0	4.0	0.0	42.0	48.0
I place clothes on hangers and smooth them as needed	Freq	8.0	12.0	0.0	20	60
	%	8.0	12.0	0.0	20.0	60.0

Source: Field data (2020)

Students' responses on clothing laundry practices in Vitin Secondary School reveal the majority 68% of them do not separate clothes during laundry whereas 32% do it. This is a bad practice of clothing care since most clothes need to be separated before laundering to avert other clothes having effect on others. The study further revealed 65% of the students saying they do not store

52

dirty clothes for long periods before laundry whereas 35% store dirty clothes for long before laundry. The study also showed the majority 70% who do not let dirty laundry get into contact with clean clothes whereas 30% do it.

Sorting clothes by colour before washing, drying and ironing and storage showed the majority 85% saying they do not sort in that order whereas 15% agree that they do it in that way before washing, drying, ironing and storage. The study also showed the majority 92% saying they do not sort clothes by fabric or construction when laundering whereas 8% were of the view that they sort clothes by fabric and construction before laundry. Sorting clothes based on the degree of soil/stain on the fabric revealed the majority 70% doing that, which is good whereas 30% do not do that when laundering. Many of the respondents 79% said they do not shake out loose dirt from cuffs to avoid risk of damage to items whereas 21% were of the view that they do that to avoid damage to items.

Majority of the respondents indicated that they avoid risk of damage to zippers, hooks and eyes, when laundering, they also indicated they avoid damage to items by mending rips of tears before laundering. They also make sure to tie strings loosely to avoid tangling when laundering. The study also revealed the majority 75% removing belts, pins/trims that are not washable before laundering whereas few 25% do not do the right thing when laundering.

 The use of detergent during laundering revealed the majority 74% indicating they use adequate detergent during laundry whereas 24% were having opposing views. They also indicated the majority 65% of them do not overload the washer/washing basin with clothes during laundry whereas 35% do overload which is a wrong practice in laundry. The study also showed 74% who do not add clothes after agitation whereas few 26% do it which is not a good practice. The use of bleach the respondents indicated majority 68% not using it at the right time and the right quantity.

The drying of clothes during laundry revealed 82% indicating they do not shake out the clothes before putting them in the dryer or on rack/line whereas 18% said they do. The study showed 90% of the respondents indicating they over dry the clothes because of the shrinkage and wrinkling. The study revealed the majority 80% do not place clothes on hangers during laundry to smooth them whereas 20% of the respondents said they place clothes on hangers.

Table 4.16 How and Where Respondents Dried their Clothes after Washing

Responses		SA	A	U	D	SD
By hanging them in the open air/sun (line drying)	Freq	70	30	0	0	0
	%	70.0	30.0	0.0	0.0	0.0
By hanging them in the open air/sun on grass/plants/trees	Freq	20	10	0	70	0
	%	20.0	10.0	0.0	70.0	0.0
By hanging them on table, hangers, racks in the room	Freq	10	15	0	60	15
	%	10.0	15.0	0.0	60.0	15.0
By putting them in shady but airy place	Freq	10	8	0	40	42
	%	10.0	8.0	0.0	40.0	42.0
By tumble drying	Freq	0	0	0	70	30
	%	0.0	0.0	0.0	70.0	30.0
Others	Freq	10	6	9	40	35
	%	10.0	6.0	9.0	40.0	35.0

Source: Field data (2020)

I solicited information from respondents about how and where they dried their clothes after washing and majority 100% said they dry their clothes in the open air/sun. Drying clothes in an open air/sun on grasses, plants and trees was not done by the majority of the students hence 70% do not practice it. Hanging clothes on tables, hangers, racks in the room, or putting clothes in shady but airy places were not done by the respondents. It was also obvious from the respondents that, majority 100% of them do not use tumble drying for their clothes during laundry. From the data gathered from the respondents it is clear that the students usually use the open air/sun to hang dry their clothes after washing rather than the other methods.

Table 4.17 How the Respondents Repair, Mend and Replace their Damaged Clothes

Responses		SA	A	U	D	SD
I manually repair and mend my damaged clothes, zippers,	Freq	10	15	0	35	40
	%	10.0	15.0	0.0	35.0	40.0
and buttons by hemming, stitching, patching, darning by self	Freq	28	35	0	32	5
	%	28.0	35.0	0.0	32.0	5.0
I use materials to manually hem, stitch, patch or darn my damaged clothes, zippers, button						
I give it to people who manually repair and mend them by hemming, stitching, patching, darning	Freq	43	32	0	15	10
	%	43.0	32.0	0.0	15.0	10.0
I personally use sewing machine to repair and mend (hem, stitch, patch, darn) my damaged (torn, cut, loose) clothes, zippers, button	Freq	7	12	0	50	31
	%	7.0	12.0	0.0	50.0	31.0
I repair and mend my damaged clothes, zippers, buttons by patching, hemming, stitching & darning either by hand or machine	Freq	5	10	0	50	35
	%	5.0	10.0	0.0	50.0	35.0
I give my damaged clothes, zippers& buttons to a dressmaker who repair and mend them by hand or sewing machine	Freq	35	45	0	15	5
	%	35.0	45.0	0.0	15.0	5.0
I consider my clothing care and maintenance practices as inappropriate	Freq	10	12	8	55	15
	%	10.0	12.0	8.0	55.0	15.0

 Source: Field data (2020).

The solicited information from the respondents about how they repair, mend and replace their damaged clothes and majority 75% do not manually repair and mend their damaged clothes, zippers and buttons by hemming, stitches, patching darning whereas 25% said they do. The study revealed the majority 85% saying they give it to people to manually repair and mend their clothes for them. The use of sewing machines to mend the clothes was not done and hence 81% said they do not use sew machines to do it whereas 19% said they use sewing machines to repair and mend their damaged clothes. The study revealed that the students do not repair their own clothes when they are damaged and need repairs. They usually give it to the dressmakers to repair for them. They agreed that the practice of giving their clothes to a dressmaker to repair for them and their general care and maintenance practices about clothes is inappropriate.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter highlighted the summary of the study, conclusions and recommendations drawn from the study. Suggestions for further studies are also put forward.

5.2 Summary

This study investigated the clothing care practices of students in Dabokpa Technical Institute and Vitin Senior High students. The design for the study was a descriptive cross-sectional survey. A total of two hundred (200) students from the clothing and textiles department were sampled from both schools for the study via randomly selected from the clothing and textiles students in the schools. This sample size gives a confidence level of 95%, and a margin of error (degree of accuracy) of 0.05 based on Research Advisors (2006) sample size selection. The technique used in selecting the samples was the lottery method. Data was collected using questionnaires and presented using the frequency and percentages tables.

5.3 Major Findings

Among the findings of this study were the following:

1. Money was the most influential factor (24.8%) which determined the clothing care practices of the students in both secondary schools where the study was conducted. This was followed by gender (20%), interest, attitudes and values (16.8%), age (12.8%) and self-concept or esteem (10.4%).

2. Respondents in both schools mainly cared for their clothing in order to remove dirt and stains (37.3%), and to remove odour (37.3%).

3. The respondents in both schools indicated that they mostly cared for their clothing by manual washing and ironing (34.5%) as well as manual repair (22.5%).

4. Majority (84%) of the respondents did not have knowledge, and they were not familiar with clothing care label information.

5. Generally, a large number (79%) of the respondents used inappropriate clothing care methods. A significant number (64.2%) of the respondents did not know the correct procedure for laundry of clothes.

6. All (100%) the respondents in both schools indicated that they dried their clothes by either hanging them in the open air or sun (line drying), on grass or trees after washing. A substantial number (64%) of the respondents often over-dried their clothes.

7. Most of the respondents (75%) did not use the recommended heat setting as needed for ironing clothes.

8. Fifty-seven percent (57%) of the respondents routinely repaired and mended their damaged clothes, zippers as well as buttons by manually stitching, patching, and darning by themselves. The rest (43%) of the respondents gave their damaged clothes, zippers and buttons to dressmakers who repaired or mended them by hand or sewing machine.

9. Most of the respondents lacked or had inadequate facilities for storing clothes. Over 55% of the respondents failed to store clothes in appropriate storage facilities.

5.3 Conclusions

Based on the findings of the study, the following conclusions were drawn:

Overall, boarding students in Dabokpa Technical Institute and Vitin Secondary School had poor clothing care habits. Hence, clothing laundry and storage activities were not effectively practiced by the students in both schools. This is partly attributable to lack of and/or inadequate

facilities for proper clothing care practices. Most of the respondents gave out their damaged clothes to dressmakers for repair. These challenges hindered effective clothing care practices by the students in the schools.

5.4 Recommendations

In the light of the findings and the conclusions drawn, the following recommendations are put forward. The Clothing and Textiles teachers at Dabokpa Technical Institute and Vitin Secondary school should organize workshops and seminars for students in order to educate them on skills involved in proper procedures for the laundry of clothes (washing and ironing) procedures, and storage practices.

The Clothing and Textiles teachers should also design a leaflet which provides information on clothing care label, laundry and storage procedures. This should be given to students as they register on admission to SHS 1. The Clothing and Textiles teachers should provide periodic education for all the students, teachers and parents to create awareness on the dangers of improper clothing laundry and storage practices.

The Clothing and Textiles teachers should organize periodic demonstration lessons to teach students' proper ironing at recommended heat setting and storage of clothing practices.

The Clothing and Textiles teachers should organize periodic demonstration lessons to teach students how to stitch, patch, and darn damaged clothes, zippers as well as buttons either manually or with the aid of a sewing machine.

Teachers and parents should encourage students at all levels of education to adopt correct and best methods, techniques and strategies for effective clothing laundry and storage practices. Parents should encourage and motivate their wards to wash, iron and store their personal clothing while at home. Parents and teachers should monitor clothing storage practices of their

wards at school and at home. They should supervise how the children wash, iron and store personal clothing.

Parents and the authorities of Dabokpa Technical Institute and Vitin Secondary School should provide adequate but appropriate and functional facilities for use by boarding students for laundry (washing and ironing), drying and storage of clothing.

5.5 Suggestions for Further Research

There is the need for further research into barriers to effective clothing care practices by adolescent students in boarding schools.

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APPENDIX A

QUESTIONNAIRE FOR BOARDING STUDENTS IN DABOKPA TECHNICAL

INSTITUTE TAMALE

Dear Student,

This questionnaire is intended to assess the clothing care practices of students. The information you will provide would be **strictly** treated as **confidential**. Please try to be as **truthful** as possible with your responses. Your personal identity **cannot** be verified from this document and will be protected. Please respond by supplying the following facts about yourself and register your opinion on the issues raised by ticking an appropriate box. There is no right or wrong answer therefore, no particular response is targeted.

SECTION A- DEMOGRAPHIC DATA

Please tick [√] ***only one*** *option as applicable **per item**.*

1. Gender: Male   [   ]   Female [   ]

2. Age (yrs):   13 – 15 [   ]   16 – 18 [   ] 19 - 21[ ] 22& above [   ]

3. Grade/Class: SHS 1 [   ]   SHS 2 [   ]   SHS 3 [   ] SHS 4 [   ]

4. Which programme do you offer? Business (   ) General Arts (   ) Visual Arts (   )

   Science [   ] Vocational Skills/Sewing [   ]

SECTION B – **GENERAL KNOWLEDGE IN CLOTHING CARE**

 Please tick (√) or write to indicate your response

5. Which of the following factors determine your clothing care practices?

Age [ ] Gender [ ] Money [ ] Parents [ ]   Experience [ ] Self-concept/Self-esteem [ ]   Interest,

Attitudes, Values [ ]

66

6. Which of the following reasons mostly influences your clothing care practices?

    a) Remove dirt and stains [ ]

    b) Remove odour [ ]

    c) Prevent colour change [ ]

    d) Other method [   ]

7. Rank (1st, 2nd, 3rd) the method(s) which you frequently use in the care and maintenance

of your clothes?

  a) washing and ironing manually by self [   ]

  b) laundering (washing and ironing) by washing machine [   ]

  c) storage of the clothes in wardrobes, shelves, drawer, hangers, and in other storage facilities

    [ ] repair and mending of the clothes [   ]

  d) Brushing the clothes [   ]   Airing the clothes [   ]

  e) Dry cleaning the clothes [   ]

  f) Drying the clothes by hanging them in the open air (line drying)/tumble drying [   ]

  g) Other method [   ]

8. Which of the following clothing/laundry care label information are you familiar with?

(Tick as many as you know)

Ironing symbols

Description	Symbol	Do you know this symbol		
		Yes	No	
Iron				
Iron, steam or dry Low Heat				
Iron, steam or dry Medium Heat				

67

Iron, steam or dry High Heat				
Do not steam				
Do not iron				

Cleaning and bleaching symbols

Description	Symbol	Do you know this symbol		
		Yes	No	
Wash				
Machine wash cold				
Machine wash warm				
Machine wash hot				
Hand wash				
Do not wash				
Cold permanent press machine wash				
Warm permanent press machine wash				
Bleach if needed				
Non chlorine bleach if needed				

Do not bleach				
Dry clean				
Dry clean any solvent				
Dry clean Petroleum solvent				
Do not dry clean				
Dry clean except tetrachlorethylene				

Drying symbols

Description	Symbol	Do you know this symbol		
		Yes	No	
Dry				
Line dry				
Drip dry				
Dry flat				
Dry in shade				
Do not wring				
Do not try				

69

Normal Tumble dry				
Normal Low Heat tumble dry				
Normal Medium Heat Tumble dry				
Normal High Heat Tumble dry				
Normal No Heat Tumble Dry				
Do not Tumble dry				
I do not know any of the symbols				

SECTION C – CLOTHING LAUNDRY PRACTICES

9. Indicate the correct stages of the laundry process:

   a) Add water and detergents → loading of cloths → wash mode → draining → rinse mode

      → drying mode [   ]

   b) loading of cloths → add detergents and water → wash mode rinse mode → drying mode

      [   ]

   c) loading of cloths → add detergents and water → wash mode → draining → rinse mode

      → spin-mode [   ]

   d) loading of cloths → wash mode → draining → rinse mode → drying mode [   ]

Indicate your level of agreement or disagreement with the following

Strongly Agree (**SA**); Agree (**A**); Uncertain (**U**); Disagree **(D)**; Strongly Disagree (**SD**)

No	Statement	SA	A	U	D	SD
10	I collect textiles separately for laundry					
11	I do not store dirty laundry for long periods					
12	I do not bring dirty laundry into contact with clean laundry					
13	I sort clothes/laundry by color before washing, drying, ironing and storage					
14	I sort clothes/laundry by fabric and construction					
15	I sort clothes/laundry by degree of soil/stain before washing					
16	I avoid risk of damage to items by being sure to shake out loose dirt from cuffs					
17	I avoid risk of damage to items by being sure to close zippers, hooks, and eyes, etc.					
18	I avoid risk of damage to items by being sure to mend rips or tears before laundering.					
19	I avoided risk of damage to items by being sure to tie strings loosely to avoid tangling.					
20	I avoid risk of damage to items by being sure to remove belts, pins or trims that are not washable.					
21	I use the proper amount of detergent during washing					

No	Statement	SA	A	U	D	SD
22	I do not overload the washer/washing basin with clothes					
23	I always add the clothes after agitation begin.					
24	When using bleach, I add the proper amount at the correct time					
25	I shook out the clothes before putting them in dryer or on rack/line					
26	I check the clothes to be sure the stains are removed					
27	I do not over dry the clothes because it causes shrinking and wrinkling					
28	I place clothes on hangers and smooth them as needed					

29. How or where do you dry your clothes after washing?

   a) hanging them in the open air/sun (line drying) [   ]

   b) hanging them in the open air/sun on grass/plants/tees [   ]

   c) hanging them on table, hangers, racks in the room   [   ]

   d) putting them in shady airy place   [   ]

   e) Tumble drying [   ]

Others [   ], **please specify:** ……………………………………………………

SECTION D –IRONING AND STORAGE OF CLOTHING PRACTICES

No	Statement	SA	A	U	D	SD
30	I iron clothes as needed, using the recommended heat setting					
31	I store under clothes night garment in drawers					

32	I store tops and shirt on hangers					
33	I fold shirts and put them in drawers					
34	I store sweater in closet shelf/shelf.					
35	I store daily used articles in top drawers.					
36	I clean all outfits thoroughly before packing					
37	I use cupboard/boxes for temporal storage					
38	I use new clean boxes to avoid staining and insects					
39	Beware that cupboard boxes do not attract bugs					
40	I line containers with tissue, etc before clothe storage					
41	I fold knitted items and place into storage container					
42	I wrap the clothing in something breathable					
43	I do not store clothes in plastic bags to avoid bug larvae					
44	I store clothes in clean, cool, dark and dry area to protect clothes.					

45. Do you often air your clothes after use and before storing? Yes [   ]   No [   ]

46. I store clothing in/on boxes/bags, wardrobes, shelves, drawer, hangers, closets, drawer space, storage spaces, cartons, rope, tight wrappers, pots, baskets, cupboards, etc **with** insect repellents, mildews and moth proof, camphor acid free tissue moth balls and cedar.

SA [ ] A [ ] U [ ] D [ ] SD [ ]

47. I store clothing in/on boxes/bags, wardrobes, shelves, drawer, hangers, closets, drawer space, storage spaces, cartons, rope, tight wrappers, pots, baskets, cupboards, etc **without** insect repellents, mildews and moth proof, camphor acid free tissue moth balls and cedar.

SA [ ] A [ ] U [ ] D [ ] SD [ ]

SECTION E – REPAIR, MENDING AND REPLACEMENT OF DAMAGED CLOTHING PRACTICES

48. Which of the following activities do you carry out in the repair, mending, and replacement of your damaged (cut, torn, loose) clothes?

   a) I manually repair and mend my damaged (torn, cut, loose) clothes, zippers, and buttons by hemming, stitching, patching, darning by self [   ]

   b) I use materials (hand needle, pins/ safety pins, scissors, thread of assorted colours, hooks and eyes, sewing gauge, etc.) to manually hem, stitch, patch or darn my damaged (torn, cut, loose) clothes, zippers, buttons. [   ]

   c) I personally use sewing machine to repair and mend (hem, stitch, patch, darn) my damaged (torn, cut, loose) clothes, zippers, buttons. [   ]

   d) I give my damaged (torn, cut, loose) clothes, zippers, and buttons to a tailor/seamstress who repair and mend them by hemming, stitching, patching, darning either by hand or sewing machine. [   ]

49. I consider my clothing care and maintenance practices as appropriate.

   SA [ ] A [ ] U [ ] D [ ] SD [ ]

50. What are some of the problems you encounter when caring for your clothes?

   a) Lack of/ inadequate information about clothing care [   ]

   b) Lack of/ inadequate facility for laundry [   ]

   c) Lack of/ inadequate facility for storing clothes [   ]

74

d) Lack of/ inadequate facility for repairing and mending clothes [   ]

e) Others [   ]